

# ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

# ภาคผนวก ค-1

---

คุณภาพอากาศในบรรยากาศ



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**

Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดอ่างศิลา (GPS 47P 0792397, 1554150)  
**Date Analysis Commenced** Nov 13, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-1	Nov 01 - Nov 02, 2024	0.034	0.021	756	29
24121835-2	Nov 02 - Nov 03, 2024	0.065	0.035	756	29
24121835-3	Nov 03 - Nov 04, 2024	0.089	0.041	756	29
24121835-4	Nov 04 - Nov 05, 2024	0.050	0.025	756	29
24121835-5	Nov 05 - Nov 06, 2024	0.064	0.027	756	28
24121835-6	Nov 06 - Nov 07, 2024	0.051	0.031	756	28
24121835-7	Nov 07 - Nov 08, 2024	0.067	0.028	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**

Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-2

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดสระตู่ศรีมหาท้าว (GPS 47P 0792644, 1550250)  
**Date Analysis Commenced** Nov 13, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-8	Nov 01 - Nov 02, 2024	0.030	0.014	756	29
24121835-9	Nov 02 - Nov 03, 2024	0.047	0.030	756	29
24121835-10	Nov 03 - Nov 04, 2024	0.039	0.027	756	29
24121835-11	Nov 04 - Nov 05, 2024	0.025	0.016	756	29
24121835-12	Nov 05 - Nov 06, 2024	0.026	0.018	756	28
24121835-13	Nov 06 - Nov 07, 2024	0.025	0.020	756	28
24121835-14	Nov 07 - Nov 08, 2024	0.032	0.022	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**

Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-3

Page 1 of 1

<b>Sample Description</b>	Air Quality
<b>Location</b>	ชุมชนบ้านนาแซง (GPS 47P 0793836, 1554219)
<b>Date Analysis Commenced</b>	Nov 13, 2024
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-15	Nov 01 - Nov 02, 2024	0.024	0.019	756	29
24121835-16	Nov 02 - Nov 03, 2024	0.032	0.023	756	29
24121835-17	Nov 03 - Nov 04, 2024	0.030	0.022	756	29
24121835-18	Nov 04 - Nov 05, 2024	0.022	0.014	756	29
24121835-19	Nov 05 - Nov 06, 2024	0.018	0.013	756	28
24121835-20	Nov 06 - Nov 07, 2024	0.019	0.017	756	28
24121835-21	Nov 07 - Nov 08, 2024	0.024	0.018	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**

Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-4

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนบ้านโนนสะอาด (GPS 47P 0788792, 1552723)  
**Date Analysis Commenced** Nov 13, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-22	Nov 01 - Nov 02, 2024	0.027	0.020	756	29
24121835-23	Nov 02 - Nov 03, 2024	0.038	0.026	756	29
24121835-24	Nov 03 - Nov 04, 2024	0.032	0.023	756	29
24121835-25	Nov 04 - Nov 05, 2024	0.024	0.015	756	29
24121835-26	Nov 05 - Nov 06, 2024	0.018	0.012	756	28
24121835-27	Nov 06 - Nov 07, 2024	0.053	0.025	756	28
24121835-28	Nov 07 - Nov 08, 2024	0.029	0.020	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**

Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-5

Page 1 of 1

**Sample Description** Air Quality  
**Location** พื้นที่โครงการ (GPS 47P 0792995, 1553106)  
**Date Analysis Commenced** Nov 13, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-29	Nov 01 - Nov 02, 2024	0.030	0.019	756	29
24121835-30	Nov 02 - Nov 03, 2024	0.052	0.028	756	29
24121835-31	Nov 03 - Nov 04, 2024	0.044	0.026	756	29
24121835-32	Nov 04 - Nov 05, 2024	0.037	0.016	756	29
24121835-33	Nov 05 - Nov 06, 2024	0.025	0.014	756	28
24121835-34	Nov 06 - Nov 07, 2024	0.028	0.018	756	28
24121835-35	Nov 07 - Nov 08, 2024	0.031	0.019	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121835**  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number: 3145887-6

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านเขานางจีน (GPS 47P 0790574, 1555767)  
**Date Analysis Commenced** Nov 13, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
24121835-36	Nov 01 - Nov 02, 2024	0.026	0.014	756	29
24121835-37	Nov 02 - Nov 03, 2024	0.044	0.030	756	29
24121835-38	Nov 03 - Nov 04, 2024	0.033	0.024	756	29
24121835-39	Nov 04 - Nov 05, 2024	0.022	0.015	756	29
24121835-40	Nov 05 - Nov 06, 2024	0.015	0.012	756	28
24121835-41	Nov 06 - Nov 07, 2024	0.021	0.020	756	28
24121835-42	Nov 07 - Nov 08, 2024	0.027	0.020	756	29
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

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

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

**Sampled By :** Apichart Wilars

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3145866-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านเขานางจีน (GPS 47P 0790574, 1555767)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-36 Nov 01, 2024	24121831-37 Nov 02, 2024	24121831-38 Nov 03, 2024	24121831-39 Nov 04, 2024	24121831-40 Nov 05, 2024	24121831-41 Nov 06, 2024	24121831-42 Nov 07, 2024
Time							
11:00 AM - 12:00 PM	0.0073	0.0050	0.0045	0.0044	0.0061	0.0056	0.0091
12:00 PM - 01:00 PM	0.0060	0.0046	0.0063	0.0044	0.0061	0.0154	0.0104
01:00 PM - 02:00 PM	0.0045	0.0063	0.0051	0.0056	0.0053	0.0184	0.0063
02:00 PM - 03:00 PM	0.0054	0.0093	0.0061	0.0054	0.0051	0.0140	0.0106
03:00 PM - 04:00 PM	0.0091	0.0092	0.0060	0.0106	0.0056	0.0112	0.0078
04:00 PM - 05:00 PM	0.0097	0.0116	0.0049	0.0086	0.0069	0.0121	0.0086
05:00 PM - 06:00 PM	0.0101	0.0117	0.0076	0.0112	0.0144	0.0120	0.0099
06:00 PM - 07:00 PM	0.0117	0.0120	0.0137	0.0161	0.0209	0.0103	0.0084
07:00 PM - 08:00 PM	0.0091	0.0132	0.0237	0.0166	0.0136	0.0104	0.0075
08:00 PM - 09:00 PM	0.0147	0.0131	0.0251	0.0194	0.0201	0.0085	0.0081
09:00 PM - 10:00 PM	0.0150	0.0103	0.0167	0.0225	0.0215	0.0073	0.0106
10:00 PM - 11:00 PM	0.0141	0.0109	0.0123	0.0098	0.0193	0.0062	0.0087
11:00 PM - 12:00 AM	0.0105	0.0128	0.0076	0.0080	0.0152	0.0062	0.0080
12:00 AM - 01:00 AM	0.0081	0.0069	0.0067	0.0071	0.0104	0.0066	0.0090
01:00 AM - 02:00 AM	0.0069	0.0044	0.0070	0.0072	0.0088	0.0070	0.0096
02:00 AM - 03:00 AM	0.0052	0.0045	0.0075	0.0070	0.0086	0.0100	0.0111
03:00 AM - 04:00 AM	0.0057	0.0046	0.0066	0.0052	0.0061	0.0080	0.0117
04:00 AM - 05:00 AM	0.0054	0.0047	0.0062	0.0051	0.0051	0.0052	0.0092
05:00 AM - 06:00 AM	0.0044	0.0049	0.0071	0.0064	0.0123	0.0045	0.0072
06:00 AM - 07:00 AM	0.0058	0.0077	0.0116	0.0141	0.0177	0.0037	0.0046
07:00 AM - 08:00 AM	0.0085	0.0085	0.0064	0.0110	0.0146	0.0028	0.0043
08:00 AM - 09:00 AM	0.0078	0.0059	0.0064	0.0104	0.0121	0.0043	0.0041
09:00 AM - 10:00 AM	0.0062	0.0072	0.0066	0.0077	0.0014	0.0044	0.0059
10:00 AM - 11:00 AM	0.0060	0.0066	0.0053	0.0076	0.0050	0.0055	0.0057
Average	0.0082	0.0082	0.0090	0.0096	0.0109	0.0083	0.0082
1hr - Maximum	0.0150	0.0132	0.0251	0.0225	0.0215	0.0184	0.0117
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3164941-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดแจ้งศาลา (GPS 47P 0792397, 1554150)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-1 Nov 01, 2024	24121831-2 Nov 02, 2024	24121831-3 Nov 03, 2024	24121831-4 Nov 04, 2024	24121831-5 Nov 05, 2024	24121831-6 Nov 06, 2024	24121831-7 Nov 07, 2024
Time							
10:00 AM - 11:00 AM	0.0063	0.0037	0.0065	0.0036	0.0037	0.0031	0.0042
11:00 AM - 12:00 PM	0.0074	0.0034	0.0038	0.0055	0.0035	0.0032	0.0036
12:00 PM - 01:00 PM	0.0044	0.0029	0.0040	0.0036	0.0033	0.0029	0.0047
01:00 PM - 02:00 PM	0.0027	0.0032	0.0047	0.0042	0.0064	0.0029	0.0041
02:00 PM - 03:00 PM	0.0027	0.0030	0.0030	0.0065	0.0102	0.0042	0.0042
03:00 PM - 04:00 PM	0.0050	0.0032	0.0033	0.0035	0.0101	0.0035	0.0030
04:00 PM - 05:00 PM	0.0060	0.0043	0.0044	0.0038	0.0057	0.0030	0.0035
05:00 PM - 06:00 PM	0.0031	0.0090	0.0072	0.0055	0.0065	0.0051	0.0044
06:00 PM - 07:00 PM	0.0039	0.0115	0.0083	0.0034	0.0062	0.0054	0.0075
07:00 PM - 08:00 PM	0.0032	0.0127	0.0159	0.0035	0.0060	0.0056	0.0124
08:00 PM - 09:00 PM	0.0038	0.0148	0.0120	0.0041	0.0061	0.0055	0.0053
09:00 PM - 10:00 PM	0.0026	0.0109	0.0125	0.0034	0.0064	0.0074	0.0048
10:00 PM - 11:00 PM	0.0082	0.0123	0.0090	0.0035	0.0061	0.0069	0.0041
11:00 PM - 12:00 AM	0.0088	0.0101	0.0062	0.0033	0.0052	0.0052	0.0039
12:00 AM - 01:00 AM	0.0055	0.0070	0.0053	0.0033	0.0043	0.0042	0.0037
01:00 AM - 02:00 AM	0.0053	0.0072	0.0052	0.0034	0.0039	0.0037	0.0032
02:00 AM - 03:00 AM	0.0063	0.0063	0.0049	0.0038	0.0034	0.0033	0.0029
03:00 AM - 04:00 AM	0.0046	0.0073	0.0052	0.0033	0.0031	0.0030	0.0030
04:00 AM - 05:00 AM	0.0051	0.0084	0.0047	0.0036	0.0030	0.0030	0.0033
05:00 AM - 06:00 AM	0.0076	0.0074	0.0054	0.0042	0.0030	0.0032	0.0031
06:00 AM - 07:00 AM	0.0107	0.0056	0.0060	0.0045	0.0034	0.0032	0.0035
07:00 AM - 08:00 AM	0.0122	0.0055	0.0051	0.0047	0.0034	0.0033	0.0031
08:00 AM - 09:00 AM	0.0120	0.0095	0.0047	0.0039	0.0030	0.0027	0.0033
09:00 AM - 10:00 AM	0.0080	0.0090	0.0038	0.0030	0.0038	0.0029	0.0033
Average	0.0061	0.0074	0.0063	0.0040	0.0050	0.0040	0.0043
1hr - Maximum	0.0122	0.0148	0.0159	0.0065	0.0102	0.0074	0.0124
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3164944-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดสระคูศรีมหาธาตุ (GPS 47P 0792644, 1550250)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-8 Nov 01, 2024	24121831-9 Nov 02, 2024	24121831-10 Nov 03, 2024	24121831-11 Nov 04, 2024	24121831-12 Nov 05, 2024	24121831-13 Nov 06, 2024	24121831-14 Nov 07, 2024
Time							
01:00 PM - 02:00 PM	0.0063	0.0028	0.0182	0.0064	0.0096	0.0080	0.0071
02:00 PM - 03:00 PM	0.0041	0.0033	0.0226	0.0165	0.0037	0.0062	0.0063
03:00 PM - 04:00 PM	0.0117	0.0025	0.0279	0.0311	0.0059	0.0076	0.0079
04:00 PM - 05:00 PM	0.0106	0.0028	0.0224	0.0245	0.0038	0.0106	0.0094
05:00 PM - 06:00 PM	0.0100	0.0057	0.0144	0.0134	0.0044	0.0121	0.0103
06:00 PM - 07:00 PM	0.0089	0.0166	0.0134	0.0098	0.0035	0.0086	0.0113
07:00 PM - 08:00 PM	0.0080	0.0146	0.0122	0.0117	0.0042	0.0076	0.0114
08:00 PM - 09:00 PM	0.0106	0.0144	0.0128	0.0069	0.0037	0.0064	0.0073
09:00 PM - 10:00 PM	0.0177	0.0142	0.0070	0.0055	0.0036	0.0063	0.0055
10:00 PM - 11:00 PM	0.0143	0.0128	0.0075	0.0063	0.0041	0.0059	0.0058
11:00 PM - 12:00 AM	0.0042	0.0131	0.0098	0.0064	0.0042	0.0050	0.0047
12:00 AM - 01:00 AM	0.0077	0.0121	0.0111	0.0054	0.0037	0.0046	0.0064
01:00 AM - 02:00 AM	0.0171	0.0139	0.0117	0.0052	0.0036	0.0050	0.0068
02:00 AM - 03:00 AM	0.0195	0.0161	0.0118	0.0049	0.0054	0.0056	0.0061
03:00 AM - 04:00 AM	0.0188	0.0241	0.0187	0.0056	0.0054	0.0052	0.0057
04:00 AM - 05:00 AM	0.0144	0.0205	0.0198	0.0048	0.0058	0.0046	0.0040
05:00 AM - 06:00 AM	0.0045	0.0166	0.0143	0.0038	0.0038	0.0037	0.0048
06:00 AM - 07:00 AM	0.0094	0.0073	0.0097	0.0025	0.0034	0.0040	0.0056
07:00 AM - 08:00 AM	0.0071	0.0043	0.0047	0.0073	0.0039	0.0049	0.0051
08:00 AM - 09:00 AM	0.0076	0.0045	0.0030	0.0064	0.0060	0.0050	0.0039
09:00 AM - 10:00 AM	0.0034	0.0055	0.0038	0.0068	0.0059	0.0023	0.0036
10:00 AM - 11:00 AM	0.0031	0.0038	0.0033	0.0046	0.0059	0.0040	0.0045
11:00 AM - 12:00 PM	0.0079	0.0031	0.0028	0.0029	0.0135	0.0040	0.0040
12:00 PM - 01:00 PM	0.0065	0.0197	0.0039	0.0070	0.0055	0.0050	0.0046
Average	0.0097	0.0106	0.0120	0.0086	0.0051	0.0059	0.0063
1hr - Maximum	0.0195	0.0241	0.0279	0.0311	0.0135	0.0121	0.0114
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3164948-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านนาแซง (GPS 47P 0793836, 1554219)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-15 Nov 01, 2024	24121831-16 Nov 02, 2024	24121831-17 Nov 03, 2024	24121831-18 Nov 04, 2024	24121831-19 Nov 05, 2024	24121831-20 Nov 06, 2024	24121831-21 Nov 07, 2024
Time							
01:00 PM - 02:00 PM	0.0108	0.0077	0.0178	0.0095	0.0043	0.0080	0.0085
02:00 PM - 03:00 PM	0.0146	0.0138	0.0186	0.0075	0.0041	0.0079	0.0064
03:00 PM - 04:00 PM	0.0204	0.0112	0.0224	0.0078	0.0045	0.0064	0.0064
04:00 PM - 05:00 PM	0.0201	0.0108	0.0058	0.0070	0.0054	0.0054	0.0058
05:00 PM - 06:00 PM	0.0199	0.0054	0.0082	0.0060	0.0048	0.0050	0.0069
06:00 PM - 07:00 PM	0.0180	0.0073	0.0101	0.0066	0.0044	0.0048	0.0079
07:00 PM - 08:00 PM	0.0205	0.0081	0.0078	0.0069	0.0054	0.0053	0.0076
08:00 PM - 09:00 PM	0.0188	0.0162	0.0052	0.0024	0.0048	0.0046	0.0054
09:00 PM - 10:00 PM	0.0166	0.0175	0.0047	0.0022	0.0047	0.0044	0.0039
10:00 PM - 11:00 PM	0.0124	0.0114	0.0042	0.0024	0.0039	0.0046	0.0045
11:00 PM - 12:00 AM	0.0105	0.0079	0.0034	0.0024	0.0035	0.0038	0.0058
12:00 AM - 01:00 AM	0.0049	0.0028	0.0046	0.0072	0.0037	0.0037	0.0040
01:00 AM - 02:00 AM	0.0031	0.0020	0.0017	0.0093	0.0064	0.0038	0.0027
02:00 AM - 03:00 AM	0.0021	0.0024	0.0013	0.0101	0.0047	0.0031	0.0106
03:00 AM - 04:00 AM	0.0018	0.0022	0.0015	0.0037	0.0049	0.0034	0.0064
04:00 AM - 05:00 AM	0.0031	0.0021	0.0019	0.0028	0.0052	0.0038	0.0042
05:00 AM - 06:00 AM	0.0033	0.0039	0.0038	0.0041	0.0045	0.0046	0.0040
06:00 AM - 07:00 AM	0.0020	0.0087	0.0056	0.0052	0.0069	0.0062	0.0059
07:00 AM - 08:00 AM	0.0036	0.0176	0.0040	0.0047	0.0070	0.0062	0.0088
08:00 AM - 09:00 AM	0.0021	0.0238	0.0151	0.0032	0.0074	0.0078	0.0090
09:00 AM - 10:00 AM	0.0029	0.0189	0.0154	0.0036	0.0121	0.0102	0.0082
10:00 AM - 11:00 AM	0.0023	0.0131	0.0090	0.0041	0.0151	0.0132	0.0086
11:00 AM - 12:00 PM	0.0059	0.0145	0.0146	0.0036	0.0101	0.0141	0.0105
12:00 PM - 01:00 PM	0.0096	0.0179	0.0144	0.0036	0.0090	0.0124	0.0101
Average	0.0096	0.0103	0.0084	0.0052	0.0061	0.0064	0.0068
1hr - Maximum	0.0205	0.0238	0.0224	0.0101	0.0151	0.0141	0.0106
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3164950-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนบ้านโนนสะอาด (GPS 47P 0788792, 1552723)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-22 Nov 01, 2024	24121831-23 Nov 02, 2024	24121831-24 Nov 03, 2024	24121831-25 Nov 04, 2024	24121831-26 Nov 05, 2024	24121831-27 Nov 06, 2024	24121831-28 Nov 07, 2024
Time							
12:00 PM - 01:00 PM	0.0050	0.0045	0.0036	0.0053	0.0047	0.0044	0.0040
01:00 PM - 02:00 PM	0.0057	0.0050	0.0035	0.0049	0.0044	0.0040	0.0034
02:00 PM - 03:00 PM	0.0051	0.0048	0.0034	0.0049	0.0043	0.0036	0.0029
03:00 PM - 04:00 PM	0.0045	0.0046	0.0044	0.0046	0.0043	0.0033	0.0028
04:00 PM - 05:00 PM	0.0039	0.0043	0.0043	0.0041	0.0042	0.0030	0.0028
05:00 PM - 06:00 PM	0.0043	0.0052	0.0041	0.0039	0.0040	0.0027	0.0028
06:00 PM - 07:00 PM	0.0048	0.0070	0.0040	0.0039	0.0039	0.0029	0.0027
07:00 PM - 08:00 PM	0.0045	0.0076	0.0040	0.0043	0.0041	0.0033	0.0029
08:00 PM - 09:00 PM	0.0054	0.0079	0.0058	0.0053	0.0045	0.0038	0.0037
09:00 PM - 10:00 PM	0.0103	0.0086	0.0089	0.0051	0.0049	0.0045	0.0046
10:00 PM - 11:00 PM	0.0075	0.0072	0.0076	0.0043	0.0050	0.0048	0.0053
11:00 PM - 12:00 AM	0.0070	0.0061	0.0076	0.0045	0.0056	0.0056	0.0067
12:00 AM - 01:00 AM	0.0069	0.0062	0.0073	0.0036	0.0068	0.0063	0.0057
01:00 AM - 02:00 AM	0.0068	0.0068	0.0070	0.0027	0.0068	0.0060	0.0059
02:00 AM - 03:00 AM	0.0072	0.0066	0.0078	0.0029	0.0081	0.0061	0.0054
03:00 AM - 04:00 AM	0.0088	0.0063	0.0072	0.0024	0.0077	0.0067	0.0061
04:00 AM - 05:00 AM	0.0074	0.0065	0.0078	0.0079	0.0072	0.0073	0.0057
05:00 AM - 06:00 AM	0.0042	0.0075	0.0080	0.0073	0.0073	0.0071	0.0058
06:00 AM - 07:00 AM	0.0038	0.0088	0.0085	0.0067	0.0064	0.0061	0.0065
07:00 AM - 08:00 AM	0.0035	0.0084	0.0089	0.0054	0.0062	0.0055	0.0063
08:00 AM - 09:00 AM	0.0037	0.0072	0.0078	0.0049	0.0059	0.0049	0.0052
09:00 AM - 10:00 AM	0.0042	0.0055	0.0067	0.0048	0.0056	0.0052	0.0046
10:00 AM - 11:00 AM	0.0047	0.0048	0.0062	0.0047	0.0052	0.0051	0.0046
11:00 AM - 12:00 PM	0.0050	0.0042	0.0059	0.0047	0.0047	0.0046	0.0041
Average	0.0056	0.0063	0.0063	0.0047	0.0055	0.0049	0.0046
1hr - Maximum	0.0103	0.0088	0.0089	0.0079	0.0081	0.0073	0.0067
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121831**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3164954-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** พื้นที่โครงการ (GPS 47P 0792995, 1553106)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121831-29	24121831-30	24121831-31	24121831-32	24121831-33	24121831-34	24121831-35
Time	Nov 01, 2024	Nov 02, 2024	Nov 03, 2024	Nov 04, 2024	Nov 05, 2024	Nov 06, 2024	Nov 07, 2024
09:00 AM - 10:00 AM	0.0091	0.0103	0.0139	0.0134	0.0108	0.0120	0.0129
10:00 AM - 11:00 AM	0.0066	0.0079	0.0093	0.0114	0.0089	0.0113	0.0066
11:00 AM - 12:00 PM	0.0059	0.0029	0.0057	0.0117	0.0082	0.0071	0.0087
12:00 PM - 01:00 PM	0.0017	0.0074	0.0046	0.0105	0.0068	0.0063	0.0073
01:00 PM - 02:00 PM	0.0037	0.0060	0.0039	0.0087	0.0068	0.0061	0.0070
02:00 PM - 03:00 PM	0.0068	0.0057	0.0038	0.0076	0.0091	0.0073	0.0062
03:00 PM - 04:00 PM	0.0081	0.0049	0.0043	0.0110	0.0094	0.0068	0.0047
04:00 PM - 05:00 PM	0.0075	0.0058	0.0083	0.0137	0.0084	0.0135	0.0056
05:00 PM - 06:00 PM	0.0115	0.0068	0.0150	0.0135	0.0092	0.0116	0.0071
06:00 PM - 07:00 PM	0.0086	0.0083	0.0123	0.0158	0.0123	0.0122	0.0135
07:00 PM - 08:00 PM	0.0092	0.0147	0.0240	0.0195	0.0126	0.0144	0.0284
08:00 PM - 09:00 PM	0.0113	0.0339	0.0227	0.0264	0.0164	0.0185	0.0131
09:00 PM - 10:00 PM	0.0142	0.0217	0.0177	0.0202	0.0222	0.0166	0.0128
10:00 PM - 11:00 PM	0.0123	0.0214	0.0219	0.0181	0.0168	0.0173	0.0107
11:00 PM - 12:00 AM	0.0131	0.0193	0.0193	0.0181	0.0174	0.0126	0.0058
12:00 AM - 01:00 AM	0.0062	0.0144	0.0143	0.0162	0.0155	0.0146	0.0082
01:00 AM - 02:00 AM	0.0082	0.0168	0.0141	0.0126	0.0134	0.0126	0.0085
02:00 AM - 03:00 AM	0.0062	0.0180	0.0103	0.0163	0.0130	0.0108	0.0120
03:00 AM - 04:00 AM	0.0044	0.0149	0.0129	0.0147	0.0133	0.0114	0.0077
04:00 AM - 05:00 AM	0.0053	0.0106	0.0180	0.0145	0.0126	0.0102	0.0113
05:00 AM - 06:00 AM	0.0041	0.0142	0.0186	0.0144	0.0127	0.0131	0.0114
06:00 AM - 07:00 AM	0.0070	0.0143	0.0209	0.0170	0.0143	0.0136	0.0148
07:00 AM - 08:00 AM	0.0075	0.0170	0.0241	0.0202	0.0170	0.0135	0.0262
08:00 AM - 09:00 AM	0.0085	0.0283	0.0207	0.0183	0.0246	0.0153	0.0209
Average	0.0078	0.0136	0.0142	0.0152	0.0130	0.0120	0.0113
1hr - Maximum	0.0142	0.0339	0.0241	0.0264	0.0246	0.0185	0.0284
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3145871-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านเขานางจีน (GPS 47P 0790574, 1555767)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121832-36 Nov 01, 2024	24121832-37 Nov 02, 2024	24121832-38 Nov 03, 2024	24121832-39 Nov 04, 2024	24121832-40 Nov 05, 2024	24121832-41 Nov 06, 2024	24121832-42 Nov 07, 2024
Time							
11:00 AM - 12:00 PM	0.0049	0.0055	0.0057	0.0060	0.0075	0.0058	0.0066
12:00 PM - 01:00 PM	0.0051	0.0058	0.0058	0.0060	0.0072	0.0065	0.0065
01:00 PM - 02:00 PM	0.0052	0.0055	0.0058	0.0058	0.0067	0.0063	0.0066
02:00 PM - 03:00 PM	0.0052	0.0055	0.0059	0.0058	0.0064	0.0061	0.0064
03:00 PM - 04:00 PM	0.0054	0.0060	0.0059	0.0061	0.0064	0.0060	0.0084
04:00 PM - 05:00 PM	0.0050	0.0059	0.0062	0.0060	0.0065	0.0062	0.0083
05:00 PM - 06:00 PM	0.0054	0.0058	0.0063	0.0062	0.0063	0.0060	0.0077
06:00 PM - 07:00 PM	0.0056	0.0057	0.0062	0.0059	0.0068	0.0061	0.0035
07:00 PM - 08:00 PM	0.0054	0.0060	0.0061	0.0060	0.0066	0.0058	0.0053
08:00 PM - 09:00 PM	0.0057	0.0059	0.0064	0.0064	0.0069	0.0060	0.0070
09:00 PM - 10:00 PM	0.0054	0.0056	0.0070	0.0059	0.0074	0.0062	0.0069
10:00 PM - 11:00 PM	0.0057	0.0054	0.0068	0.0061	0.0078	0.0061	0.0070
11:00 PM - 12:00 AM	0.0057	0.0057	0.0067	0.0059	0.0087	0.0061	0.0073
12:00 AM - 01:00 AM	0.0052	0.0056	0.0057	0.0060	0.0085	0.0058	0.0070
01:00 AM - 02:00 AM	0.0060	0.0057	0.0060	0.0059	0.0059	0.0060	0.0067
02:00 AM - 03:00 AM	0.0057	0.0060	0.0059	0.0062	0.0059	0.0045	0.0065
03:00 AM - 04:00 AM	0.0058	0.0059	0.0060	0.0058	0.0061	0.0050	0.0068
04:00 AM - 05:00 AM	0.0056	0.0059	0.0059	0.0060	0.0059	0.0055	0.0071
05:00 AM - 06:00 AM	0.0058	0.0061	0.0058	0.0058	0.0060	0.0057	0.0070
06:00 AM - 07:00 AM	0.0060	0.0056	0.0059	0.0060	0.0058	0.0058	0.0067
07:00 AM - 08:00 AM	0.0059	0.0060	0.0059	0.0062	0.0058	0.0062	0.0070
08:00 AM - 09:00 AM	0.0057	0.0059	0.0056	0.0059	0.0063	0.0061	0.0068
09:00 AM - 10:00 AM	0.0056	0.0055	0.0060	0.0056	0.0061	0.0062	0.0069
10:00 AM - 11:00 AM	0.0057	0.0058	0.0057	0.0063	0.0060	0.0063	0.0071
Average	0.0055	0.0058	0.0060	0.0060	0.0066	0.0059	0.0068
1hr - Maximum	0.0060	0.0061	0.0070	0.0064	0.0087	0.0065	0.0084
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3165005-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดแจ้งศาลา (GPS 47P 0792397, 1554150)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121832-1 Nov 01, 2024	24121832-2 Nov 02, 2024	24121832-3 Nov 03, 2024	24121832-4 Nov 04, 2024	24121832-5 Nov 05, 2024	24121832-6 Nov 06, 2024	24121832-7 Nov 07, 2024
Time							
10:00 AM - 11:00 AM	0.0033	0.0037	0.0033	0.0039	0.0039	0.0037	0.0027
11:00 AM - 12:00 PM	0.0032	0.0036	0.0033	0.0041	0.0054	0.0047	0.0028
12:00 PM - 01:00 PM	0.0036	0.0035	0.0041	0.0048	0.0057	0.0085	0.0032
01:00 PM - 02:00 PM	0.0046	0.0036	0.0047	0.0053	0.0055	0.0049	0.0036
02:00 PM - 03:00 PM	0.0055	0.0036	0.0049	0.0053	0.0056	0.0041	0.0041
03:00 PM - 04:00 PM	0.0057	0.0039	0.0049	0.0050	0.0056	0.0040	0.0043
04:00 PM - 05:00 PM	0.0057	0.0045	0.0049	0.0050	0.0057	0.0041	0.0046
05:00 PM - 06:00 PM	0.0058	0.0051	0.0051	0.0054	0.0059	0.0045	0.0049
06:00 PM - 07:00 PM	0.0062	0.0057	0.0056	0.0058	0.0060	0.0053	0.0050
07:00 PM - 08:00 PM	0.0063	0.0057	0.0057	0.0060	0.0060	0.0051	0.0050
08:00 PM - 09:00 PM	0.0066	0.0060	0.0058	0.0061	0.0060	0.0051	0.0051
09:00 PM - 10:00 PM	0.0068	0.0059	0.0057	0.0061	0.0058	0.0050	0.0055
10:00 PM - 11:00 PM	0.0067	0.0061	0.0058	0.0060	0.0056	0.0051	0.0058
11:00 PM - 12:00 AM	0.0068	0.0062	0.0063	0.0062	0.0053	0.0050	0.0056
12:00 AM - 01:00 AM	0.0069	0.0062	0.0062	0.0062	0.0051	0.0050	0.0058
01:00 AM - 02:00 AM	0.0069	0.0061	0.0062	0.0062	0.0050	0.0048	0.0058
02:00 AM - 03:00 AM	0.0068	0.0063	0.0062	0.0062	0.0048	0.0049	0.0057
03:00 AM - 04:00 AM	0.0066	0.0062	0.0060	0.0062	0.0046	0.0049	0.0056
04:00 AM - 05:00 AM	0.0065	0.0060	0.0061	0.0062	0.0043	0.0049	0.0053
05:00 AM - 06:00 AM	0.0065	0.0062	0.0060	0.0059	0.0042	0.0049	0.0049
06:00 AM - 07:00 AM	0.0061	0.0059	0.0058	0.0057	0.0045	0.0049	0.0043
07:00 AM - 08:00 AM	0.0054	0.0046	0.0048	0.0051	0.0044	0.0011	0.0036
08:00 AM - 09:00 AM	0.0046	0.0039	0.0041	0.0041	0.0040	0.0032	0.0035
09:00 AM - 10:00 AM	0.0040	0.0035	0.0039	0.0039	0.0036	0.0031	0.0035
Average	0.0057	0.0051	0.0052	0.0054	0.0051	0.0046	0.0046
1hr - Maximum	0.0069	0.0063	0.0063	0.0062	0.0060	0.0085	0.0058
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3165006-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดสระตูละครท่า (GPS 47P 0792644, 1550250)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121832-8	24121832-9	24121832-10	24121832-11	24121832-12	24121832-13	24121832-14
Time	Nov 01, 2024	Nov 02, 2024	Nov 03, 2024	Nov 04, 2024	Nov 05, 2024	Nov 06, 2024	Nov 07, 2024
01:00 PM - 02:00 PM	0.0039	0.0051	0.0061	0.0060	0.0055	0.0056	0.0051
02:00 PM - 03:00 PM	0.0039	0.0048	0.0057	0.0054	0.0051	0.0050	0.0051
03:00 PM - 04:00 PM	0.0043	0.0046	0.0052	0.0053	0.0052	0.0048	0.0054
04:00 PM - 05:00 PM	0.0057	0.0046	0.0048	0.0052	0.0053	0.0047	0.0057
05:00 PM - 06:00 PM	0.0054	0.0049	0.0048	0.0048	0.0056	0.0058	0.0058
06:00 PM - 07:00 PM	0.0053	0.0049	0.0048	0.0048	0.0067	0.0075	0.0057
07:00 PM - 08:00 PM	0.0055	0.0049	0.0048	0.0047	0.0072	0.0076	0.0058
08:00 PM - 09:00 PM	0.0056	0.0051	0.0049	0.0054	0.0072	0.0074	0.0062
09:00 PM - 10:00 PM	0.0057	0.0057	0.0053	0.0054	0.0070	0.0074	0.0066
10:00 PM - 11:00 PM	0.0060	0.0062	0.0055	0.0061	0.0071	0.0075	0.0069
11:00 PM - 12:00 AM	0.0065	0.0072	0.0059	0.0062	0.0073	0.0074	0.0070
12:00 AM - 01:00 AM	0.0069	0.0074	0.0064	0.0065	0.0070	0.0074	0.0070
01:00 AM - 02:00 AM	0.0071	0.0077	0.0066	0.0065	0.0072	0.0075	0.0070
02:00 AM - 03:00 AM	0.0072	0.0078	0.0069	0.0065	0.0074	0.0073	0.0072
03:00 AM - 04:00 AM	0.0072	0.0075	0.0072	0.0067	0.0072	0.0027	0.0073
04:00 AM - 05:00 AM	0.0074	0.0075	0.0074	0.0072	0.0074	0.0073	0.0074
05:00 AM - 06:00 AM	0.0074	0.0075	0.0075	0.0074	0.0073	0.0075	0.0079
06:00 AM - 07:00 AM	0.0074	0.0074	0.0075	0.0075	0.0073	0.0075	0.0082
07:00 AM - 08:00 AM	0.0074	0.0074	0.0074	0.0073	0.0074	0.0074	0.0081
08:00 AM - 09:00 AM	0.0070	0.0074	0.0074	0.0071	0.0074	0.0073	0.0082
09:00 AM - 10:00 AM	0.0073	0.0075	0.0073	0.0070	0.0073	0.0071	0.0082
10:00 AM - 11:00 AM	0.0073	0.0076	0.0071	0.0070	0.0073	0.0062	0.0078
11:00 AM - 12:00 PM	0.0070	0.0072	0.0070	0.0068	0.0072	0.0058	0.0035
12:00 PM - 01:00 PM	0.0058	0.0066	0.0064	0.0061	0.0065	0.0056	0.0064
Average	0.0063	0.0064	0.0062	0.0062	0.0068	0.0066	0.0066
1hr - Maximum	0.0074	0.0078	0.0075	0.0075	0.0074	0.0076	0.0082
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3165008-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** ชุมชนบ้านนาแซง (GPS 47P 0793836, 1554219)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121832-15 Nov 01, 2024	24121832-16 Nov 02, 2024	24121832-17 Nov 03, 2024	24121832-18 Nov 04, 2024	24121832-19 Nov 05, 2024	24121832-20 Nov 06, 2024	24121832-21 Nov 07, 2024
Time							
01:00 PM - 02:00 PM	0.0032	0.0031	0.0031	0.0028	0.0030	0.0028	0.0028
02:00 PM - 03:00 PM	0.0034	0.0031	0.0031	0.0029	0.0031	0.0030	0.0027
03:00 PM - 04:00 PM	0.0032	0.0031	0.0030	0.0026	0.0030	0.0031	0.0028
04:00 PM - 05:00 PM	0.0033	0.0031	0.0031	0.0028	0.0030	0.0030	0.0028
05:00 PM - 06:00 PM	0.0031	0.0030	0.0029	0.0029	0.0029	0.0030	0.0026
06:00 PM - 07:00 PM	0.0032	0.0030	0.0030	0.0027	0.0029	0.0029	0.0034
07:00 PM - 08:00 PM	0.0031	0.0030	0.0031	0.0026	0.0030	0.0029	0.0035
08:00 PM - 09:00 PM	0.0029	0.0030	0.0031	0.0028	0.0031	0.0028	0.0036
09:00 PM - 10:00 PM	0.0021	0.0028	0.0029	0.0027	0.0030	0.0028	0.0036
10:00 PM - 11:00 PM	0.0027	0.0028	0.0030	0.0029	0.0030	0.0029	0.0038
11:00 PM - 12:00 AM	0.0029	0.0029	0.0030	0.0031	0.0029	0.0030	0.0037
12:00 AM - 01:00 AM	0.0028	0.0029	0.0030	0.0028	0.0029	0.0029	0.0036
01:00 AM - 02:00 AM	0.0028	0.0030	0.0029	0.0029	0.0029	0.0028	0.0037
02:00 AM - 03:00 AM	0.0029	0.0029	0.0029	0.0030	0.0031	0.0028	0.0038
03:00 AM - 04:00 AM	0.0028	0.0029	0.0028	0.0031	0.0029	0.0029	0.0038
04:00 AM - 05:00 AM	0.0030	0.0029	0.0029	0.0032	0.0027	0.0028	0.0038
05:00 AM - 06:00 AM	0.0027	0.0029	0.0030	0.0032	0.0027	0.0029	0.0036
06:00 AM - 07:00 AM	0.0029	0.0030	0.0029	0.0030	0.0028	0.0028	0.0035
07:00 AM - 08:00 AM	0.0029	0.0029	0.0029	0.0031	0.0028	0.0027	0.0034
08:00 AM - 09:00 AM	0.0031	0.0029	0.0030	0.0029	0.0027	0.0027	0.0037
09:00 AM - 10:00 AM	0.0030	0.0030	0.0029	0.0030	0.0029	0.0025	0.0038
10:00 AM - 11:00 AM	0.0031	0.0030	0.0028	0.0031	0.0031	0.0027	0.0037
11:00 AM - 12:00 PM	0.0031	0.0030	0.0028	0.0030	0.0029	0.0027	0.0038
12:00 PM - 01:00 PM	0.0031	0.0030	0.0029	0.0029	0.0029	0.0028	0.0036
Average	0.0030	0.0030	0.0030	0.0029	0.0029	0.0028	0.0035
1hr - Maximum	0.0034	0.0031	0.0031	0.0032	0.0031	0.0031	0.0038
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3165009-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนบ้านโนนสะอาด (GPS 47P 0788792, 1552723)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

	24121832-22 Nov 01, 2024	24121832-23 Nov 02, 2024	24121832-24 Nov 03, 2024	24121832-25 Nov 04, 2024	24121832-26 Nov 05, 2024	24121832-27 Nov 06, 2024	24121832-28 Nov 07, 2024
Time							
12:00 PM - 01:00 PM	0.0049	0.0055	0.0042	0.0044	0.0047	0.0056	0.0041
01:00 PM - 02:00 PM	0.0054	0.0065	0.0043	0.0041	0.0050	0.0045	0.0038
02:00 PM - 03:00 PM	0.0055	0.0063	0.0043	0.0040	0.0049	0.0041	0.0036
03:00 PM - 04:00 PM	0.0064	0.0052	0.0044	0.0043	0.0056	0.0041	0.0037
04:00 PM - 05:00 PM	0.0069	0.0048	0.0044	0.0045	0.0058	0.0045	0.0038
05:00 PM - 06:00 PM	0.0073	0.0050	0.0047	0.0050	0.0061	0.0053	0.0045
06:00 PM - 07:00 PM	0.0077	0.0058	0.0054	0.0055	0.0064	0.0064	0.0053
07:00 PM - 08:00 PM	0.0074	0.0066	0.0060	0.0058	0.0064	0.0066	0.0059
08:00 PM - 09:00 PM	0.0070	0.0071	0.0065	0.0061	0.0062	0.0067	0.0061
09:00 PM - 10:00 PM	0.0068	0.0069	0.0070	0.0062	0.0062	0.0064	0.0064
10:00 PM - 11:00 PM	0.0066	0.0070	0.0070	0.0064	0.0063	0.0062	0.0063
11:00 PM - 12:00 AM	0.0068	0.0068	0.0068	0.0063	0.0065	0.0064	0.0065
12:00 AM - 01:00 AM	0.0066	0.0068	0.0066	0.0060	0.0050	0.0061	0.0066
01:00 AM - 02:00 AM	0.0063	0.0068	0.0066	0.0060	0.0076	0.0062	0.0065
02:00 AM - 03:00 AM	0.0062	0.0066	0.0020	0.0060	0.0074	0.0062	0.0064
03:00 AM - 04:00 AM	0.0061	0.0068	0.0067	0.0059	0.0074	0.0063	0.0063
04:00 AM - 05:00 AM	0.0061	0.0069	0.0074	0.0059	0.0076	0.0066	0.0063
05:00 AM - 06:00 AM	0.0060	0.0069	0.0072	0.0059	0.0079	0.0065	0.0065
06:00 AM - 07:00 AM	0.0060	0.0069	0.0067	0.0057	0.0073	0.0063	0.0060
07:00 AM - 08:00 AM	0.0061	0.0067	0.0057	0.0051	0.0065	0.0057	0.0050
08:00 AM - 09:00 AM	0.0055	0.0056	0.0049	0.0047	0.0057	0.0051	0.0030
09:00 AM - 10:00 AM	0.0050	0.0047	0.0044	0.0042	0.0057	0.0049	0.0048
10:00 AM - 11:00 AM	0.0047	0.0044	0.0041	0.0040	0.0054	0.0044	0.0046
11:00 AM - 12:00 PM	0.0044	0.0043	0.0041	0.0042	0.0055	0.0040	0.0042
Average	0.0062	0.0061	0.0055	0.0053	0.0062	0.0056	0.0053
1hr - Maximum	0.0077	0.0071	0.0074	0.0064	0.0079	0.0067	0.0066
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121832**

Date Received : Nov 11, 2024  
Date Reported : Nov 14, 2024  
Report Number: 3165014-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** พื้นที่โครงการ (GPS 47P 0792995, 1553106)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Nov 01, 2024 - Nov 08, 2024  
**Measurement by** Apichart Wilars

Time	24121832-29 Nov 01, 2024	24121832-30 Nov 02, 2024	24121832-31 Nov 03, 2024	24121832-32 Nov 04, 2024	24121832-33 Nov 05, 2024	24121832-34 Nov 06, 2024	24121832-35 Nov 07, 2024
09:00 AM - 10:00 AM	0.0072	0.0079	0.0080	0.0081	0.0081	0.0081	0.0081
10:00 AM - 11:00 AM	0.0072	0.0079	0.0083	0.0081	0.0081	0.0082	0.0081
11:00 AM - 12:00 PM	0.0073	0.0081	0.0085	0.0079	0.0081	0.0082	0.0082
12:00 PM - 01:00 PM	0.0076	0.0083	0.0086	0.0082	0.0082	0.0082	0.0083
01:00 PM - 02:00 PM	0.0084	0.0084	0.0093	0.0088	0.0080	0.0087	0.0089
02:00 PM - 03:00 PM	0.0086	0.0079	0.0093	0.0092	0.0079	0.0087	0.0094
03:00 PM - 04:00 PM	0.0087	0.0076	0.0089	0.0088	0.0087	0.0072	0.0089
04:00 PM - 05:00 PM	0.0085	0.0081	0.0082	0.0087	0.0099	0.0084	0.0089
05:00 PM - 06:00 PM	0.0084	0.0099	0.0084	0.0086	0.0089	0.0079	0.0029
06:00 PM - 07:00 PM	0.0082	0.0107	0.0086	0.0083	0.0087	0.0073	0.0051
07:00 PM - 08:00 PM	0.0084	0.0084	0.0082	0.0064	0.0085	0.0079	0.0055
08:00 PM - 09:00 PM	0.0074	0.0080	0.0076	0.0069	0.0074	0.0082	0.0066
09:00 PM - 10:00 PM	0.0063	0.0078	0.0071	0.0080	0.0072	0.0083	0.0068
10:00 PM - 11:00 PM	0.0069	0.0079	0.0070	0.0080	0.0074	0.0082	0.0075
11:00 PM - 12:00 AM	0.0065	0.0079	0.0071	0.0076	0.0075	0.0081	0.0079
12:00 AM - 01:00 AM	0.0072	0.0079	0.0075	0.0075	0.0075	0.0081	0.0081
01:00 AM - 02:00 AM	0.0078	0.0080	0.0078	0.0077	0.0079	0.0081	0.0090
02:00 AM - 03:00 AM	0.0079	0.0081	0.0080	0.0077	0.0080	0.0082	0.0092
03:00 AM - 04:00 AM	0.0079	0.0080	0.0081	0.0080	0.0082	0.0081	0.0091
04:00 AM - 05:00 AM	0.0080	0.0080	0.0078	0.0082	0.0081	0.0082	0.0085
05:00 AM - 06:00 AM	0.0080	0.0081	0.0081	0.0081	0.0079	0.0083	0.0082
06:00 AM - 07:00 AM	0.0081	0.0081	0.0080	0.0081	0.0080	0.0083	0.0083
07:00 AM - 08:00 AM	0.0081	0.0082	0.0081	0.0080	0.0081	0.0082	0.0087
08:00 AM - 09:00 AM	0.0081	0.0082	0.0080	0.0081	0.0080	0.0082	0.0089
Average	0.0078	0.0082	0.0081	0.0080	0.0081	0.0081	0.0079
1hr - Maximum	0.0087	0.0107	0.0093	0.0092	0.0099	0.0087	0.0094
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).  
Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 1 of 2

Sample Number 24121833-1 to 7  
Parameter Wind Speed / Wind Direction  
Location วัดอ่างศิลา (GPS 47P 0792397, 1554150)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	0.3	88.0	E	0.4	245.0	WSW	0.9	2.0	N	0.4	49.0	NE	0.5	296.0	WNW	0.2	-	-	0.0	-	-
11:00 AM - 12:00 PM	0.4	308.0	NW	0.5	83.0	E	0.3	42.0	NE	3.7	50.0	NE	0.3	35.0	NE	0.7	35.0	NE	0.1	-	-
12:00 PM - 01:00 PM	0.6	359.0	N	0.6	322.0	NW	0.6	5.0	N	0.3	318.0	NW	1.3	114.0	ESE	1.6	50.0	NE	2.8	47.0	NE
01:00 PM - 02:00 PM	0.7	355.0	N	0.3	6.0	N	1.6	359.0	N	0.4	340.0	NNW	0.1	-	-	0.3	359.0	N	0.0	-	-
02:00 PM - 03:00 PM	0.3	309.0	NW	0.3	25.0	NNE	0.9	33.0	NNE	0.7	20.0	NNE	0.3	84.0	E	0.2	-	-	0.0	-	-
03:00 PM - 04:00 PM	0.0	-	-	0.4	14.0	NNE	0.7	351.0	N	0.9	6.0	N	0.0	-	-	0.2	-	-	0.0	-	-
04:00 PM - 05:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.3	323.0	NW	0.0	-	-	0.1	-	-	0.0	-	-
05:00 PM - 06:00 PM	0.3	47.0	NE	0.0	-	-	0.0	-	-	0.3	26.0	NNE	0.9	40.0	NE	0.4	34.0	NE	0.0	-	-
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.0	24.0	NNE	0.4	97.0	E	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.8	171.0	S	0.7	327.0	NNW	0.3	19.0	NNE	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.6	39.0	NE	0.0	-	-	0.7	340.0	NNW	0.3	39.0	NE	0.6	22.0	NNE	0.2	-	-
09:00 PM - 10:00 PM	0.2	-	-	1.0	49.0	NE	0.6	95.0	E	0.9	39.0	NE	0.9	305.0	NW	0.5	36.0	NE	0.4	342.0	NNW
10:00 PM - 11:00 PM	0.1	-	-	0.3	14.0	NNE	0.0	-	-	1.5	7.0	N	1.2	53.0	NE	0.6	53.0	NE	0.8	21.0	NNE
11:00 PM - 12:00 AM	0.0	-	-	0.3	43.0	NE	0.0	-	-	0.5	67.0	ENE	0.4	359.0	N	0.3	61.0	ENE	0.0	-	-
12:00 AM - 01:00 AM	0.0	-	-	0.6	4.0	N	0.0	-	-	0.7	58.0	ENE	0.4	305.0	NW	0.1	-	-	0.7	21.0	NNE
01:00 AM - 02:00 AM	0.0	-	-	0.3	264.0	W	0.0	-	-	1.3	45.0	NE	0.4	351.0	N	0.1	-	-	0.9	346.0	NNW
02:00 AM - 03:00 AM	0.0	-	-	0.4	28.0	NNE	0.0	-	-	1.1	41.0	NE	0.5	0.0	N	2.7	65.0	ENE	0.0	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.6	26.0	NNE	0.4	95.0	E	0.8	68.0	ENE	0.9	33.0	NNE	0.6	67.0	ENE	0.0	-	-
04:00 AM - 05:00 AM	0.0	-	-	0.7	0.0	N	0.9	111.0	ESE	0.3	110.0	ESE	0.8	72.0	ENE	0.6	44.0	NE	0.0	-	-
05:00 AM - 06:00 AM	0.7	359.0	N	0.8	49.0	NE	1.1	68.0	ENE	0.6	126.0	SE	0.9	90.0	E	0.4	65.0	ENE	0.9	31.0	NNE
06:00 AM - 07:00 AM	1.2	319.0	NW	0.7	338.0	NNW	1.7	359.0	N	1.8	54.0	NE	0.3	316.0	NW	0.6	72.0	ENE	0.0	-	-
07:00 AM - 08:00 AM	1.0	309.0	NW	2.4	28.0	NNE	1.2	4.0	N	0.4	24.0	NNE	0.5	349.0	N	0.6	19.0	NNE	0.1	-	-
08:00 AM - 09:00 AM	0.9	47.0	NE	0.3	57.0	ENE	2.4	28.0	NNE	3.2	45.0	NE	0.7	312.0	NW	0.3	336.0	NNW	2.7	65.0	ENE
09:00 AM - 10:00 AM	1.1	342.0	NNW	0.3	359.0	N	0.6	40.0	NE	0.3	21.0	NNE	0.3	59.0	ENE	1.9	67.0	ENE	0.6	67.0	ENE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

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

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

Page 2 of 2

### Wind Rose



Date : Nov 01-02, 2024



Date : Nov 02-03, 2024



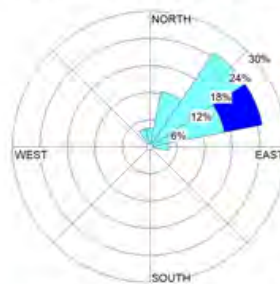
Date : Nov 03-04, 2024



Date : Nov 04-05, 2024



Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	5.36
0.3-1.7	62.50
Calms	31.55

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

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 1 of 2

Sample Number 24121833-8 to 14  
Parameter Wind Speed / Wind Direction  
Location วัดสระตูละคร (GPS 47P 0792644, 1550250)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	3.6	162.0	SSE	1.0	21.0	NNE	1.9	349.0	N	1.4	39.0	NE	0.7	359.0	N	1.3	17.0	NNE	2.3	0.0	N
02:00 PM - 03:00 PM	1.5	359.0	N	0.3	0.0	N	0.8	355.0	N	2.1	84.0	E	0.2	-	-	0.3	350.0	N	1.2	28.0	NNE
03:00 PM - 04:00 PM	0.4	336.0	NNW	0.6	15.0	NNE	1.2	15.0	NNE	0.8	343.0	NNW	0.6	82.0	E	0.8	355.0	N	2.0	46.0	NE
04:00 PM - 05:00 PM	0.6	355.0	N	0.1	-	-	0.9	359.0	N	1.0	355.0	N	0.0	-	-	1.5	0.0	N	2.4	12.0	NNE
05:00 PM - 06:00 PM	0.5	50.0	NE	0.0	-	-	0.6	38.0	NE	1.1	0.0	N	0.0	-	-	0.9	349.0	N	0.0	-	-
06:00 PM - 07:00 PM	0.0	-	-	0.1	-	-	0.9	9.0	N	1.4	10.0	N	0.5	13.0	NNE	0.7	9.0	N	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	1.1	359.0	N	1.5	27.0	NNE	0.4	7.0	N	1.0	0.0	N	0.0	-	-
08:00 PM - 09:00 PM	0.4	174.0	S	0.0	-	-	0.4	5.0	N	0.2	-	-	0.0	-	-	0.9	337.0	NNW	2.0	2.0	N
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.8	0.0	N	1.0	320.0	NW	1.5	342.0	NNW
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.4	21.0	NNE	0.4	20.0	NNE	0.3	41.0	NE	0.5	354.0	N
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.6	29.0	NNE	2.7	0.0	N	1.8	22.0	NNE	1.5	50.0	NE
12:00 AM - 01:00 AM	0.1	-	-	0.0	-	-	0.0	-	-	0.5	333.0	NNW	0.2	-	-	0.0	-	-	0.5	78.0	ENE
01:00 AM - 02:00 AM	0.3	35.0	NE	0.6	26.0	NNE	0.0	-	-	1.4	53.0	NE	0.6	359.0	N	0.0	-	-	6.8	0.0	N
02:00 AM - 03:00 AM	0.2	-	-	1.5	347.0	NNW	0.4	58.0	ENE	1.5	61.0	ENE	2.8	357.0	N	0.7	20.0	NNE	3.2	28.0	NNE
03:00 AM - 04:00 AM	0.2	-	-	2.6	345.0	NNW	0.0	-	-	0.6	63.0	ENE	4.7	8.0	N	0.0	-	-	1.5	46.0	NE
04:00 AM - 05:00 AM	0.0	-	-	1.6	75.0	ENE	0.0	-	-	1.4	50.0	NE	2.5	24.0	NNE	0.0	-	-	1.7	42.0	NE
05:00 AM - 06:00 AM	0.0	-	-	1.0	13.0	NNE	0.0	-	-	0.5	32.0	NNE	3.1	321.0	NW	0.0	-	-	1.1	59.0	ENE
06:00 AM - 07:00 AM	0.6	40.0	NE	1.1	25.0	NNE	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	2.1	84.0	E
07:00 AM - 08:00 AM	0.2	-	-	1.0	28.0	NNE	1.0	28.0	NNE	0.2	-	-	0.3	357.0	N	1.2	50.0	NE	2.3	0.0	N
08:00 AM - 09:00 AM	1.6	14.0	NNE	1.4	33.0	NNE	2.4	36.0	NE	0.5	89.0	E	2.7	24.0	NNE	0.6	34.0	NE	2.1	34.0	NE
09:00 AM - 10:00 AM	1.2	359.0	N	1.6	57.0	ENE	0.5	45.0	NE	3.1	0.0	N	0.5	356.0	N	0.8	96.0	E	2.2	316.0	NW
10:00 AM - 11:00 AM	1.4	42.0	NE	1.7	27.0	NNE	1.7	29.0	NNE	1.9	20.0	NNE	0.3	33.0	NNE	2.4	157.0	SSE	0.5	354.0	N
11:00 AM - 12:00 PM	3.9	4.0	N	0.8	32.0	NNE	0.3	41.0	NE	2.2	30.0	NNE	3.5	14.0	NNE	2.4	59.0	ENE	1.5	50.0	NE
12:00 PM - 01:00 PM	2.2	358.0	N	1.0	340.0	NNW	0.6	354.0	N	0.9	116.0	ESE	0.3	47.0	NE	0.6	37.0	NE	0.5	78.0	ENE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

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

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

Page 2 of 2

### Wind Rose



Date : Nov 01-02, 2024



Date : Nov 02-03, 2024



Date : Nov 03-04, 2024



Date : Nov 04-05, 2024



Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	2.38
1.7-3.3	16.67
0.3-1.7	51.79
Calms	28.57

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

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 1 of 2

Sample Number 24121833-15 to 21  
Parameter Wind Speed / Wind Direction  
Location ชุมชนบ้านนาแซง (GPS 47P 0793836, 1554219)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	0.7	121.0	ESE	1.1	223.0	SW	0.0	-	-	1.6	226.0	SW	0.6	185.0	S	0.3	91.0	E	0.7	218.0	SW
02:00 PM - 03:00 PM	0.0	-	-	0.5	171.0	S	0.4	239.0	WSW	0.2	-	-	1.8	301.0	WNW	0.4	237.0	WSW	0.1	-	-
03:00 PM - 04:00 PM	0.0	-	-	0.6	185.0	S	3.9	228.0	SW	0.6	133.0	SE	0.3	253.0	WSW	0.2	-	-	2.2	252.0	WSW
04:00 PM - 05:00 PM	1.0	139.0	SE	1.1	247.0	WSW	2.1	281.0	W	1.1	213.0	SSW	0.0	-	-	0.4	164.0	SSE	0.4	237.0	WSW
05:00 PM - 06:00 PM	1.2	139.0	SE	3.8	270.0	W	5.2	268.0	W	0.7	131.0	SE	0.0	-	-	0.0	-	-	0.0	-	-
06:00 PM - 07:00 PM	0.9	143.0	SE	3.3	268.0	W	6.0	308.0	NW	0.0	-	-	0.0	-	-	0.4	77.0	ENE	0.0	-	-
07:00 PM - 08:00 PM	1.0	173.0	S	1.3	304.0	NW	3.3	267.0	W	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-
08:00 PM - 09:00 PM	3.2	128.0	SE	0.7	275.0	W	2.7	181.0	S	0.0	-	-	0.0	-	-	0.3	260.0	W	0.0	-	-
09:00 PM - 10:00 PM	4.2	209.0	SSW	1.1	320.0	NW	3.6	209.0	SSW	0.0	-	-	0.0	-	-	0.3	224.0	SW	0.9	65.0	ENE
10:00 PM - 11:00 PM	0.9	82.0	E	0.8	352.0	N	1.1	144.0	SE	0.3	270.0	W	0.2	-	-	0.6	261.0	W	0.4	254.0	WSW
11:00 PM - 12:00 AM	2.3	35.0	NE	1.7	116.0	ESE	2.5	155.0	SSE	0.7	214.0	SW	1.0	106.0	ESE	0.8	214.0	SW	0.4	261.0	W
12:00 AM - 01:00 AM	1.0	108.0	ESE	1.2	111.0	ESE	2.1	157.0	SSE	0.6	231.0	SW	0.4	254.0	WSW	0.5	283.0	WNW	1.0	220.0	SW
01:00 AM - 02:00 AM	1.5	315.0	NW	0.4	93.0	E	1.1	97.0	E	0.1	-	-	2.2	215.0	SW	0.0	-	-	1.9	236.0	SW
02:00 AM - 03:00 AM	0.3	29.0	NNE	0.7	82.0	E	0.8	108.0	ESE	1.5	254.0	WSW	0.9	279.0	W	0.0	-	-	2.1	71.0	ENE
03:00 AM - 04:00 AM	0.7	84.0	E	0.0	-	-	0.2	-	-	1.0	242.0	WSW	2.5	261.0	W	0.4	281.0	W	0.5	188.0	S
04:00 AM - 05:00 AM	0.9	110.0	ESE	0.1	-	-	0.1	-	-	0.0	-	-	0.6	205.0	SSW	0.0	-	-	1.2	296.0	WNW
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.4	121.0	ESE	0.7	254.0	WSW	0.4	209.0	SSW	0.0	-	-	0.6	271.0	W
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.6	105.0	ESE	0.0	-	-	0.4	193.0	SSW	0.2	-	-	0.8	252.0	WSW
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	0.4	254.0	WSW	0.4	299.0	WNW	1.5	196.0	SSW	0.2	-	-	1.2	161.0	SSE
08:00 AM - 09:00 AM	0.0	-	-	0.3	200.0	SSW	2.2	215.0	SW	0.6	234.0	SW	1.6	261.0	W	0.5	136.0	SE	0.4	282.0	WNW
09:00 AM - 10:00 AM	0.0	-	-	0.0	-	-	0.9	279.0	W	1.2	335.0	NNW	0.8	180.0	S	2.1	257.0	WSW	0.4	154.0	SSE
10:00 AM - 11:00 AM	3.1	268.0	W	0.3	191.0	S	0.5	8.0	N	2.2	166.0	SSE	1.2	186.0	S	1.2	336.0	NNW	0.0	-	-
11:00 AM - 12:00 PM	0.2	-	-	0.0	-	-	0.7	243.0	WSW	3.4	247.0	WSW	1.5	132.0	SE	1.7	11.0	N	0.3	99.0	E
12:00 PM - 01:00 PM	1.2	247.0	WSW	0.0	-	-	1.0	285.0	WNW	1.3	259.0	W	1.8	159.0	SSE	1.0	259.0	W	0.0	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont  
Assistant General Manager





## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 2 of 2

### Wind Rose



Date : Nov 01-02, 2024



Date : Nov 02-03, 2024



Date : Nov 03-04, 2024



Date : Nov 04-05, 2024



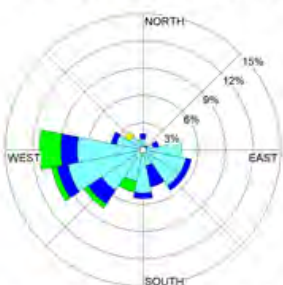
Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	4.76
1.7-3.3	11.31
0.3-1.7	53.57
Calms	29.76

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

Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 1 of 2

Sample Number 24121833-22 to 28  
Parameter Wind Speed / Wind Direction  
Location โรงเรียนบ้านโนนสะอาด (GPS 47P 0788792, 1552723)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	1.1	58.0	ENE	2.2	159.0	SSE	2.3	191.0	S	2.6	203.0	SSW	2.7	304.0	NW	1.4	76.0	ENE	2.4	24.0	NNE
01:00 PM - 02:00 PM	0.2	-	-	3.0	269.0	W	3.5	183.0	S	3.5	216.0	SW	3.4	244.0	WSW	2.4	157.0	SSE	1.6	43.0	NE
02:00 PM - 03:00 PM	1.6	152.0	SSE	0.8	233.0	SW	3.5	195.0	SSW	2.1	220.0	SW	1.8	261.0	W	3.6	225.0	SW	1.9	102.0	ESE
03:00 PM - 04:00 PM	2.1	213.0	SSW	2.7	254.0	WSW	1.6	234.0	SW	2.7	203.0	SSW	1.7	256.0	WSW	1.1	279.0	W	3.2	67.0	ENE
04:00 PM - 05:00 PM	1.8	232.0	SW	3.0	205.0	SSW	1.5	260.0	W	0.3	321.0	NW	1.0	302.0	WNW	0.4	212.0	SSW	1.4	74.0	ENE
05:00 PM - 06:00 PM	2.4	203.0	SSW	0.5	190.0	S	0.4	333.0	NNW	1.3	346.0	NNW	0.2	-	-	0.6	162.0	SSE	0.9	70.0	ENE
06:00 PM - 07:00 PM	2.4	204.0	SSW	2.0	186.0	S	0.6	294.0	WNW	0.4	25.0	NNE	0.9	67.0	ENE	0.4	73.0	ENE	0.6	50.0	NE
07:00 PM - 08:00 PM	1.6	210.0	SSW	0.0	-	-	0.4	125.0	SE	0.8	30.0	NNE	1.7	2.0	N	0.8	22.0	NNE	1.3	9.0	N
08:00 PM - 09:00 PM	1.1	221.0	SW	0.4	41.0	NE	0.6	122.0	ESE	0.8	35.0	NE	1.2	31.0	NNE	0.4	17.0	NNE	1.9	38.0	NE
09:00 PM - 10:00 PM	0.4	150.0	SSE	0.2	-	-	0.8	125.0	SE	0.6	30.0	NNE	0.4	95.0	E	0.7	21.0	NNE	1.8	53.0	NE
10:00 PM - 11:00 PM	0.6	100.0	E	0.4	146.0	SE	0.3	42.0	NE	0.9	40.0	NE	0.3	98.0	E	2.3	71.0	ENE	1.5	46.0	NE
11:00 PM - 12:00 AM	0.2	-	-	0.6	152.0	SSE	1.5	37.0	NE	0.8	26.0	NNE	0.4	51.0	NE	2.4	60.0	ENE	2.6	54.0	NE
12:00 AM - 01:00 AM	1.1	39.0	NE	0.4	49.0	NE	1.1	36.0	NE	0.6	47.0	NE	1.1	27.0	NNE	1.0	56.0	NE	3.5	43.0	NE
01:00 AM - 02:00 AM	0.6	43.0	NE	0.8	75.0	ENE	0.6	32.0	NNE	0.6	46.0	NE	1.0	36.0	NE	3.0	53.0	NE	2.6	25.0	NNE
02:00 AM - 03:00 AM	1.0	46.0	NE	1.6	27.0	NNE	0.9	30.0	NNE	0.2	-	-	0.8	25.0	NNE	3.1	31.0	NNE	2.7	6.0	N
03:00 AM - 04:00 AM	1.4	44.0	NE	1.4	42.0	NE	1.0	24.0	NNE	0.0	-	-	1.5	36.0	NE	2.9	28.0	NNE	2.6	52.0	NE
04:00 AM - 05:00 AM	0.8	38.0	NE	1.2	41.0	NE	1.4	55.0	NE	1.0	44.0	NE	1.0	57.0	ENE	3.4	27.0	NNE	2.3	25.0	NNE
05:00 AM - 06:00 AM	1.6	23.0	NNE	2.5	50.0	NE	1.4	23.0	NNE	1.1	45.0	NE	2.6	21.0	NNE	3.0	48.0	NE	3.9	66.0	ENE
06:00 AM - 07:00 AM	1.7	12.0	NNE	3.0	46.0	NE	1.5	45.0	NE	1.1	37.0	NE	2.3	52.0	NE	2.3	43.0	NE	2.7	51.0	NE
07:00 AM - 08:00 AM	1.3	104.0	ESE	2.5	63.0	ENE	2.3	38.0	NE	0.9	77.0	ENE	3.3	32.0	NNE	3.5	44.0	NE	1.2	59.0	ENE
08:00 AM - 09:00 AM	1.4	99.0	E	1.5	69.0	ENE	1.5	119.0	ESE	1.8	222.0	SW	2.5	64.0	ENE	2.1	37.0	NE	0.6	62.0	ENE
09:00 AM - 10:00 AM	1.4	80.0	E	0.9	128.0	SE	1.5	0.0	N	3.5	171.0	S	2.0	45.0	NE	2.1	72.0	ENE	0.8	68.0	ENE
10:00 AM - 11:00 AM	2.3	207.0	SSW	1.3	210.0	SSW	2.6	46.0	NE	2.6	211.0	SSW	1.1	127.0	SE	3.0	71.0	ENE	1.4	58.0	ENE
11:00 AM - 12:00 PM	1.0	234.0	SW	2.0	239.0	WSW	3.5	241.0	WSW	2.3	257.0	WSW	2.1	58.0	ENE	3.7	53.0	NE	2.1	62.0	ENE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont  
Assistant General Manager



## Analysis / Test Report

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

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

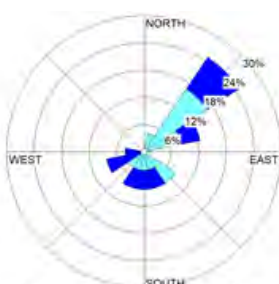
Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

Page 2 of 2

### Wind Rose



Date : Nov 01-02, 2024



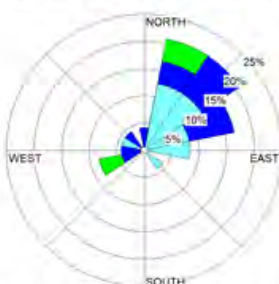
Date : Nov 02-03, 2024



Date : Nov 03-04, 2024



Date : Nov 04-05, 2024



Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	7.74
1.7-3.3	33.33
0.3-1.7	54.76
Calms	4.17

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

Approved by

Sarayuth Jitranont  
Assistant General Manager





## Analysis / Test Report

Client : Gulf NC Co., Ltd.

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

Lot ID: 24121833

Date Received : Nov 09, 2024

Date Reported : Nov 15, 2024

Report Number : 3145884-1

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Page 1 of 2

Sample Number 24121833-29 to 35  
Parameter Wind Speed / Wind Direction  
Location พื้นที่โครงการ (GPS 47P 0792995, 1553106)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	0.8	86.0	E	3.9	11.0	N	2.9	210.0	SSW	1.7	195.0	SSW	6.9	199.0	SSW	1.6	222.0	SW	3.5	208.0	SSW
10:00 AM - 11:00 AM	2.4	64.0	ENE	2.8	195.0	SSW	5.2	208.0	SSW	1.7	223.0	SW	2.1	209.0	SSW	2.6	196.0	SSW	2.8	219.0	SW
11:00 AM - 12:00 PM	1.8	52.0	NE	3.1	204.0	SSW	1.6	14.0	NNE	0.5	179.0	S	0.6	203.0	SSW	2.9	198.0	SSW	4.4	197.0	SSW
12:00 PM - 01:00 PM	2.8	204.0	SSW	1.8	219.0	SW	4.3	216.0	SW	3.8	198.0	SSW	0.6	186.0	S	1.5	203.0	SSW	1.3	205.0	SSW
01:00 PM - 02:00 PM	0.4	359.0	N	1.9	200.0	SSW	4.0	210.0	SSW	1.9	216.0	SW	0.4	203.0	SSW	1.2	215.0	SW	2.2	208.0	SSW
02:00 PM - 03:00 PM	1.4	213.0	SSW	1.1	209.0	SSW	1.2	205.0	SSW	1.1	215.0	SW	0.5	201.0	SSW	0.5	12.0	NNE	1.9	205.0	SSW
03:00 PM - 04:00 PM	0.1	-	-	0.2	-	-	0.8	213.0	SSW	1.4	219.0	SW	0.5	207.0	SSW	0.7	209.0	SSW	1.3	213.0	SSW
04:00 PM - 05:00 PM	0.0	-	-	0.3	206.0	SSW	0.3	211.0	SSW	2.0	205.0	SSW	0.8	205.0	SSW	1.3	187.0	S	0.7	206.0	SSW
05:00 PM - 06:00 PM	0.2	-	-	0.4	209.0	SSW	1.0	203.0	SSW	1.2	204.0	SSW	1.0	213.0	SSW	3.0	202.0	SSW	0.4	209.0	SSW
06:00 PM - 07:00 PM	0.1	-	-	0.8	209.0	SSW	0.1	-	-	0.6	188.0	S	0.8	202.0	SSW	1.1	11.0	N	0.7	16.0	NNE
07:00 PM - 08:00 PM	0.7	205.0	SSW	0.6	201.0	SSW	0.8	211.0	SSW	0.4	199.0	SSW	0.3	206.0	SSW	1.6	203.0	SSW	1.5	197.0	SSW
08:00 PM - 09:00 PM	0.3	209.0	SSW	1.3	210.0	SSW	0.7	205.0	SSW	1.3	205.0	SSW	1.3	220.0	SW	1.1	213.0	SSW	2.1	207.0	SSW
09:00 PM - 10:00 PM	1.0	206.0	SSW	0.8	210.0	SSW	0.6	203.0	SSW	1.3	212.0	SSW	1.9	177.0	S	1.9	212.0	SSW	2.4	230.0	SW
10:00 PM - 11:00 PM	0.4	213.0	SSW	1.1	227.0	SW	0.0	-	-	1.5	207.0	SSW	2.5	199.0	SSW	0.5	190.0	S	3.4	216.0	SW
11:00 PM - 12:00 AM	0.5	199.0	SSW	3.6	208.0	SSW	0.0	-	-	0.6	196.0	SSW	2.9	209.0	SSW	0.0	-	-	3.1	218.0	SW
12:00 AM - 01:00 AM	0.6	199.0	SSW	3.1	213.0	SSW	0.2	-	-	1.4	207.0	SSW	2.5	188.0	S	0.9	205.0	SSW	2.8	204.0	SSW
01:00 AM - 02:00 AM	0.9	207.0	SSW	3.1	187.0	S	0.1	-	-	1.3	205.0	SSW	3.0	198.0	SSW	0.4	204.0	SSW	2.5	8.0	N
02:00 AM - 03:00 AM	0.8	198.0	SSW	3.5	203.0	SSW	0.0	-	-	1.4	183.0	S	3.6	221.0	SW	0.3	200.0	SSW	2.9	197.0	SSW
03:00 AM - 04:00 AM	0.2	-	-	2.8	212.0	SSW	0.2	-	-	1.2	197.0	SSW	2.5	219.0	SW	0.9	200.0	SSW	3.3	227.0	SW
04:00 AM - 05:00 AM	1.2	207.0	SSW	2.0	213.0	SSW	0.0	-	-	0.5	193.0	SSW	1.1	213.0	SSW	0.3	200.0	SSW	2.2	214.0	SW
05:00 AM - 06:00 AM	1.9	208.0	SSW	2.7	210.0	SSW	2.1	197.0	SSW	0.4	195.0	SSW	2.4	216.0	SW	2.1	212.0	SSW	5.3	209.0	SSW
06:00 AM - 07:00 AM	2.0	216.0	SW	3.2	14.0	NNE	3.0	207.0	SSW	0.7	195.0	SSW	1.9	220.0	SW	3.0	205.0	SSW	4.2	205.0	SSW
07:00 AM - 08:00 AM	3.3	213.0	SSW	3.6	191.0	S	1.5	214.0	SW	2.9	210.0	SSW	0.3	229.0	SW	2.3	207.0	SSW	4.9	200.0	SSW
08:00 AM - 09:00 AM	3.0	208.0	SSW	3.8	192.0	SSW	3.6	222.0	SW	4.9	210.0	SSW	1.6	210.0	SSW	2.3	211.0	SSW	5.0	183.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

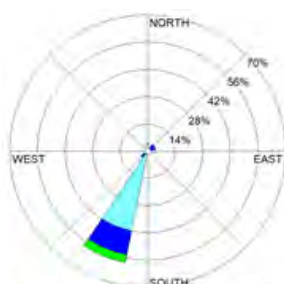
Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

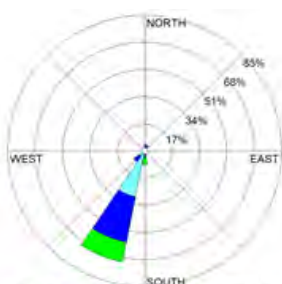
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 2 of 2

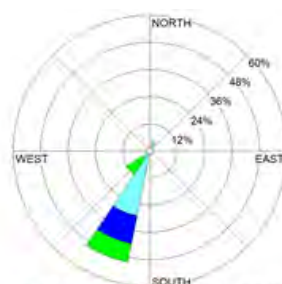
### Wind Rose



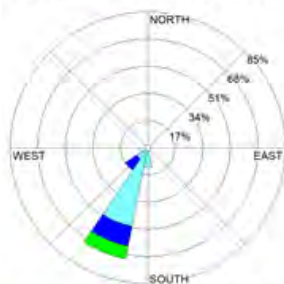
Date : Nov 01-02, 2024



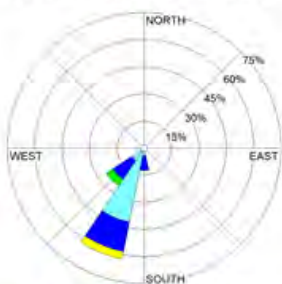
Date : Nov 02-03, 2024



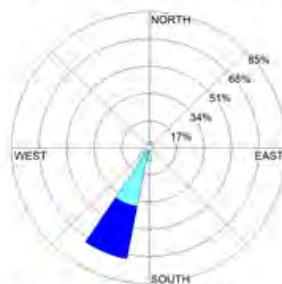
Date : Nov 03-04, 2024



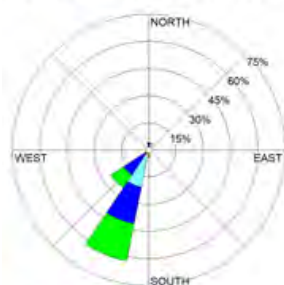
Date : Nov 04-05, 2024



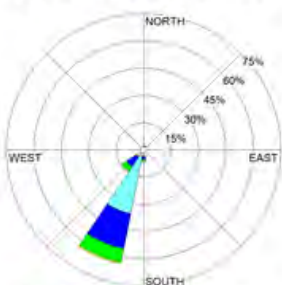
Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	12.50
1.7-3.3	30.36
0.3-1.7	47.62
Calms	8.93

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

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

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

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Page 1 of 2

Sample Number 24121833-36 to 42  
Parameter Wind Speed / Wind Direction  
Location ชุมชนบ้านเขานางจีน (GPS 47P 0790574, 1555767)  
Sampling Date Nov 01 - Nov 08, 2024  
Sampling by Apichart Wilars

Time	Nov 01 - Nov 02, 2024			Nov 02 - Nov 03, 2024			Nov 03 - Nov 04, 2024			Nov 04 - Nov 05, 2024			Nov 05 - Nov 06, 2024			Nov 06 - Nov 07, 2024			Nov 07 - Nov 08, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	2.6	242.0	WSW	1.8	198.0	SSW	3.3	254.0	WSW	2.9	255.0	WSW	1.2	220.0	SW	1.2	66.0	ENE	3.0	120.0	ESE
12:00 PM - 01:00 PM	0.3	209.0	SSW	2.6	190.0	S	1.3	172.0	S	1.3	253.0	WSW	1.3	269.0	W	1.6	24.0	NNE	1.1	119.0	ESE
01:00 PM - 02:00 PM	1.6	222.0	SW	1.2	176.0	S	1.2	210.0	SSW	1.2	230.0	SW	1.5	198.0	SSW	0.7	191.0	S	0.9	177.0	S
02:00 PM - 03:00 PM	0.9	202.0	SSW	3.6	232.0	SW	2.3	95.0	E	1.0	200.0	SSW	0.5	249.0	WSW	1.3	127.0	SE	1.6	178.0	S
03:00 PM - 04:00 PM	1.3	159.0	SSE	3.6	217.0	SW	2.1	92.0	E	0.9	169.0	S	1.3	268.0	W	1.1	174.0	S	1.1	180.0	S
04:00 PM - 05:00 PM	3.8	200.0	SSW	1.6	211.0	SSW	1.0	174.0	S	1.4	147.0	SSE	1.1	270.0	W	1.5	191.0	S	1.3	188.0	S
05:00 PM - 06:00 PM	0.8	216.0	SW	2.6	241.0	WSW	2.1	141.0	SE	1.3	179.0	S	1.1	258.0	WSW	1.0	165.0	SSE	0.2	-	-
06:00 PM - 07:00 PM	0.4	207.0	SSW	2.1	204.0	SSW	0.2	-	-	1.6	122.0	ESE	0.2	-	-	0.8	291.0	WNW	2.1	201.0	SSW
07:00 PM - 08:00 PM	0.2	-	-	1.1	208.0	SSW	0.3	256.0	WSW	0.3	131.0	SE	0.3	145.0	SE	0.3	282.0	WNW	0.9	205.0	SSW
08:00 PM - 09:00 PM	1.2	226.0	SW	1.6	233.0	SW	1.2	50.0	NE	1.5	174.0	S	0.9	110.0	ESE	1.6	235.0	SW	0.5	210.0	SSW
09:00 PM - 10:00 PM	1.3	208.0	SSW	1.8	239.0	WSW	1.2	73.0	ENE	0.5	88.0	E	2.1	81.0	E	1.5	267.0	W	1.3	230.0	SW
10:00 PM - 11:00 PM	1.2	188.0	S	2.0	233.0	SW	0.5	28.0	NNE	0.6	226.0	SW	2.0	123.0	ESE	1.6	150.0	SSE	1.4	190.0	S
11:00 PM - 12:00 AM	1.2	175.0	S	1.6	280.0	W	0.3	103.0	ESE	0.9	251.0	WSW	0.1	-	-	1.5	268.0	W	1.5	199.0	SSW
12:00 AM - 01:00 AM	1.1	139.0	SE	1.5	272.0	W	1.3	29.0	NNE	1.2	157.0	SSE	0.9	134.0	SE	1.2	193.0	SSW	0.6	201.0	SSW
01:00 AM - 02:00 AM	0.4	171.0	S	0.8	225.0	SW	1.2	146.0	SE	2.0	184.0	S	0.5	145.0	SE	1.1	164.0	SSE	1.2	255.0	WSW
02:00 AM - 03:00 AM	1.2	42.0	NE	1.1	243.0	WSW	1.6	85.0	E	2.5	163.0	SSE	1.6	155.0	SSE	1.3	156.0	SSE	0.5	251.0	WSW
03:00 AM - 04:00 AM	0.9	168.0	SSE	1.5	168.0	SSE	1.3	145.0	SE	0.6	88.0	E	2.1	85.0	E	1.6	177.0	S	0.7	280.0	W
04:00 AM - 05:00 AM	0.4	158.0	SSE	1.8	226.0	SW	1.5	152.0	SSE	0.7	176.0	S	2.3	238.0	WSW	1.5	134.0	SE	1.3	177.0	S
05:00 AM - 06:00 AM	0.7	85.0	E	2.5	269.0	W	2.3	215.0	SW	1.5	133.0	SE	0.4	235.0	SW	0.5	161.0	SSE	2.5	189.0	S
06:00 AM - 07:00 AM	0.5	183.0	S	1.9	191.0	S	2.1	214.0	SW	2.3	179.0	S	1.9	262.0	W	1.2	142.0	SE	2.3	190.0	S
07:00 AM - 08:00 AM	0.8	188.0	S	2.4	212.0	SSW	0.5	263.0	W	2.4	225.0	SW	2.1	31.0	NNE	1.6	216.0	SW	2.1	177.0	S
08:00 AM - 09:00 AM	0.7	156.0	SSE	0.8	267.0	W	0.3	272.0	W	1.2	211.0	SSW	0.8	74.0	ENE	1.2	210.0	SSW	2.0	200.0	SSW
09:00 AM - 10:00 AM	0.4	287.0	WNW	0.5	207.0	SSW	0.8	273.0	W	2.3	249.0	WSW	0.5	175.0	S	2.4	225.0	SW	0.8	210.0	SSW
10:00 AM - 11:00 AM	1.4	197.0	SSW	1.8	201.0	SSW	1.3	248.0	WSW	1.6	252.0	WSW	0.3	22.0	NNE	3.1	230.0	SW	0.9	213.0	SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont  
Assistant General Manager



## Analysis / Test Report

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

P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121833  
Date Received : Nov 09, 2024  
Date Reported : Nov 15, 2024  
Report Number : 3145884-1

Page 2 of 2

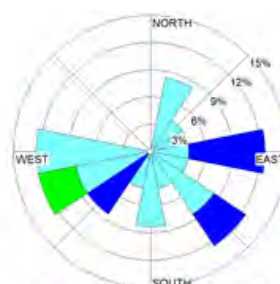
### Wind Rose



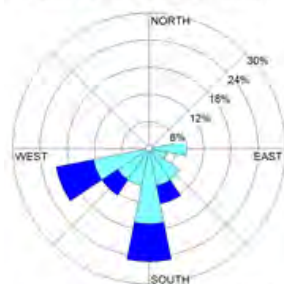
Date : Nov 01-02, 2024



Date : Nov 02-03, 2024



Date : Nov 03-04, 2024



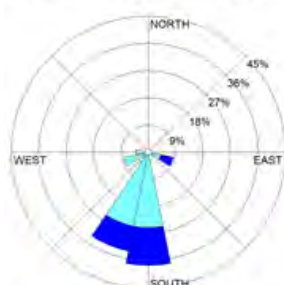
Date : Nov 04-05, 2024



Date : Nov 05-06, 2024



Date : Nov 06-07, 2024



Date : Nov 07-08, 2024



Date : Nov 01-08, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	2.38
1.7-3.3	22.02
0.3-1.7	72.62
Calms	2.98

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

Approved by

Sarayuth Jitranont  
Assistant General Manager

## ภาคผนวก ค-2

---

คุณภาพอากาศจากปล่องระบาย



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121844**

Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number: 3145922-1

Page 1 of 2

**Sample Number** 24121844-1  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	285524	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.6 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	10:30 AM - 11:30 AM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 4:58PM)





## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121844**

Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number: 3145922-1

Page 2 of 2

**Sample Number** 24121844-1  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	285524	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	10:30 AM - 11:30 AM	g/s	-	-	<0.040	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Suphanut Pisaipan ทะเบียนเลขที่ ว-323-จ-0018

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 4:58PM)



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121840  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3145907-1

Page 1 of 1

Sample Number 24121840-1  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Measurement Date Nov 05, 2024

### Stack Description

Ambient Temperature	32 °C	Diameter	3.35 m	Oxygen	14.51 %
Ambient Pressure	757.1 mmHg	Shape	Circle	Carbon dioxide	3.41 %
Type of Process	Combustion	Stack Temperature	112 °C	Gas Velocity	12.80 m/s
Type of Fuel	Natural Gas	Moisture	8.98 %	Flow Rate	285017 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	10:40 AM - 11:00 AM	14.52	3.40	8.91	19.39	0.65	1.41
2	11:01 AM - 11:21 AM	14.48	3.43	9.99	21.61	0.56	1.22
3	11:22 AM - 11:42 AM	14.53	3.40	8.12	17.73	0.58	1.27
Average (ppm)		14.51	3.41	9.00	19.58	0.60	1.30
Guideline <sup>1/</sup> (ppm)				-	60	-	6
Guideline <sup>2/</sup> (ppm)				-	120	-	20
Result (mg/Nm <sup>3</sup> )				16.94	36.83	1.57	3.41
Emission Rate at Actual O <sub>2</sub> (g/s)				1.3412		0.1240	
Guideline <sup>1/</sup> (g/s)				7.40		1.00	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Saksit Phaisanphisut

Guideline : <sup>1/</sup>Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250, THAILAND | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121840  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3145907-1

Page 1 of 1

Sample Number 24121840-1  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Measurement Date Nov 05, 2024

### Stack Description

Ambient Temperature	32 °C	Diameter	3.35 m	Oxygen	14.51 %
Ambient Pressure	757.1 mmHg	Shape	Circle	Carbon dioxide	3.41 %
Type of Process	Combustion	Stack Temperature	112 °C	Gas Velocity	12.80 m/s
Type of Fuel	Natural Gas	Moisture	8.98 %	Flow Rate	285017 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)	
				at Actual O <sub>2</sub>	At 7% O <sub>2</sub>
1	10:40 AM - 11:00 AM	14.52	3.40	50.79	110.60
2	11:01 AM - 11:21 AM	14.48	3.43	51.64	111.74
3	11:22 AM - 11:42 AM	14.53	3.40	49.21	107.45
Average (ppm)		14.51	3.41	50.55	109.93
Guideline (ppm)				-	690
Result (mg/Nm <sup>3</sup> )				57.89	125.89
Emission Rate at Actual O <sub>2</sub> (g/s)				4.5831	
Method				US EPA Method 10	

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

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250, THAILAND | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121845**

Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number: 3145909-1

Page 1 of 2

**Sample Number** 24121845-1  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	117	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.08	%	Flow Rate (Actual O2)	353490	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 %O <sub>2</sub>	at 14.3 % O <sub>2</sub>				
Air Testing										
Total Suspended Particulate	11:40 AM - 12:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 5:03PM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24121845**  
Date Received : Nov 06, 2024  
Date Reported : Nov 13, 2024  
Report Number: 3145909-1

Page 2 of 2

**Sample Number** 24121845-1  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	117	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.08	%	Flow Rate (Actual O2)	353490	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	11:40 AM - 12:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Suphanut Pisaipan ทะเบียนเลขที่ ว-323-จ-0018

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 5:03PM)



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121841  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3145905-1

Page 1 of 1

Sample Number 24121841-1  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Measurement Date Nov 04, 2024

### Stack Description

Ambient Temperature	32 °C	Diameter	3.35 m	Oxygen	14.11 %
Ambient Pressure	757.1 mmHg	Shape	Circle	Carbon dioxide	3.76 %
Type of Process	Combustion	Stack Temperature	117 °C	Gas Velocity	16.09 m/s
Type of Fuel	Natural Gas	Moisture	9.08 %	Flow Rate	353150 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O <sub>2</sub>	at 7% O <sub>2</sub>	at Actual O <sub>2</sub>	at 7% O <sub>2</sub>
1	11:40 AM - 12:00 PM	14.12	3.76	25.83	52.98	0.52	1.06
2	12:01 PM - 12:21 PM	14.11	3.75	26.08	53.37	0.54	1.11
3	12:22 PM - 12:42 PM	14.11	3.75	26.10	53.47	0.53	1.09
Average (ppm)		14.11	3.76	26.01	53.27	0.53	1.09
Guideline <sup>1/</sup> (ppm)				-	60	-	6
Guideline <sup>2/</sup> (ppm)				-	120	-	20
Result (mg/Nm <sup>3</sup> )				48.93	100.23	1.39	2.85
Emission Rate at Actual O <sub>2</sub> (g/s)				4.7996		0.1364	
Guideline <sup>1/</sup> (g/s)				7.40		1.00	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Saksit Phaisanphisut

Guideline : <sup>1/</sup>Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250, THAILAND | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 24121841  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3145905-1

Page 1 of 1

Sample Number 24121841-1  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Measurement Date Nov 04, 2024

### Stack Description

Ambient Temperature	32 °C	Diameter	3.35 m	Oxygen	14.11 %
Ambient Pressure	757.1 mmHg	Shape	Circle	Carbon dioxide	3.76 %
Type of Process	Combustion	Stack Temperature	117 °C	Gas Velocity	16.09 m/s
Type of Fuel	Natural Gas	Moisture	9.08 %	Flow Rate	353150 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)	
				at Actual O <sub>2</sub>	At 7% O <sub>2</sub>
1	11:40 AM - 12:00 PM	14.12	3.76	27.39	56.17
2	12:01 PM - 12:21 PM	14.11	3.75	26.80	54.84
3	12:22 PM - 12:42 PM	14.11	3.75	26.40	54.08
Average (ppm)		14.11	3.76	26.86	55.03
Guideline (ppm)				-	690
Result (mg/Nm <sup>3</sup> )				30.76	63.02
Emission Rate at Actual O <sub>2</sub> (g/s)				3.0179	
Method				US EPA Method 10	

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

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250, THAILAND | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

## ภาคผนวก ค-3

---

ระดับเสียงทั่วไป



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166370-1

Page 1 of 1

Sample Number 24121830-1  
Parameter Noise (Leq 24 hrs.)  
Location พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
Measurement Date Oct 28 - Oct 29, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	62.4	66.6	61.2
12:00 PM - 01:00 PM	63.4	66.0	60.4
01:00 PM - 02:00 PM	60.4	72.3	59.9
02:00 PM - 03:00 PM	60.3	63.0	59.8
03:00 PM - 04:00 PM	60.8	62.9	60.2
04:00 PM - 05:00 PM	61.0	77.2	60.4
05:00 PM - 06:00 PM	62.0	67.2	61.4
06:00 PM - 07:00 PM	61.9	67.7	61.3
07:00 PM - 08:00 PM	62.0	66.1	61.4
08:00 PM - 09:00 PM	62.2	64.5	61.7
09:00 PM - 10:00 PM	61.7	63.1	61.2
10:00 PM - 11:00 PM	60.8	63.3	60.3
11:00 PM - 12:00 AM	62.7	65.7	60.1
12:00 AM - 01:00 AM	63.3	65.4	62.8
01:00 AM - 02:00 AM	62.8	68.3	62.3
02:00 AM - 03:00 AM	62.9	64.1	62.5
03:00 AM - 04:00 AM	62.8	65.7	62.3
04:00 AM - 05:00 AM	63.2	65.0	62.8
05:00 AM - 06:00 AM	63.2	69.4	62.7
06:00 AM - 07:00 AM	62.8	67.4	62.4
07:00 AM - 08:00 AM	62.9	64.5	62.3
08:00 AM - 09:00 AM	61.8	67.9	60.0
09:00 AM - 10:00 AM	60.3	73.8	59.5
10:00 AM - 11:00 AM	62.2	71.8	60.0

Leq Average 24 hrs. (dB(A)) 62.2  
Lmax (dB(A)) 77.2  
L90 (dB(A)) 61.2  
Ldn (dB(A)) 69.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head





## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166371-1

Page 1 of 1

Sample Number 24121830-2  
Parameter Noise (Leq 24 hrs.)  
Location พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
Measurement Date Oct 29 - Oct 30, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	61.3	66.4	60.0
12:00 PM - 01:00 PM	62.9	65.4	60.1
01:00 PM - 02:00 PM	60.0	65.0	59.4
02:00 PM - 03:00 PM	59.8	62.2	59.2
03:00 PM - 04:00 PM	59.2	78.1	58.4
04:00 PM - 05:00 PM	59.8	64.8	59.2
05:00 PM - 06:00 PM	60.8	72.3	59.7
06:00 PM - 07:00 PM	61.9	64.5	61.2
07:00 PM - 08:00 PM	61.6	64.9	61.0
08:00 PM - 09:00 PM	61.5	63.6	60.9
09:00 PM - 10:00 PM	61.3	63.9	60.7
10:00 PM - 11:00 PM	61.6	65.0	60.8
11:00 PM - 12:00 AM	63.1	82.8	61.2
12:00 AM - 01:00 AM	63.3	65.6	62.8
01:00 AM - 02:00 AM	63.2	65.0	62.5
02:00 AM - 03:00 AM	63.3	65.1	62.8
03:00 AM - 04:00 AM	63.0	64.9	62.5
04:00 AM - 05:00 AM	63.4	66.4	62.9
05:00 AM - 06:00 AM	63.0	65.1	62.5
06:00 AM - 07:00 AM	63.0	64.8	62.6
07:00 AM - 08:00 AM	63.3	65.5	62.7
08:00 AM - 09:00 AM	62.0	66.3	60.3
09:00 AM - 10:00 AM	60.6	65.7	60.1
10:00 AM - 11:00 AM	59.7	71.5	58.3

Leq Average 24 hrs. (dB(A)) 62.0  
Lmax (dB(A)) 82.8  
L90 (dB(A)) 60.8  
Ldn (dB(A)) 69.2  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166372-1

Page 1 of 1

**Sample Number** 24121830-3  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
**Measurement Date** Oct 30 - Oct 31, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	61.0	70.9	59.2
12:00 PM - 01:00 PM	62.4	66.3	59.9
01:00 PM - 02:00 PM	59.8	70.4	59.0
02:00 PM - 03:00 PM	59.7	71.4	59.0
03:00 PM - 04:00 PM	59.8	72.6	59.3
04:00 PM - 05:00 PM	60.0	67.5	59.2
05:00 PM - 06:00 PM	60.9	69.4	60.3
06:00 PM - 07:00 PM	60.6	63.9	60.1
07:00 PM - 08:00 PM	60.4	62.2	59.9
08:00 PM - 09:00 PM	60.9	65.9	60.3
09:00 PM - 10:00 PM	60.8	62.5	60.1
10:00 PM - 11:00 PM	60.8	63.3	60.3
11:00 PM - 12:00 AM	62.9	66.0	60.4
12:00 AM - 01:00 AM	63.5	65.3	62.8
01:00 AM - 02:00 AM	62.9	64.4	62.4
02:00 AM - 03:00 AM	62.1	63.6	61.7
03:00 AM - 04:00 AM	62.3	64.2	61.8
04:00 AM - 05:00 AM	63.0	64.7	62.5
05:00 AM - 06:00 AM	62.9	67.9	62.2
06:00 AM - 07:00 AM	62.4	70.5	62.0
07:00 AM - 08:00 AM	62.7	69.0	62.2
08:00 AM - 09:00 AM	61.3	64.3	59.5
09:00 AM - 10:00 AM	59.4	66.2	58.3
10:00 AM - 11:00 AM	59.4	64.6	58.3

Leq Average 24 hrs. (dB(A)) 61.5  
Lmax (dB(A)) 72.6  
L90 (dB(A)) 60.1  
Ldn (dB(A)) 68.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166373-1

Page 1 of 1

Sample Number 24121830-4  
Parameter Noise (Leq 24 hrs.)  
Location พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
Measurement Date Oct 31 - Nov 01, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	61.0	65.8	59.0
12:00 PM - 01:00 PM	61.8	65.8	59.4
01:00 PM - 02:00 PM	59.4	65.8	58.3
02:00 PM - 03:00 PM	59.2	64.1	58.4
03:00 PM - 04:00 PM	59.5	72.4	58.8
04:00 PM - 05:00 PM	60.3	65.6	59.6
05:00 PM - 06:00 PM	61.1	74.8	60.6
06:00 PM - 07:00 PM	61.1	63.4	60.4
07:00 PM - 08:00 PM	61.2	66.9	60.6
08:00 PM - 09:00 PM	60.8	63.2	60.2
09:00 PM - 10:00 PM	61.1	63.1	60.5
10:00 PM - 11:00 PM	61.1	74.7	60.5
11:00 PM - 12:00 AM	62.6	72.6	60.0
12:00 AM - 01:00 AM	63.2	67.3	62.6
01:00 AM - 02:00 AM	62.5	70.7	62.1
02:00 AM - 03:00 AM	62.5	79.4	61.8
03:00 AM - 04:00 AM	63.0	64.7	62.5
04:00 AM - 05:00 AM	63.5	65.7	62.9
05:00 AM - 06:00 AM	63.6	65.7	63.0
06:00 AM - 07:00 AM	63.6	69.9	63.1
07:00 AM - 08:00 AM	63.6	73.7	63.1
08:00 AM - 09:00 AM	62.9	65.3	62.3
09:00 AM - 10:00 AM	62.4	69.0	61.5
10:00 AM - 11:00 AM	61.8	64.8	60.6

Leq Average 24 hrs. (dB(A)) 62.0  
Lmax (dB(A)) 79.4  
L90 (dB(A)) 60.6  
Ldn (dB(A)) 69.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166374-1

Page 1 of 1

**Sample Number** 24121830-5  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
**Measurement Date** Nov 01 - Nov 02, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	62.2	65.5	61.0
12:00 PM - 01:00 PM	62.0	64.6	60.8
01:00 PM - 02:00 PM	60.8	66.5	58.7
02:00 PM - 03:00 PM	60.6	65.5	59.9
03:00 PM - 04:00 PM	60.8	63.4	60.2
04:00 PM - 05:00 PM	60.9	70.4	60.4
05:00 PM - 06:00 PM	61.1	72.3	60.6
06:00 PM - 07:00 PM	61.2	64.8	60.6
07:00 PM - 08:00 PM	61.3	65.7	60.3
08:00 PM - 09:00 PM	60.9	62.8	60.3
09:00 PM - 10:00 PM	64.7	79.6	60.7
10:00 PM - 11:00 PM	59.8	76.8	58.5
11:00 PM - 12:00 AM	58.7	61.9	57.8
12:00 AM - 01:00 AM	58.9	61.5	58.0
01:00 AM - 02:00 AM	58.2	60.7	57.3
02:00 AM - 03:00 AM	58.3	66.3	57.3
03:00 AM - 04:00 AM	57.9	60.6	57.0
04:00 AM - 05:00 AM	57.5	60.4	56.7
05:00 AM - 06:00 AM	57.8	66.0	57.0
06:00 AM - 07:00 AM	57.6	62.9	56.8
07:00 AM - 08:00 AM	58.0	68.1	57.3
08:00 AM - 09:00 AM	57.8	66.0	57.1
09:00 AM - 10:00 AM	58.1	63.6	57.4
10:00 AM - 11:00 AM	58.9	73.7	57.5

Leq Average 24 hrs. (dB(A)) 60.2  
Lmax (dB(A)) 79.6  
L90 (dB(A)) 58.0  
Ldn (dB(A)) 65.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166375-1

Page 1 of 1

Sample Number 24121830-6  
Parameter Noise (Leq 24 hrs.)  
Location พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
Measurement Date Nov 02 - Nov 03, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	58.1	63.7	57.3
12:00 PM - 01:00 PM	61.7	86.4	57.4
01:00 PM - 02:00 PM	61.8	67.9	60.6
02:00 PM - 03:00 PM	61.1	64.2	60.4
03:00 PM - 04:00 PM	61.1	64.5	60.4
04:00 PM - 05:00 PM	61.1	72.7	60.4
05:00 PM - 06:00 PM	61.7	71.7	61.0
06:00 PM - 07:00 PM	62.7	65.5	61.7
07:00 PM - 08:00 PM	62.3	67.2	61.7
08:00 PM - 09:00 PM	62.0	64.1	61.5
09:00 PM - 10:00 PM	64.1	79.9	61.3
10:00 PM - 11:00 PM	61.7	77.2	57.8
11:00 PM - 12:00 AM	58.7	62.8	57.5
12:00 AM - 01:00 AM	58.8	61.5	57.9
01:00 AM - 02:00 AM	58.3	61.3	57.6
02:00 AM - 03:00 AM	58.6	62.3	57.8
03:00 AM - 04:00 AM	58.8	63.1	58.0
04:00 AM - 05:00 AM	59.0	62.0	58.1
05:00 AM - 06:00 AM	58.7	66.5	57.8
06:00 AM - 07:00 AM	58.4	63.9	57.5
07:00 AM - 08:00 AM	58.5	64.5	57.6
08:00 AM - 09:00 AM	58.6	66.7	57.7
09:00 AM - 10:00 AM	58.3	71.0	57.4
10:00 AM - 11:00 AM	60.0	82.0	57.5

Leq Average 24 hrs. (dB(A)) 60.5  
Lmax (dB(A)) 86.4  
L90 (dB(A)) 57.8  
Ldn (dB(A)) 65.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166376-1

Page 1 of 1

**Sample Number** 24121830-7  
**Parameter** Noise (Leq 24 hrs.)  
**Location** พื้นที่โครงการฯ (บริเวณเริ่มรั้วโครงการ ด้านทิศตะวันตก) (GPS 47P 0792778, 1552935)  
**Measurement Date** Nov 03 - Nov 04, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 873057

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	59.5	68.1	57.8
12:00 PM - 01:00 PM	58.6	65.4	57.8
01:00 PM - 02:00 PM	59.4	75.7	57.9
02:00 PM - 03:00 PM	63.2	84.4	57.7
03:00 PM - 04:00 PM	59.8	82.3	57.5
04:00 PM - 05:00 PM	63.5	90.6	57.7
05:00 PM - 06:00 PM	63.2	70.1	61.1
06:00 PM - 07:00 PM	63.2	65.7	62.6
07:00 PM - 08:00 PM	63.2	66.5	62.7
08:00 PM - 09:00 PM	64.9	82.2	63.0
09:00 PM - 10:00 PM	61.9	76.4	58.8
10:00 PM - 11:00 PM	59.0	61.5	58.4
11:00 PM - 12:00 AM	58.6	61.6	58.0
12:00 AM - 01:00 AM	58.7	63.8	58.0
01:00 AM - 02:00 AM	58.2	60.7	57.5
02:00 AM - 03:00 AM	58.1	62.0	57.5
03:00 AM - 04:00 AM	57.8	60.5	57.2
04:00 AM - 05:00 AM	57.9	61.4	57.2
05:00 AM - 06:00 AM	57.9	64.7	57.0
06:00 AM - 07:00 AM	57.4	70.9	56.5
07:00 AM - 08:00 AM	58.9	62.5	57.9
08:00 AM - 09:00 AM	59.3	71.5	58.4
09:00 AM - 10:00 AM	69.5	91.0	58.6
10:00 AM - 11:00 AM	59.6	78.2	58.9

Leq Average 24 hrs. (dB(A)) 61.8  
Lmax (dB(A)) 91.0  
L90 (dB(A)) 57.9  
Ldn (dB(A)) 65.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166377-1

Page 1 of 1

Sample Number 24121830-8  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Oct 28 - Oct 29, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	50.7	84.4	37.3
12:00 PM - 01:00 PM	57.9	83.8	41.6
01:00 PM - 02:00 PM	57.5	92.0	38.5
02:00 PM - 03:00 PM	54.4	85.6	36.9
03:00 PM - 04:00 PM	52.8	76.4	38.9
04:00 PM - 05:00 PM	55.9	82.8	39.9
05:00 PM - 06:00 PM	59.1	83.9	45.7
06:00 PM - 07:00 PM	65.6	81.6	57.8
07:00 PM - 08:00 PM	68.7	89.4	65.0
08:00 PM - 09:00 PM	68.9	78.5	66.7
09:00 PM - 10:00 PM	68.8	76.2	66.3
10:00 PM - 11:00 PM	69.6	73.0	67.0
11:00 PM - 12:00 AM	68.8	82.1	65.6
12:00 AM - 01:00 AM	61.2	83.1	51.0
01:00 AM - 02:00 AM	60.1	73.0	50.7
02:00 AM - 03:00 AM	64.4	71.8	52.8
03:00 AM - 04:00 AM	64.1	72.2	59.2
04:00 AM - 05:00 AM	66.4	81.4	59.6
05:00 AM - 06:00 AM	64.5	81.4	54.7
06:00 AM - 07:00 AM	58.7	81.3	47.2
07:00 AM - 08:00 AM	59.6	82.0	41.1
08:00 AM - 09:00 AM	52.6	72.3	39.8
09:00 AM - 10:00 AM	50.9	72.6	38.4
10:00 AM - 11:00 AM	51.4	72.9	36.5

Leq Average 24 hrs. (dB(A)) 64.2  
Lmax (dB(A)) 92.0  
L90 (dB(A)) 47.2  
Ldn (dB(A)) 71.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166378-1

Page 1 of 1

Sample Number 24121830-9  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Oct 29 - Oct 30, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.7	78.2	35.3
12:00 PM - 01:00 PM	52.6	74.6	39.2
01:00 PM - 02:00 PM	53.4	75.6	36.0
02:00 PM - 03:00 PM	53.1	79.8	35.5
03:00 PM - 04:00 PM	52.3	83.0	35.7
04:00 PM - 05:00 PM	55.4	86.4	38.3
05:00 PM - 06:00 PM	56.7	79.5	47.1
06:00 PM - 07:00 PM	69.3	81.9	51.0
07:00 PM - 08:00 PM	69.9	78.2	64.0
08:00 PM - 09:00 PM	69.9	76.9	71.5
09:00 PM - 10:00 PM	69.9	75.2	71.5
10:00 PM - 11:00 PM	69.3	74.5	71.4
11:00 PM - 12:00 AM	68.9	76.4	70.8
12:00 AM - 01:00 AM	68.8	74.2	71.0
01:00 AM - 02:00 AM	68.3	74.5	65.9
02:00 AM - 03:00 AM	66.0	75.8	60.5
03:00 AM - 04:00 AM	66.3	82.0	60.1
04:00 AM - 05:00 AM	65.1	82.0	58.4
05:00 AM - 06:00 AM	65.2	84.3	58.0
06:00 AM - 07:00 AM	58.4	80.8	46.4
07:00 AM - 08:00 AM	57.0	83.2	41.8
08:00 AM - 09:00 AM	55.4	82.7	38.2
09:00 AM - 10:00 AM	54.0	82.6	37.4
10:00 AM - 11:00 AM	51.5	72.0	37.4

Leq Average 24 hrs. (dB(A)) 65.6  
Lmax (dB(A)) 86.4  
L90 (dB(A)) 47.1  
Ldn (dB(A)) 73.2  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166379-1

Page 1 of 1

Sample Number 24121830-10  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Oct 30 - Oct 31, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	56.9	85.5	40.5
12:00 PM - 01:00 PM	56.4	81.6	37.2
01:00 PM - 02:00 PM	53.6	80.6	36.4
02:00 PM - 03:00 PM	52.2	80.6	36.9
03:00 PM - 04:00 PM	55.8	82.0	37.9
04:00 PM - 05:00 PM	56.6	84.2	42.1
05:00 PM - 06:00 PM	58.0	83.1	43.4
06:00 PM - 07:00 PM	62.2	85.5	50.8
07:00 PM - 08:00 PM	67.9	80.0	60.5
08:00 PM - 09:00 PM	68.2	81.5	63.6
09:00 PM - 10:00 PM	68.7	89.4	65.0
10:00 PM - 11:00 PM	68.9	78.5	66.7
11:00 PM - 12:00 AM	68.0	80.2	61.9
12:00 AM - 01:00 AM	64.8	86.9	60.6
01:00 AM - 02:00 AM	65.6	79.4	61.0
02:00 AM - 03:00 AM	66.5	80.8	53.3
03:00 AM - 04:00 AM	61.1	82.3	49.9
04:00 AM - 05:00 AM	60.0	82.0	52.0
05:00 AM - 06:00 AM	60.5	81.8	47.4
06:00 AM - 07:00 AM	57.2	83.9	42.7
07:00 AM - 08:00 AM	59.2	85.7	43.3
08:00 AM - 09:00 AM	58.7	85.9	38.5
09:00 AM - 10:00 AM	51.9	81.2	36.5
10:00 AM - 11:00 AM	53.7	81.2	36.2

Leq Average 24 hrs. (dB(A)) 63.7  
Lmax (dB(A)) 89.4  
L90 (dB(A)) 43.4  
Ldn (dB(A)) 71.2  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166380-1

Page 1 of 1

Sample Number 24121830-11  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Oct 31 - Nov 01, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.7	77.7	36.3
12:00 PM - 01:00 PM	51.3	78.8	37.6
01:00 PM - 02:00 PM	54.6	78.6	37.6
02:00 PM - 03:00 PM	52.1	75.6	39.0
03:00 PM - 04:00 PM	56.3	81.7	38.5
04:00 PM - 05:00 PM	55.3	79.6	38.0
05:00 PM - 06:00 PM	60.6	85.4	44.1
06:00 PM - 07:00 PM	61.3	86.6	52.0
07:00 PM - 08:00 PM	67.7	83.5	58.8
08:00 PM - 09:00 PM	68.3	78.5	62.8
09:00 PM - 10:00 PM	66.9	76.7	59.6
10:00 PM - 11:00 PM	60.1	69.0	56.8
11:00 PM - 12:00 AM	61.0	71.9	53.1
12:00 AM - 01:00 AM	64.9	72.2	60.0
01:00 AM - 02:00 AM	65.9	71.6	55.4
02:00 AM - 03:00 AM	65.7	81.9	58.7
03:00 AM - 04:00 AM	61.7	81.5	50.8
04:00 AM - 05:00 AM	60.1	83.8	53.2
05:00 AM - 06:00 AM	62.7	84.2	52.0
06:00 AM - 07:00 AM	63.8	89.0	45.8
07:00 AM - 08:00 AM	63.8	89.3	43.8
08:00 AM - 09:00 AM	57.1	81.9	37.2
09:00 AM - 10:00 AM	57.2	82.5	35.4
10:00 AM - 11:00 AM	54.7	83.4	35.4

Leq Average 24 hrs. (dB(A)) 62.7  
Lmax (dB(A)) 89.3  
L90 (dB(A)) 45.8  
Ldn (dB(A)) 69.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166381-1

Page 1 of 1

**Sample Number** 24121830-12  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
**Measurement Date** Nov 01 - Nov 02, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.0	81.3	35.1
12:00 PM - 01:00 PM	55.1	80.8	35.3
01:00 PM - 02:00 PM	54.9	81.2	34.9
02:00 PM - 03:00 PM	55.0	80.0	39.4
03:00 PM - 04:00 PM	54.0	85.2	37.2
04:00 PM - 05:00 PM	56.3	81.7	38.5
05:00 PM - 06:00 PM	59.5	85.0	44.4
06:00 PM - 07:00 PM	62.1	81.8	48.9
07:00 PM - 08:00 PM	63.3	83.7	59.3
08:00 PM - 09:00 PM	62.6	75.5	59.3
09:00 PM - 10:00 PM	64.6	76.7	59.9
10:00 PM - 11:00 PM	68.1	75.5	63.7
11:00 PM - 12:00 AM	69.8	75.6	69.1
12:00 AM - 01:00 AM	69.5	81.6	65.7
01:00 AM - 02:00 AM	66.6	79.9	64.5
02:00 AM - 03:00 AM	60.8	86.5	59.4
03:00 AM - 04:00 AM	60.7	82.8	54.0
04:00 AM - 05:00 AM	53.8	64.9	48.8
05:00 AM - 06:00 AM	61.5	84.0	51.3
06:00 AM - 07:00 AM	58.1	82.0	45.6
07:00 AM - 08:00 AM	60.2	83.8	42.7
08:00 AM - 09:00 AM	57.1	83.8	41.3
09:00 AM - 10:00 AM	56.4	82.6	42.2
10:00 AM - 11:00 AM	54.5	83.6	41.4

Leq Average 24 hrs. (dB(A)) 63.0  
Lmax (dB(A)) 86.5  
L90 (dB(A)) 45.6  
Ldn (dB(A)) 71.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

**Lot ID: 24121830**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166382-1

Page 1 of 1

Sample Number 24121830-13  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Nov 02 - Nov 03, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	58.0	88.2	40.6
12:00 PM - 01:00 PM	58.1	80.7	40.7
01:00 PM - 02:00 PM	53.1	82.3	38.8
02:00 PM - 03:00 PM	56.8	81.7	39.0
03:00 PM - 04:00 PM	55.3	82.4	39.5
04:00 PM - 05:00 PM	57.3	85.9	42.7
05:00 PM - 06:00 PM	57.3	84.1	45.3
06:00 PM - 07:00 PM	59.1	80.7	52.3
07:00 PM - 08:00 PM	61.4	86.1	57.0
08:00 PM - 09:00 PM	63.4	82.6	57.3
09:00 PM - 10:00 PM	63.3	82.7	57.6
10:00 PM - 11:00 PM	63.8	83.2	59.0
11:00 PM - 12:00 AM	57.7	89.9	52.2
12:00 AM - 01:00 AM	52.5	70.4	46.9
01:00 AM - 02:00 AM	59.5	79.3	57.9
02:00 AM - 03:00 AM	59.3	74.9	58.1
03:00 AM - 04:00 AM	57.3	81.5	48.9
04:00 AM - 05:00 AM	62.0	83.8	48.7
05:00 AM - 06:00 AM	63.6	84.0	49.9
06:00 AM - 07:00 AM	57.7	78.6	48.7
07:00 AM - 08:00 AM	58.6	80.1	48.6
08:00 AM - 09:00 AM	59.4	84.1	48.4
09:00 AM - 10:00 AM	57.6	81.3	49.6
10:00 AM - 11:00 AM	59.4	84.9	47.2

Leq Average 24 hrs. (dB(A)) 59.8  
Lmax (dB(A)) 89.9  
L90 (dB(A)) 48.7  
Ldn (dB(A)) 66.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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

P/O : 4210602061

Project Name : Monitoring EIA

Project Location : GNC

Lot ID: 24121830

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166383-1

Page 1 of 1

Sample Number 24121830-14  
Parameter Noise (Leq 24 hrs.)  
Location ชุมชนบ้านหนองอนามัย (GPS 47P 0792106, 1553110)  
Measurement Date Nov 03 - Nov 04, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.1	80.2	46.0
12:00 PM - 01:00 PM	57.7	83.9	44.0
01:00 PM - 02:00 PM	52.2	75.0	42.9
02:00 PM - 03:00 PM	55.1	77.9	43.1
03:00 PM - 04:00 PM	56.5	84.6	41.6
04:00 PM - 05:00 PM	55.6	83.3	41.1
05:00 PM - 06:00 PM	57.0	89.0	43.1
06:00 PM - 07:00 PM	59.8	88.5	55.1
07:00 PM - 08:00 PM	62.6	73.1	59.6
08:00 PM - 09:00 PM	63.5	80.8	62.3
09:00 PM - 10:00 PM	58.7	77.4	51.1
10:00 PM - 11:00 PM	60.9	67.8	57.8
11:00 PM - 12:00 AM	64.6	67.7	63.9
12:00 AM - 01:00 AM	63.3	76.5	59.3
01:00 AM - 02:00 AM	59.3	84.4	48.9
02:00 AM - 03:00 AM	56.1	81.6	46.2
03:00 AM - 04:00 AM	51.5	70.6	47.3
04:00 AM - 05:00 AM	58.7	81.0	52.7
05:00 AM - 06:00 AM	62.9	84.6	45.7
06:00 AM - 07:00 AM	62.1	89.2	47.8
07:00 AM - 08:00 AM	60.3	84.8	44.9
08:00 AM - 09:00 AM	59.5	83.9	41.5
09:00 AM - 10:00 AM	57.6	84.2	40.0
10:00 AM - 11:00 AM	57.4	87.7	40.6

Leq Average 24 hrs. (dB(A)) 59.9  
Lmax (dB(A)) 89.2  
L90 (dB(A)) 46.0  
Ldn (dB(A)) 67.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166302-1

Page 1 of 1

Sample Number 24121508-1  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนบ้านหนองอานามย์ (GPS 47P 0791572, 1552710)  
Measurement Date Oct 28 - Oct 29, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	59.7	92.7	40.5
12:00 PM - 01:00 PM	53.6	80.7	42.8
01:00 PM - 02:00 PM	49.5	67.4	44.1
02:00 PM - 03:00 PM	49.0	65.9	41.8
03:00 PM - 04:00 PM	50.0	71.6	38.4
04:00 PM - 05:00 PM	49.7	64.2	42.5
05:00 PM - 06:00 PM	52.9	69.9	47.6
06:00 PM - 07:00 PM	54.7	68.8	51.2
07:00 PM - 08:00 PM	58.5	73.7	53.3
08:00 PM - 09:00 PM	57.5	72.3	55.6
09:00 PM - 10:00 PM	55.3	70.0	50.5
10:00 PM - 11:00 PM	55.7	78.3	50.5
11:00 PM - 12:00 AM	51.8	64.5	49.2
12:00 AM - 01:00 AM	52.5	63.9	50.1
01:00 AM - 02:00 AM	52.0	61.7	50.3
02:00 AM - 03:00 AM	52.7	74.0	50.1
03:00 AM - 04:00 AM	51.7	61.8	48.8
04:00 AM - 05:00 AM	51.5	71.8	47.7
05:00 AM - 06:00 AM	53.4	72.4	49.7
06:00 AM - 07:00 AM	52.0	66.2	44.7
07:00 AM - 08:00 AM	52.5	68.2	45.9
08:00 AM - 09:00 AM	50.1	65.9	42.9
09:00 AM - 10:00 AM	47.2	63.0	37.8
10:00 AM - 11:00 AM	48.2	71.6	38.1

Leq Average 24 hrs. (dB(A)) 53.8  
Lmax (dB(A)) 92.7  
L90 (dB(A)) 47.6  
Ldn (dB(A)) 59.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head





## Analysis / Test Report

TESTING  
No.0042

**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: 24121508**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166303-1

Page 1 of 1

**Sample Number** 24121508-2  
**Parameter** Noise (Leq 24 hrs.)  
**Location** โรงเรียนบ้านหนองอามัย (GPS 47P 0791572, 1552710)  
**Measurement Date** Oct 29 - Oct 30, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	68.3	78.5	62.8
12:00 PM - 01:00 PM	59.6	81.6	37.6
01:00 PM - 02:00 PM	46.4	64.2	35.8
02:00 PM - 03:00 PM	47.2	64.5	36.7
03:00 PM - 04:00 PM	62.4	82.0	47.0
04:00 PM - 05:00 PM	63.1	81.2	43.6
05:00 PM - 06:00 PM	51.2	68.4	44.4
06:00 PM - 07:00 PM	52.6	68.6	47.3
07:00 PM - 08:00 PM	50.7	65.5	47.7
08:00 PM - 09:00 PM	54.4	81.4	46.8
09:00 PM - 10:00 PM	52.1	71.0	47.2
10:00 PM - 11:00 PM	48.4	65.4	45.6
11:00 PM - 12:00 AM	49.3	67.8	46.2
12:00 AM - 01:00 AM	51.3	81.3	49.1
01:00 AM - 02:00 AM	51.1	63.7	49.6
02:00 AM - 03:00 AM	50.0	72.0	47.9
03:00 AM - 04:00 AM	47.6	68.0	43.8
04:00 AM - 05:00 AM	44.8	65.7	43.3
05:00 AM - 06:00 AM	48.3	73.0	43.8
06:00 AM - 07:00 AM	49.9	67.7	44.2
07:00 AM - 08:00 AM	51.2	73.2	43.0
08:00 AM - 09:00 AM	49.8	69.3	42.4
09:00 AM - 10:00 AM	49.8	78.2	41.6
10:00 AM - 11:00 AM	47.7	66.0	39.1

Leq Average 24 hrs. (dB(A)) 57.5  
Lmax (dB(A)) 82.0  
L90 (dB(A)) 44.2  
Ldn (dB(A)) 59.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166304-1

Page 1 of 1

Sample Number 24121508-3  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนบ้านหนองอานามัย (GPS 47P 0791572, 1552710)  
Measurement Date Oct 30 - Oct 31, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.1	71.4	40.1
12:00 PM - 01:00 PM	49.0	67.8	39.4
01:00 PM - 02:00 PM	48.2	65.9	37.8
02:00 PM - 03:00 PM	47.5	63.8	38.2
03:00 PM - 04:00 PM	48.8	65.5	43.3
04:00 PM - 05:00 PM	50.7	71.9	45.5
05:00 PM - 06:00 PM	52.6	70.0	46.2
06:00 PM - 07:00 PM	51.6	67.8	46.0
07:00 PM - 08:00 PM	49.3	68.1	45.1
08:00 PM - 09:00 PM	50.4	75.8	44.6
09:00 PM - 10:00 PM	46.9	65.1	44.3
10:00 PM - 11:00 PM	47.2	68.7	44.0
11:00 PM - 12:00 AM	45.9	62.1	43.9
12:00 AM - 01:00 AM	48.7	73.2	43.5
01:00 AM - 02:00 AM	44.2	58.8	42.3
02:00 AM - 03:00 AM	43.6	63.3	41.2
03:00 AM - 04:00 AM	44.4	64.0	41.7
04:00 AM - 05:00 AM	46.1	77.0	42.5
05:00 AM - 06:00 AM	47.7	73.3	43.4
06:00 AM - 07:00 AM	49.5	64.7	43.3
07:00 AM - 08:00 AM	51.5	67.8	43.5
08:00 AM - 09:00 AM	49.8	67.8	41.9
09:00 AM - 10:00 AM	51.1	72.7	41.1
10:00 AM - 11:00 AM	48.8	67.4	38.2

Leq Average 24 hrs. (dB(A)) 49.0  
Lmax (dB(A)) 77.0  
L90 (dB(A)) 43.3  
Ldn (dB(A)) 53.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166305-1

Page 1 of 1

Sample Number 24121508-4  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนบ้านหนองอามัย (GPS 47P 0791572, 1552710)  
Measurement Date Oct 31 - Nov 01, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.4	72.6	39.5
12:00 PM - 01:00 PM	49.9	67.2	43.0
01:00 PM - 02:00 PM	48.7	64.6	40.3
02:00 PM - 03:00 PM	53.1	77.7	43.8
03:00 PM - 04:00 PM	48.8	65.2	42.1
04:00 PM - 05:00 PM	48.6	64.3	40.1
05:00 PM - 06:00 PM	52.8	76.3	46.0
06:00 PM - 07:00 PM	52.5	80.3	47.8
07:00 PM - 08:00 PM	52.0	73.1	47.9
08:00 PM - 09:00 PM	53.2	77.3	47.1
09:00 PM - 10:00 PM	49.4	72.1	46.1
10:00 PM - 11:00 PM	52.5	78.4	45.6
11:00 PM - 12:00 AM	48.5	72.7	44.3
12:00 AM - 01:00 AM	46.2	61.9	44.2
01:00 AM - 02:00 AM	45.4	60.6	43.8
02:00 AM - 03:00 AM	43.6	57.5	42.2
03:00 AM - 04:00 AM	43.9	60.6	42.2
04:00 AM - 05:00 AM	45.5	68.7	42.2
05:00 AM - 06:00 AM	47.4	70.2	42.5
06:00 AM - 07:00 AM	50.8	72.4	45.8
07:00 AM - 08:00 AM	53.6	71.8	46.4
08:00 AM - 09:00 AM	52.1	68.6	45.1
09:00 AM - 10:00 AM	49.8	73.3	40.4
10:00 AM - 11:00 AM	48.2	65.8	39.1

Leq Average 24 hrs. (dB(A)) 50.3  
Lmax (dB(A)) 80.3  
L90 (dB(A)) 43.8  
Ldn (dB(A)) 55.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166306-1

Page 1 of 1

Sample Number 24121508-5  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนบ้านหนองอามัย (GPS 47P 0791572, 1552710)  
Measurement Date Nov 01 - Nov 02, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	50.2	72.0	39.9
12:00 PM - 01:00 PM	52.7	76.3	41.9
01:00 PM - 02:00 PM	49.5	65.0	40.8
02:00 PM - 03:00 PM	53.4	68.6	46.3
03:00 PM - 04:00 PM	53.5	83.7	45.0
04:00 PM - 05:00 PM	51.9	76.7	43.7
05:00 PM - 06:00 PM	52.6	73.3	45.5
06:00 PM - 07:00 PM	52.1	68.5	46.8
07:00 PM - 08:00 PM	53.6	77.4	48.0
08:00 PM - 09:00 PM	50.3	64.4	47.9
09:00 PM - 10:00 PM	49.5	71.3	46.1
10:00 PM - 11:00 PM	47.1	65.2	44.0
11:00 PM - 12:00 AM	47.0	70.1	43.5
12:00 AM - 01:00 AM	48.2	71.4	43.1
01:00 AM - 02:00 AM	45.6	64.2	43.4
02:00 AM - 03:00 AM	44.9	65.8	42.6
03:00 AM - 04:00 AM	45.8	66.0	42.8
04:00 AM - 05:00 AM	44.9	58.0	42.5
05:00 AM - 06:00 AM	49.1	66.8	44.0
06:00 AM - 07:00 AM	50.9	74.6	43.6
07:00 AM - 08:00 AM	51.8	66.6	46.2
08:00 AM - 09:00 AM	51.5	67.8	43.5
09:00 AM - 10:00 AM	52.5	78.2	46.7
10:00 AM - 11:00 AM	52.6	66.6	46.2

Leq Average 24 hrs. (dB(A)) 50.8  
Lmax (dB(A)) 83.7  
L90 (dB(A)) 43.7  
Ldn (dB(A)) 54.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

**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: 24121508**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166307-1

Page 1 of 1

**Sample Number** 24121508-6  
**Parameter** Noise (Leq 24 hrs.)  
**Location** โรงเรียนบ้านหนองอานามย์ (GPS 47P 0791572, 1552710)  
**Measurement Date** Nov 02 - Nov 03, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.0	69.6	47.3
12:00 PM - 01:00 PM	52.8	63.5	46.8
01:00 PM - 02:00 PM	51.1	66.7	44.2
02:00 PM - 03:00 PM	49.4	68.7	42.9
03:00 PM - 04:00 PM	49.2	65.0	41.9
04:00 PM - 05:00 PM	50.1	67.3	45.3
05:00 PM - 06:00 PM	51.8	69.2	45.7
06:00 PM - 07:00 PM	53.3	73.3	48.1
07:00 PM - 08:00 PM	53.1	70.5	50.9
08:00 PM - 09:00 PM	52.4	70.3	50.2
09:00 PM - 10:00 PM	52.4	70.0	50.1
10:00 PM - 11:00 PM	50.6	64.9	48.9
11:00 PM - 12:00 AM	50.8	67.7	48.4
12:00 AM - 01:00 AM	50.9	68.6	48.1
01:00 AM - 02:00 AM	51.4	66.0	46.6
02:00 AM - 03:00 AM	53.4	72.1	45.6
03:00 AM - 04:00 AM	52.9	69.0	46.3
04:00 AM - 05:00 AM	53.6	67.3	47.1
05:00 AM - 06:00 AM	52.5	64.6	46.3
06:00 AM - 07:00 AM	55.6	68.1	49.4
07:00 AM - 08:00 AM	54.8	69.7	48.7
08:00 AM - 09:00 AM	57.8	76.5	51.6
09:00 AM - 10:00 AM	57.2	91.6	51.6
10:00 AM - 11:00 AM	55.8	79.1	50.9

Leq Average 24 hrs. (dB(A)) 53.4  
Lmax (dB(A)) 91.6  
L90 (dB(A)) 47.3  
Ldn (dB(A)) 59.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166308-1

Page 1 of 1

Sample Number 24121508-7  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนบ้านหนองอานามัย (GPS 47P 0791572, 1552710)  
Measurement Date Nov 03 - Nov 04, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.2	67.7	46.4
12:00 PM - 01:00 PM	52.6	68.4	47.3
01:00 PM - 02:00 PM	53.0	69.9	47.9
02:00 PM - 03:00 PM	52.4	66.9	47.5
03:00 PM - 04:00 PM	51.7	64.8	46.1
04:00 PM - 05:00 PM	51.3	73.1	46.6
05:00 PM - 06:00 PM	50.6	64.3	45.7
06:00 PM - 07:00 PM	55.2	83.2	47.1
07:00 PM - 08:00 PM	53.3	71.4	51.0
08:00 PM - 09:00 PM	53.4	71.3	51.0
09:00 PM - 10:00 PM	52.5	66.7	50.2
10:00 PM - 11:00 PM	51.0	64.5	49.3
11:00 PM - 12:00 AM	51.7	74.3	49.9
12:00 AM - 01:00 AM	50.7	66.1	47.3
01:00 AM - 02:00 AM	50.7	69.1	47.1
02:00 AM - 03:00 AM	49.3	60.0	45.2
03:00 AM - 04:00 AM	48.0	63.2	43.7
04:00 AM - 05:00 AM	43.9	62.8	42.0
05:00 AM - 06:00 AM	45.9	64.4	42.3
06:00 AM - 07:00 AM	48.9	67.1	43.2
07:00 AM - 08:00 AM	51.5	69.7	44.9
08:00 AM - 09:00 AM	55.3	78.3	49.5
09:00 AM - 10:00 AM	52.4	78.9	46.6
10:00 AM - 11:00 AM	51.6	66.2	45.6

Leq Average 24 hrs. (dB(A)) 51.8  
Lmax (dB(A)) 83.2  
L90 (dB(A)) 46.6  
Ldn (dB(A)) 56.5

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166309-1

Page 1 of 1

Sample Number 24121508-8  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Oct 28 - Oct 29, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	41.5	74.6	30.5
12:00 PM - 01:00 PM	40.0	66.6	30.6
01:00 PM - 02:00 PM	39.9	66.5	31.0
02:00 PM - 03:00 PM	45.5	71.9	31.8
03:00 PM - 04:00 PM	42.0	61.6	32.6
04:00 PM - 05:00 PM	43.5	63.5	33.4
05:00 PM - 06:00 PM	48.2	68.5	38.9
06:00 PM - 07:00 PM	50.4	56.2	48.1
07:00 PM - 08:00 PM	50.4	61.6	46.1
08:00 PM - 09:00 PM	47.8	61.2	44.2
09:00 PM - 10:00 PM	46.3	52.9	41.8
10:00 PM - 11:00 PM	45.0	58.3	39.2
11:00 PM - 12:00 AM	43.6	60.0	38.9
12:00 AM - 01:00 AM	44.0	61.2	38.2
01:00 AM - 02:00 AM	39.0	48.4	37.6
02:00 AM - 03:00 AM	46.5	55.7	37.2
03:00 AM - 04:00 AM	41.4	56.5	37.9
04:00 AM - 05:00 AM	45.6	59.7	42.2
05:00 AM - 06:00 AM	51.9	70.9	47.5
06:00 AM - 07:00 AM	47.1	69.8	41.4
07:00 AM - 08:00 AM	47.3	69.7	36.7
08:00 AM - 09:00 AM	44.1	66.9	32.8
09:00 AM - 10:00 AM	41.5	64.2	32.4
10:00 AM - 11:00 AM	47.6	71.5	33.9

Leq Average 24 hrs. (dB(A)) 46.3  
Lmax (dB(A)) 74.6  
L90 (dB(A)) 37.6  
Ldn (dB(A)) 52.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

**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: 24121508**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166310-1

Page 1 of 1

**Sample Number** 24121508-9  
**Parameter** Noise (Leq 24 hrs.)  
**Location** วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
**Measurement Date** Oct 29 - Oct 30, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	40.9	64.1	30.3
12:00 PM - 01:00 PM	46.5	78.3	30.1
01:00 PM - 02:00 PM	39.9	66.1	29.8
02:00 PM - 03:00 PM	40.1	71.5	29.7
03:00 PM - 04:00 PM	44.7	78.0	33.4
04:00 PM - 05:00 PM	44.0	64.3	34.4
05:00 PM - 06:00 PM	50.0	63.3	40.7
06:00 PM - 07:00 PM	55.0	77.5	51.7
07:00 PM - 08:00 PM	47.8	58.5	46.6
08:00 PM - 09:00 PM	48.2	53.8	46.0
09:00 PM - 10:00 PM	45.5	51.7	42.8
10:00 PM - 11:00 PM	42.3	52.2	38.8
11:00 PM - 12:00 AM	40.7	56.1	38.2
12:00 AM - 01:00 AM	43.7	55.0	39.0
01:00 AM - 02:00 AM	44.8	50.8	39.2
02:00 AM - 03:00 AM	40.2	55.0	35.2
03:00 AM - 04:00 AM	41.1	59.2	36.5
04:00 AM - 05:00 AM	47.0	65.5	40.9
05:00 AM - 06:00 AM	54.0	73.8	48.2
06:00 AM - 07:00 AM	49.5	72.8	43.0
07:00 AM - 08:00 AM	48.7	79.6	38.5
08:00 AM - 09:00 AM	49.5	70.2	38.0
09:00 AM - 10:00 AM	44.4	64.8	34.3
10:00 AM - 11:00 AM	48.9	71.7	42.5

Leq Average 24 hrs. (dB(A)) 47.9  
Lmax (dB(A)) 79.6  
L90 (dB(A)) 38.5  
Ldn (dB(A)) 53.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166311-1

Page 1 of 1

Sample Number 24121508-10  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Oct 30 - Oct 31, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.3	76.8	36.0
12:00 PM - 01:00 PM	47.3	74.4	35.9
01:00 PM - 02:00 PM	43.1	61.5	36.7
02:00 PM - 03:00 PM	42.0	64.6	34.7
03:00 PM - 04:00 PM	44.8	69.5	33.8
04:00 PM - 05:00 PM	46.9	70.6	34.7
05:00 PM - 06:00 PM	45.4	63.0	38.5
06:00 PM - 07:00 PM	46.1	62.6	43.9
07:00 PM - 08:00 PM	44.9	54.4	41.9
08:00 PM - 09:00 PM	44.5	58.8	41.7
09:00 PM - 10:00 PM	44.0	53.3	41.6
10:00 PM - 11:00 PM	44.0	56.9	40.8
11:00 PM - 12:00 AM	40.3	51.3	36.3
12:00 AM - 01:00 AM	41.1	61.3	35.6
01:00 AM - 02:00 AM	39.1	55.6	35.1
02:00 AM - 03:00 AM	36.3	51.6	33.4
03:00 AM - 04:00 AM	37.9	47.2	35.3
04:00 AM - 05:00 AM	45.1	61.9	40.0
05:00 AM - 06:00 AM	49.5	71.9	45.1
06:00 AM - 07:00 AM	47.9	76.4	40.9
07:00 AM - 08:00 AM	51.3	76.2	39.9
08:00 AM - 09:00 AM	50.8	77.9	38.4
09:00 AM - 10:00 AM	49.1	72.3	37.4
10:00 AM - 11:00 AM	44.5	72.1	34.2

Leq Average 24 hrs. (dB(A)) 47.3  
Lmax (dB(A)) 77.9  
L90 (dB(A)) 36.7  
Ldn (dB(A)) 51.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166312-1

Page 1 of 1

Sample Number 24121508-11  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Oct 31 - Nov 01, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	44.9	66.6	35.6
12:00 PM - 01:00 PM	49.0	66.8	35.3
01:00 PM - 02:00 PM	48.2	69.1	32.2
02:00 PM - 03:00 PM	43.5	63.9	37.1
03:00 PM - 04:00 PM	47.3	72.9	34.7
04:00 PM - 05:00 PM	49.0	71.6	36.6
05:00 PM - 06:00 PM	50.9	74.4	41.8
06:00 PM - 07:00 PM	48.0	62.6	45.7
07:00 PM - 08:00 PM	45.5	61.2	43.6
08:00 PM - 09:00 PM	43.7	55.6	41.0
09:00 PM - 10:00 PM	42.7	53.6	41.1
10:00 PM - 11:00 PM	41.7	55.5	39.2
11:00 PM - 12:00 AM	41.2	57.8	38.1
12:00 AM - 01:00 AM	39.6	48.8	37.3
01:00 AM - 02:00 AM	45.1	52.3	40.2
02:00 AM - 03:00 AM	45.0	61.2	38.4
03:00 AM - 04:00 AM	41.3	61.2	38.0
04:00 AM - 05:00 AM	48.2	62.8	44.0
05:00 AM - 06:00 AM	51.8	68.6	47.9
06:00 AM - 07:00 AM	50.7	70.4	43.2
07:00 AM - 08:00 AM	44.2	64.2	38.7
08:00 AM - 09:00 AM	40.9	58.2	35.5
09:00 AM - 10:00 AM	42.8	64.2	34.6
10:00 AM - 11:00 AM	45.9	66.4	35.2

Leq Average 24 hrs. (dB(A)) 46.8  
Lmax (dB(A)) 74.4  
L90 (dB(A)) 38.1  
Ldn (dB(A)) 53.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166313-1

Page 1 of 1

Sample Number 24121508-12  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Nov 01 - Nov 02, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	47.5	74.5	31.9
12:00 PM - 01:00 PM	44.5	71.1	33.0
01:00 PM - 02:00 PM	50.4	63.9	40.0
02:00 PM - 03:00 PM	44.1	67.0	34.9
03:00 PM - 04:00 PM	41.8	60.9	35.0
04:00 PM - 05:00 PM	42.4	61.3	35.0
05:00 PM - 06:00 PM	51.1	67.4	39.4
06:00 PM - 07:00 PM	51.7	61.8	49.5
07:00 PM - 08:00 PM	48.3	54.9	45.6
08:00 PM - 09:00 PM	46.9	57.1	44.0
09:00 PM - 10:00 PM	47.7	62.0	44.4
10:00 PM - 11:00 PM	44.8	53.1	39.9
11:00 PM - 12:00 AM	41.7	51.0	39.6
12:00 AM - 01:00 AM	44.1	54.6	40.2
01:00 AM - 02:00 AM	44.6	60.7	39.2
02:00 AM - 03:00 AM	41.6	59.0	38.1
03:00 AM - 04:00 AM	43.1	60.2	38.5
04:00 AM - 05:00 AM	49.7	61.1	44.5
05:00 AM - 06:00 AM	52.9	75.9	46.9
06:00 AM - 07:00 AM	47.2	73.3	43.6
07:00 AM - 08:00 AM	46.9	69.4	41.1
08:00 AM - 09:00 AM	49.4	68.7	42.9
09:00 AM - 10:00 AM	49.2	65.0	41.9
10:00 AM - 11:00 AM	45.8	68.9	40.7

Leq Average 24 hrs. (dB(A)) 47.8  
Lmax (dB(A)) 75.9  
L90 (dB(A)) 40.0  
Ldn (dB(A)) 53.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166314-1

Page 1 of 1

Sample Number 24121508-13  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Nov 02 - Nov 03, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.1	78.0	40.0
12:00 PM - 01:00 PM	43.9	70.1	38.4
01:00 PM - 02:00 PM	57.1	71.2	38.6
02:00 PM - 03:00 PM	41.3	61.0	37.6
03:00 PM - 04:00 PM	48.9	77.2	39.3
04:00 PM - 05:00 PM	58.5	73.0	40.2
05:00 PM - 06:00 PM	63.8	72.8	49.8
06:00 PM - 07:00 PM	63.9	78.7	52.5
07:00 PM - 08:00 PM	61.0	74.8	49.7
08:00 PM - 09:00 PM	63.9	80.3	52.0
09:00 PM - 10:00 PM	60.7	77.2	52.4
10:00 PM - 11:00 PM	61.5	73.7	52.0
11:00 PM - 12:00 AM	62.6	79.0	53.4
12:00 AM - 01:00 AM	56.3	74.4	40.4
01:00 AM - 02:00 AM	43.8	52.7	39.7
02:00 AM - 03:00 AM	44.4	59.0	40.4
03:00 AM - 04:00 AM	45.2	65.2	40.8
04:00 AM - 05:00 AM	45.7	60.3	42.3
05:00 AM - 06:00 AM	69.0	78.4	48.0
06:00 AM - 07:00 AM	66.5	81.5	46.4
07:00 AM - 08:00 AM	67.0	81.1	51.1
08:00 AM - 09:00 AM	67.5	82.9	53.5
09:00 AM - 10:00 AM	69.6	82.3	62.2
10:00 AM - 11:00 AM	67.8	82.6	62.6

Leq Average 24 hrs. (dB(A)) 63.5  
Lmax (dB(A)) 82.9  
L90 (dB(A)) 46.4  
Ldn (dB(A)) 69.2

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166315-1

Page 1 of 1

Sample Number 24121508-14  
Parameter Noise (Leq 24 hrs.)  
Location วัดอ่างศิลา (GPS 47P 0792400, 1554211)  
Measurement Date Nov 03 - Nov 04, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	69.4	83.0	64.9
12:00 PM - 01:00 PM	67.8	81.5	61.0
01:00 PM - 02:00 PM	69.0	82.7	62.8
02:00 PM - 03:00 PM	67.3	83.2	53.2
03:00 PM - 04:00 PM	45.6	64.0	40.3
04:00 PM - 05:00 PM	44.6	69.2	39.8
05:00 PM - 06:00 PM	49.4	80.1	40.1
06:00 PM - 07:00 PM	43.0	68.9	41.6
07:00 PM - 08:00 PM	41.4	54.4	40.0
08:00 PM - 09:00 PM	41.1	62.2	38.3
09:00 PM - 10:00 PM	40.6	62.0	37.5
10:00 PM - 11:00 PM	41.9	59.0	37.9
11:00 PM - 12:00 AM	40.4	65.5	39.0
12:00 AM - 01:00 AM	47.8	72.9	39.8
01:00 AM - 02:00 AM	40.8	52.7	38.2
02:00 AM - 03:00 AM	41.0	56.8	38.2
03:00 AM - 04:00 AM	40.9	59.3	36.9
04:00 AM - 05:00 AM	51.3	72.3	41.5
05:00 AM - 06:00 AM	58.9	86.6	45.9
06:00 AM - 07:00 AM	49.2	82.7	44.5
07:00 AM - 08:00 AM	48.5	65.7	43.3
08:00 AM - 09:00 AM	45.5	65.4	40.9
09:00 AM - 10:00 AM	49.0	83.3	40.8
10:00 AM - 11:00 AM	48.2	53.8	46.0

Leq Average 24 hrs. (dB(A)) 60.9  
Lmax (dB(A)) 86.6  
L90 (dB(A)) 40.3  
Ldn (dB(A)) 62.2

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0042

**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: 24121508**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166316-1

Page 1 of 1

**Sample Number** 24121508-15  
**Parameter** Noise (Leq 24 hrs.)  
**Location** บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
**Measurement Date** Oct 28 - Oct 29, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.9	80.9	49.5
12:00 PM - 01:00 PM	56.6	85.4	50.2
01:00 PM - 02:00 PM	53.8	72.3	51.2
02:00 PM - 03:00 PM	53.8	73.4	51.4
03:00 PM - 04:00 PM	53.7	79.7	50.9
04:00 PM - 05:00 PM	53.9	78.9	50.0
05:00 PM - 06:00 PM	56.4	81.3	50.5
06:00 PM - 07:00 PM	57.4	80.8	52.4
07:00 PM - 08:00 PM	59.9	84.2	54.8
08:00 PM - 09:00 PM	59.7	82.7	55.0
09:00 PM - 10:00 PM	58.7	83.9	55.5
10:00 PM - 11:00 PM	56.4	68.3	54.9
11:00 PM - 12:00 AM	55.1	70.0	52.8
12:00 AM - 01:00 AM	53.3	63.7	52.3
01:00 AM - 02:00 AM	53.0	65.9	51.7
02:00 AM - 03:00 AM	53.8	65.5	52.6
03:00 AM - 04:00 AM	53.3	76.2	51.8
04:00 AM - 05:00 AM	53.4	70.3	52.1
05:00 AM - 06:00 AM	54.9	76.8	52.5
06:00 AM - 07:00 AM	54.1	78.4	52.3
07:00 AM - 08:00 AM	56.4	77.0	52.7
08:00 AM - 09:00 AM	56.6	78.8	51.2
09:00 AM - 10:00 AM	53.3	71.8	50.5
10:00 AM - 11:00 AM	52.6	75.5	49.1

Leq Average 24 hrs. (dB(A)) 55.7  
Lmax (dB(A)) 85.4  
L90 (dB(A)) 51.8  
Ldn (dB(A)) 61.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head





## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166317-1

Page 1 of 1

Sample Number 24121508-16  
Parameter Noise (Leq 24 hrs.)  
Location บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
Measurement Date Oct 29 - Oct 30, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.7	79.7	49.3
12:00 PM - 01:00 PM	53.2	80.7	48.9
01:00 PM - 02:00 PM	52.3	72.6	48.5
02:00 PM - 03:00 PM	53.1	74.7	49.7
03:00 PM - 04:00 PM	52.8	69.7	50.7
04:00 PM - 05:00 PM	54.9	74.1	51.5
05:00 PM - 06:00 PM	55.7	80.2	51.5
06:00 PM - 07:00 PM	56.0	82.4	52.2
07:00 PM - 08:00 PM	58.3	82.4	54.6
08:00 PM - 09:00 PM	58.1	79.5	54.2
09:00 PM - 10:00 PM	56.1	71.0	53.7
10:00 PM - 11:00 PM	56.9	82.7	52.4
11:00 PM - 12:00 AM	54.0	73.3	51.7
12:00 AM - 01:00 AM	53.7	78.8	52.0
01:00 AM - 02:00 AM	57.3	80.5	52.5
02:00 AM - 03:00 AM	53.1	56.5	51.4
03:00 AM - 04:00 AM	52.6	65.8	51.5
04:00 AM - 05:00 AM	56.8	84.1	51.1
05:00 AM - 06:00 AM	54.1	79.3	52.1
06:00 AM - 07:00 AM	53.8	69.3	51.8
07:00 AM - 08:00 AM	57.0	79.6	52.2
08:00 AM - 09:00 AM	58.4	83.2	50.2
09:00 AM - 10:00 AM	57.7	83.6	50.4
10:00 AM - 11:00 AM	56.0	72.8	50.5

Leq Average 24 hrs. (dB(A)) 55.7  
Lmax (dB(A)) 84.1  
L90 (dB(A)) 51.5  
Ldn (dB(A)) 61.6  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

**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: 24121508**

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166318-1

Page 1 of 1

**Sample Number** 24121508-17  
**Parameter** Noise (Leq 24 hrs.)  
**Location** บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
**Measurement Date** Oct 30 - Oct 31, 2024  
**Measurement by** Apichart Wilars  
**Sound Level meter** Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.0	81.0	51.1
12:00 PM - 01:00 PM	54.2	78.4	50.8
01:00 PM - 02:00 PM	54.5	78.3	49.7
02:00 PM - 03:00 PM	52.9	71.8	49.9
03:00 PM - 04:00 PM	51.3	73.9	49.8
04:00 PM - 05:00 PM	57.8	82.9	50.9
05:00 PM - 06:00 PM	55.9	78.6	52.6
06:00 PM - 07:00 PM	55.4	74.5	52.6
07:00 PM - 08:00 PM	58.4	82.9	53.6
08:00 PM - 09:00 PM	55.0	78.4	52.1
09:00 PM - 10:00 PM	54.0	69.7	51.6
10:00 PM - 11:00 PM	55.8	83.2	52.2
11:00 PM - 12:00 AM	54.6	80.3	52.1
12:00 AM - 01:00 AM	52.8	78.2	51.5
01:00 AM - 02:00 AM	52.4	59.1	51.7
02:00 AM - 03:00 AM	53.6	77.4	52.0
03:00 AM - 04:00 AM	52.1	60.8	51.0
04:00 AM - 05:00 AM	52.6	61.6	51.4
05:00 AM - 06:00 AM	52.8	68.0	51.6
06:00 AM - 07:00 AM	54.1	69.2	52.4
07:00 AM - 08:00 AM	56.5	78.9	52.3
08:00 AM - 09:00 AM	55.6	75.1	51.9
09:00 AM - 10:00 AM	54.7	78.3	51.6
10:00 AM - 11:00 AM	54.0	75.7	52.0

Leq Average 24 hrs. (dB(A)) 54.8  
Lmax (dB(A)) 83.2  
L90 (dB(A)) 51.6  
Ldn (dB(A)) 60.3

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166319-1

Page 1 of 1

Sample Number 24121508-18  
Parameter Noise (Leq 24 hrs.)  
Location บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
Measurement Date Oct 31 - Nov 01, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	54.8	80.0	51.7
12:00 PM - 01:00 PM	53.0	72.2	50.6
01:00 PM - 02:00 PM	54.4	78.7	51.2
02:00 PM - 03:00 PM	56.5	78.3	51.0
03:00 PM - 04:00 PM	55.8	76.1	52.5
04:00 PM - 05:00 PM	54.6	74.3	50.6
05:00 PM - 06:00 PM	54.5	70.7	51.1
06:00 PM - 07:00 PM	57.5	82.0	52.2
07:00 PM - 08:00 PM	55.6	73.4	53.0
08:00 PM - 09:00 PM	56.0	83.2	52.7
09:00 PM - 10:00 PM	54.8	77.2	52.0
10:00 PM - 11:00 PM	55.0	77.2	51.9
11:00 PM - 12:00 AM	53.0	77.5	51.7
12:00 AM - 01:00 AM	53.4	71.2	52.2
01:00 AM - 02:00 AM	53.2	61.4	52.3
02:00 AM - 03:00 AM	53.7	69.5	52.4
03:00 AM - 04:00 AM	52.5	65.9	51.4
04:00 AM - 05:00 AM	51.9	60.0	51.0
05:00 AM - 06:00 AM	55.2	79.0	51.3
06:00 AM - 07:00 AM	54.5	79.0	51.3
07:00 AM - 08:00 AM	56.5	78.1	52.1
08:00 AM - 09:00 AM	55.2	74.8	50.5
09:00 AM - 10:00 AM	52.4	69.1	50.1
10:00 AM - 11:00 AM	52.9	66.2	50.5

Leq Average 24 hrs. (dB(A)) 54.7  
Lmax (dB(A)) 83.2  
L90 (dB(A)) 51.4  
Ldn (dB(A)) 60.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166320-1

Page 1 of 1

Sample Number 24121508-19  
Parameter Noise (Leq 24 hrs.)  
Location บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
Measurement Date Nov 01 - Nov 02, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.2	75.2	50.9
12:00 PM - 01:00 PM	54.4	79.3	50.4
01:00 PM - 02:00 PM	52.8	65.9	50.7
02:00 PM - 03:00 PM	54.8	72.8	50.9
03:00 PM - 04:00 PM	51.8	67.4	48.9
04:00 PM - 05:00 PM	55.1	75.1	50.8
05:00 PM - 06:00 PM	56.6	76.7	51.0
06:00 PM - 07:00 PM	55.6	78.2	52.3
07:00 PM - 08:00 PM	57.3	81.6	52.4
08:00 PM - 09:00 PM	55.7	78.0	52.5
09:00 PM - 10:00 PM	54.2	73.8	52.2
10:00 PM - 11:00 PM	52.8	65.2	50.9
11:00 PM - 12:00 AM	51.5	64.7	50.4
12:00 AM - 01:00 AM	51.9	67.0	50.5
01:00 AM - 02:00 AM	51.3	56.8	50.4
02:00 AM - 03:00 AM	51.2	65.9	50.0
03:00 AM - 04:00 AM	51.5	61.0	50.4
04:00 AM - 05:00 AM	52.3	69.6	50.6
05:00 AM - 06:00 AM	52.8	74.0	50.6
06:00 AM - 07:00 AM	53.9	74.8	51.0
07:00 AM - 08:00 AM	55.5	73.5	51.0
08:00 AM - 09:00 AM	54.3	76.2	49.3
09:00 AM - 10:00 AM	55.2	77.3	48.8
10:00 AM - 11:00 AM	52.9	79.6	48.7

Leq Average 24 hrs. (dB(A)) 54.0  
Lmax (dB(A)) 81.6  
L90 (dB(A)) 50.6  
Ldn (dB(A)) 59.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166321-1

Page 1 of 1

Sample Number 24121508-20  
Parameter Noise (Leq 24 hrs.)  
Location บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
Measurement Date Nov 02 - Nov 03, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.1	71.3	48.3
12:00 PM - 01:00 PM	55.2	79.8	49.6
01:00 PM - 02:00 PM	54.7	79.1	49.0
02:00 PM - 03:00 PM	53.4	75.4	49.4
03:00 PM - 04:00 PM	52.3	70.2	48.6
04:00 PM - 05:00 PM	53.5	70.6	49.0
05:00 PM - 06:00 PM	52.9	69.1	49.2
06:00 PM - 07:00 PM	55.8	78.7	50.9
07:00 PM - 08:00 PM	55.5	81.8	51.4
08:00 PM - 09:00 PM	56.5	78.4	52.4
09:00 PM - 10:00 PM	55.2	74.3	52.0
10:00 PM - 11:00 PM	54.5	76.8	51.4
11:00 PM - 12:00 AM	53.4	74.0	50.8
12:00 AM - 01:00 AM	53.4	74.7	50.2
01:00 AM - 02:00 AM	52.5	70.1	50.6
02:00 AM - 03:00 AM	51.3	60.5	49.7
03:00 AM - 04:00 AM	53.2	64.5	50.1
04:00 AM - 05:00 AM	53.1	64.4	50.4
05:00 AM - 06:00 AM	53.4	66.4	50.3
06:00 AM - 07:00 AM	53.2	72.7	49.8
07:00 AM - 08:00 AM	54.6	73.5	49.7
08:00 AM - 09:00 AM	54.7	77.6	49.6
09:00 AM - 10:00 AM	56.1	73.6	51.0
10:00 AM - 11:00 AM	55.1	71.2	50.5

Leq Average 24 hrs. (dB(A)) 54.2  
Lmax (dB(A)) 81.8  
L90 (dB(A)) 50.1  
Ldn (dB(A)) 59.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head



## Analysis / Test Report

TESTING  
No.0042

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: 24121508

Date Received : Nov 09, 2024

Date Reported : Nov 14, 2024

Report Number: 3166322-1

Page 1 of 1

Sample Number 24121508-21  
Parameter Noise (Leq 24 hrs.)  
Location บ้านเลขที่ 171 (บ้านที่ติดกับพื้นที่โครงการด้านทิศตะวันออกเฉียงเหนือ) (GPS 47P 0793126, 1553136)  
Measurement Date Nov 03 - Nov 04, 2024  
Measurement by Apichart Wilars  
Sound Level meter Serial No. 597169

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.7	69.1	49.5
12:00 PM - 01:00 PM	52.7	69.4	48.5
01:00 PM - 02:00 PM	54.5	77.6	49.2
02:00 PM - 03:00 PM	55.2	77.5	49.7
03:00 PM - 04:00 PM	53.0	65.4	49.0
04:00 PM - 05:00 PM	53.0	70.2	48.5
05:00 PM - 06:00 PM	53.2	74.1	48.5
06:00 PM - 07:00 PM	55.1	75.7	49.9
07:00 PM - 08:00 PM	54.2	65.8	51.0
08:00 PM - 09:00 PM	56.5	80.4	51.1
09:00 PM - 10:00 PM	55.4	78.6	51.2
10:00 PM - 11:00 PM	55.6	80.2	50.4
11:00 PM - 12:00 AM	52.4	73.3	50.1
12:00 AM - 01:00 AM	54.6	78.1	50.6
01:00 AM - 02:00 AM	52.6	71.9	51.1
02:00 AM - 03:00 AM	61.0	87.3	51.7
03:00 AM - 04:00 AM	52.6	60.5	51.8
04:00 AM - 05:00 AM	52.4	60.1	51.3
05:00 AM - 06:00 AM	52.4	62.9	51.1
06:00 AM - 07:00 AM	52.9	63.3	51.3
07:00 AM - 08:00 AM	55.4	76.1	52.2
08:00 AM - 09:00 AM	55.5	70.8	51.5
09:00 AM - 10:00 AM	53.8	71.7	49.1
10:00 AM - 11:00 AM	52.8	73.8	48.2

Leq Average 24 hrs. (dB(A)) 54.7  
Lmax (dB(A)) 87.3  
L90 (dB(A)) 50.4  
Ldn (dB(A)) 61.5  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

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

Technical Management

Chontichak

Chonticha Subongkoch  
Scientist (3)

Approved by

Supot S

Supot Salamteh  
Section Head

# ภาคผนวก ค-4

---

คุณภาพน้ำทิ้ง





## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2466406**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3021266-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2466406-1						
<b>Sampled Date</b>	Jul 12, 2024 11:55 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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	14	≤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	13	≤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		-	-	7.5	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	712	≤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	10	≤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 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Chumson.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 2466406**

Date Received : Jul 12, 2024  
Date Reported : Jul 20, 2024  
Report Number : 3021266-2

Page 1 of 1

**Sample Number** 2466406-1  
**Sampled Date** Jul 12, 2024 11:55 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** Jul 13, 2024  
**Condition of Sample** Contained in two BOD bottles, 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	4.46	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	1.65	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR		-	0.10	2.12	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	3.70	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	5.7	≥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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Chanattagarn Imchom  
Section Head

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 2479524**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3052373-1

Page 1 of 1

<b>Sample Number</b>	2479524-1
<b>Sampled Date</b>	Jul 12, 2024 11:55 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Jul 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤100	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤35	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

Chontichak

Chonticha Subongkoch

Scientist (3)

ทะเบียนเลขที่ ว-323-จ-9449

**Approved by**

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 2479524**  
Date Received : Jul 12, 2024  
Date Reported : Jul 20, 2024  
Report Number : 3052373-2

Page 1 of 1

<b>Sample Number</b>	2479524-1
<b>Sampled Date</b>	Jul 12, 2024 11:55 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Jul 13, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤1	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-9476 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Savitree N.*

Savitree Noisangiam

Manager

ทะเบียนเลขที่ ว-204-จ-0007

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt (12:32PM)



## 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: 2479524**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3052373-3

Page 1 of 1

<b>Sample Number</b>	2479524-1							
<b>Sampled Date</b>	Jul 12, 2024 11:55 AM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Jul 13, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Iron	mg/L	0.003	0.005	0.55	No Standard	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>								
Nitrate as N *	mg/L	0.015	0.05	2.31	No Standard	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

Approved by

Chanattagarn Imchom  
Section Head

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2479850**

Date Received : Aug 14, 2024

Date Reported : Aug 22, 2024

Report Number : 3053334-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	2479850-1						
<b>Sampled Date</b>	Aug 14, 2024 10:30 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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	14	≤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	13	≤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	-	-	34.0	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	640	≤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	12	≤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 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Chumson.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 2479850**  
Date Received : Aug 14, 2024  
Date Reported : Aug 22, 2024  
Report Number : 3053334-2

Page 1 of 1

**Sample Number** 2479850-1  
**Sampled Date** Aug 14, 2024 10:30 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** Aug 15, 2024  
**Condition of Sample** Contained in one amber glass bottle, two BOD bottles 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	3.74	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	0.96	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	2.77	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	4.24	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	0.35	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	6.1	≥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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## 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: 2479856**  
Date Received : Aug 14, 2024  
Date Reported : Aug 21, 2024  
Report Number : 3053338-1

Page 1 of 1

<b>Sample Number</b>	2479856-1
<b>Sampled Date</b>	Aug 14, 2024 10:30 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Aug 15, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤100	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤35	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.  
Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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

**Technical Management**

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

**Approved by**

Kanok Korn Anek

Kanok Korn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt ( 4:38PM)



## 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: 2479856**  
Date Received : Aug 14, 2024  
Date Reported : Aug 21, 2024  
Report Number : 3053338-2

Page 1 of 1

<b>Sample Number</b>	2479856-1
<b>Sampled Date</b>	Aug 14, 2024 10:30 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Aug 15, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤1	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.  
Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Sawitree N.*

Sawitree Noisangiam

Manager

ทะเบียนเลขที่ ว-204-จ-0007

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 2479856**

Date Received : Aug 14, 2024

Date Reported : Aug 21, 2024

Report Number : 3053338-3

Page 1 of 1

<b>Sample Number</b>	2479856-1							
<b>Sampled Date</b>	Aug 14, 2024 10:30 AM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Aug 15, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Iron	mg/L	0.003	0.005	0.78	No Standard	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>								
Nitrate as N *	mg/L	0.015	0.05	1.92	No Standard	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

**Remark :**

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt ( 6:13PM)



## 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: 24101342**

Date Received : Sep 24, 2024

Date Reported : Sep 28, 2024

Report Number : 3098594-2

Page 1 of 1

<b>Sample Number</b>	24101342-1
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Sep 25, 2024
<b>Condition of Sample</b>	Contained in two BOD bottles 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>Metals Testing</b>							
Arsenic	mg/L	0.0003	0.0005	0.003	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.34	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

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

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

**Technical Management**

*Chamatt L.*

Chanattagarn Imchom

Section Head

ทะเบียนเลขที่ ว-204-จ-0008

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24101342**

Date Received : Sep 24, 2024

Date Reported : Sep 27, 2024

Report Number : 3098594-1

Page 1 of 1

<b>Sample Number</b>	24101342-1
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Sep 25, 2024
<b>Condition of Sample</b>	Contained in two BOD bottles 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>							
COD	mg/L	1.5	25	<25	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong

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

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

**Technical Management**

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

**Approved by**

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24101337**  
Date Received : Sep 24, 2024  
Date Reported : Oct 11, 2024  
Report Number : 3098589-1

Page 1 of 2

<b>Sample Number</b>	24101337-1					
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM					
<b>Sample Description</b>	Wastewater					
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ					
<b>Date Analysis Commenced</b>	Sep 24, 2024					
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	15	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Cl (F)	Rayong

Technical Management

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24101337**

Date Received : Sep 24, 2024

Date Reported : Oct 11, 2024

Report Number : 3098589-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 2 of 2

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 24, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven 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>							
Sulfide *	mg/L	-	0.5	<0.5	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	31.8	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	732	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.4	≤35	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

**Note :** Tar, Gross alpha activity and Gross beta activity analysis has been subcontracted to outsource lab.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING

No.0009

**Lot ID: 24101337**

Date Received : Sep 24, 2024

Date Reported : Oct 11, 2024

Report Number : 3098589-2

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 5

<b>Sample Number</b>	24101337-1
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Sep 25, 2024
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Arsenic	mg/L	0.0003	0.0005	0.003	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.24	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Chromium	mg/L	0.0003	0.0005	0.003	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.006	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.28	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

**Technical Management**

*Chamatt L.*

Chanattagarn Imchom

Section Head

ทะเบียนเลขที่ ว-204-จ-0008

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 24101337**  
Date Received : Sep 24, 2024  
Date Reported : Oct 11, 2024  
Report Number : 3098589-2

Page 2 of 5

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven 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>							
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.001	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.03	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
<b>Pesticides - Organochlorine Group</b>							
2,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok

Technical Management

*Chamatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0008

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 24101337**  
Date Received : Sep 24, 2024  
Date Reported : Oct 11, 2024  
Report Number : 3098589-2

Page 3 of 5

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Pesticides - Organochlorine Group</b>							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok

Technical Management

*Chamatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0008

Approved by

*Kanok Korn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 24101337**  
Date Received : Sep 24, 2024  
Date Reported : Oct 11, 2024  
Report Number : 3098589-2

Page 4 of 5

**Sample Number** 24101337-1  
**Sampled Date** Sep 24, 2024 11:10 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** Sep 25, 2024  
**Condition of Sample** Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Pesticides - Organochlorine Group</b>							
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok

Technical Management

*Chamatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0008

Approved by

*Kanok Korn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 24101337**  
Date Received : Sep 24, 2024  
Date Reported : Oct 11, 2024  
Report Number : 3098589-2

Page 5 of 5

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
<b>Analyte</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ (LOR)</b>	<b>Result</b>	<b>Guideline / Specification</b>	<b>Method</b>	<b>Testing Location</b>
<b>Pesticides - Organochlorine Group</b>							
Heptachlor-Epoxyde *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok

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

**Note :** Tar, Gross alpha activity and Gross beta activity analysis has been subcontracted to outsource lab.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Chamatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0008

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 24101337**

Date Received : Sep 24, 2024

Date Reported : Oct 11, 2024

Report Number : 3098589-3

Page 1 of 3

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven 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	5.69	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	1.22	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	0.16	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	2.72	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
<b>Pesticides - Organochlorine Group</b>							
alpha-Chlordane	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
gamma-Chlordane	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
Hexachlorobenzene	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok

Approved by

Chanattagarn Imchom  
Section Head

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





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 24101337**

Date Received : Sep 24, 2024

Date Reported : Oct 11, 2024

Report Number : 3098589-3

Page 2 of 3

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Pesticides - Organochlorine Group</b>							
Mirex	ug/L	0.01	0.02	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6630 D, part 6410 B	Bangkok
<b>Semi-Volatile Organics Compounds</b>							
Cresol	mg/L	0.0005	0.002	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6410 B	Bangkok
Phenol & Cresol	mg/L	-	0.002	<0.002	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 6410 B	Bangkok
<b>Water Testing</b>							
Chlorite	mg/L	0.05	0.1	0.51	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Conductivity at 25 Degree C	micromhos/cm	-	0.5	1001	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Gross alpha activity	Bq/L	0.018	0.063	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 900.0 Section I and EPA-600/4/80-032 (1980)	Bangkok
Gross beta activity	Bq/L	0.012	0.063	0.369 ± 0.028	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 900.0 Section I and EPA-600/4/80-032 (1980)	Bangkok

Approved by

Chanattagarn Imchom  
Section Head

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





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 24101337**

Date Received : Sep 24, 2024

Date Reported : Oct 11, 2024

Report Number : 3098589-3

Page 3 of 3

<b>Sample Number</b>	24101337-1						
<b>Sampled Date</b>	Sep 24, 2024 11:10 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Sep 25, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, two glass vials, four amber glass bottles and eleven 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>							
Nitrate as N	mg/L	0.015	0.05	2.67	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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, 24th ed., 2023, part 4500-NO2 (B)	Rayong
Odour		-	-	Odourless	No Standard	TIS, 257-2549	Rayong
Tar	mg/L	0.5	1.0	Not Detected	No Standard	In-house method based on United States Environmental Protection Agency, EPA Method 8015 D	Bangkok
Total Nitrogen as N	mg/L	-	1.0	4.1	No Standard	Calculation	Rayong

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

**Note :** Tar, Gross alpha activity and Gross beta activity analysis has been subcontracted to outsource lab.

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Remark :

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

Approved by

Chanattagarn Imchom  
Section Head

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



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24109169**

Date Received : Oct 16, 2024

Date Reported : Oct 24, 2024

Report Number : 3117590-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 1

<b>Sample Number</b>	24109169-1						
<b>Sampled Date</b>	Oct 16, 2024 10:07 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Oct 16, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	856	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

**Sampling By :** Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006

Remark :

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

**Technical Management**

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

**Approved by**

D. Chumson.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 24109169**

Date Received : Oct 16, 2024  
Date Reported : Oct 24, 2024  
Report Number : 3117590-2

Page 1 of 1

**Sample Number** 24109169-1  
**Sampled Date** Oct 16, 2024 10:07 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** Oct 17, 2024  
**Condition of Sample** Contained in one amber glass bottle, two BOD bottles 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	6.29	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	1.31	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR		-	-	2.23	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	4.34	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	<0.10	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, 24th ed., 2023, part 4500-O (C)	Rayong

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

**Sampling By :** Nattawut Athomprommarat

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24109178**  
Date Received : Oct 16, 2024  
Date Reported : Oct 23, 2024  
Report Number : 3117605-1

Page 1 of 1

**Sample Number** 24109178-1  
**Sampled Date** Oct 16, 2024 10:07 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งก่อนระบายออกของโครงการ  
**Date Analysis Commenced** Oct 17, 2024  
**Condition of Sample** Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.01	≤1	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.  
Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Savitree N.*

Savitree Noisangiam  
Manager

ทะเบียนเลขที่ ว-204-จ-0007

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24109178**

Date Received : Oct 16, 2024

Date Reported : Oct 23, 2024

Report Number : 3117605-2

Page 1 of 1

<b>Sample Number</b>	24109178-1							
<b>Sampled Date</b>	Oct 16, 2024 10:07 AM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Oct 17, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤100	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.4	≤35	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

**Approved by**

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24109178**

Date Received : Oct 16, 2024

Date Reported : Oct 23, 2024

Report Number : 3117605-3

Page 1 of 1

<b>Sample Number</b>	24109178-1							
<b>Sampled Date</b>	Oct 16, 2024 10:07 AM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Oct 17, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Iron	mg/L	0.003	0.005	0.64	No Standard	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
<b>Water Testing</b>								
Nitrate as N *	mg/L	0.015	0.05	1.48	No Standard	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Nattawut Athomprommarat , Pattarapol Sawangjaitam

Remark :

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt ( 4:09PM)



## 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: 24120817**  
Date Received : Nov 14, 2024  
Date Reported : Dec 12, 2024  
Report Number : 3190907-1

Page 1 of 1

<b>Sample Number</b>	24120817-1						
<b>Sampled Date</b>	Nov 14, 2024 11:50 AM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ						
<b>Date Analysis Commenced</b>	Nov 15, 2024						
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤100	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.5	≤35	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.  
Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Note :** This Analysis test report is reissued to supersede report No.3143853-3, Date Reported : Nov 21, 2024 due to revise analytical information.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-0051 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## 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: 24120817**

Date Received : Nov 14, 2024

Date Reported : Dec 12, 2024

Report Number : 3190907-2

Page 1 of 1

<b>Sample Number</b>	24120817-1
<b>Sampled Date</b>	Nov 14, 2024 11:50 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Nov 15, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Arsenic	mg/L	0.0003	0.0005	0.003	≤0.25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤1	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Note :** This Analysis test report is reissued to supersede report No.3143853-2, Date Reported : Nov 21, 2024 due to revise analytical information.

**Sampling By :** Paramet Sattayakun ทะเบียนเลขที่ ว-323-จ-0051 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Sawitree N.*

Sawitree Noisangiam

Manager

ทะเบียนเลขที่ ว-204-จ-0007

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt (10:57AM)



## 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: 24120817**

Date Received : Nov 14, 2024

Date Reported : Dec 12, 2024

Report Number : 3190907-3

Page 1 of 1

<b>Sample Number</b>	24120817-1							
<b>Sampled Date</b>	Nov 14, 2024 11:50 AM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Nov 15, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
Nitrate as N	mg/L	0.015	0.05	1.69	No Standard	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Note :** This Analysis test report is reissued to supersede report No.3143853-3, Date Reported : Nov 21, 2024 due to revise analytical information.

**Sampling By :** Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24120810**

Date Received : Nov 14, 2024

Date Reported : Nov 22, 2024

Report Number : 3143778-1

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

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

**P/O** : 4210602061

**Project Name** : Monitoring EIA

**Project Location** : GNC

Page 1 of 1

<b>Sample Number</b>	24120810-1
<b>Sampled Date</b>	Nov 14, 2024 11:50 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ
<b>Date Analysis Commenced</b>	Nov 14, 2024
<b>Condition of Sample</b>	Contained in two BOD bottles, 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	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	10	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.4	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	732	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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-0051 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Chumson.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**TESTING**  
**No.0009**  
**Lot ID: 24120810**  
Date Received : Nov 14, 2024  
Date Reported : Nov 22, 2024  
Report Number : 3143778-2

Page 1 of 1

**Sample Number** 24120810-1  
**Sampled Date** Nov 14, 2024 11:50 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งของโครงการ  
**Date Analysis Commenced** Nov 15, 2024  
**Condition of Sample** Contained in two BOD bottles, 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	6.35	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	1.30	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	1.48	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	2.90	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	<0.10	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, 24th ed., 2023, part 4500-O (C)	Rayong

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

**Sampling By** : Paramet Sattayakun , Pattarapol Sawangjaitam

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.

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24135077**

Date Received : Nov 28, 2024

Date Reported : Dec 03, 2024

Report Number : 3178170-1

Page 1 of 1

**Sample Number** 24135077-1  
**Sampled Date** Nov 28, 2024 11:07 AM  
**Sample Description** Wastewater  
**Location** จดระบายนํ้าทิ้งก่อนระบายออกของโครงการ  
**Date Analysis Commenced** Nov 29, 2024  
**Condition of Sample** Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Iron	mg/L	0.003	0.005	0.82	No Standard	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Pattarapol Sawangjaitam

Remark :

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\MixRef\_All\_2GL.rpt ( 6:51PM)



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24101330**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3098583-1

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

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

**P/O** : 4210602061

**Project Name** : Monitoring EIA

**Project Location** : GNC

Page 1 of 2

<b>Sample Number</b>	24101330-1						
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	7	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	8.0	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	26.1	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	148	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤35	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤30	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

ทะเบียนเลขที่ ว-323-จ-0031

**Approved by**

D. Changchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0009**  
**Lot ID: 24101330**  
Date Received : Dec 20, 2024  
Date Reported : Dec 28, 2024  
Report Number : 3098583-2

Page 1 of 2

<b>Sample Number</b>	24101330-1						
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Dec 23, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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	1.22	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	0.29	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	Not Detected	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	0.59	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	0.52	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	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.07	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong
Nitrite as N *	mg/L	0.0006	0.002	0.002	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO2 (B)	Rayong

Approved by

*Chamatt L.*

Chanattagarn Imchom  
Section Head

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**TESTING**  
No.0009  
**Lot ID: 24101330**  
Date Received : Dec 20, 2024  
Date Reported : Dec 28, 2024  
Report Number : 3098583-2

Page 2 of 2

<b>Sample Number</b>	24101330-1						
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM						
<b>Sample Description</b>	Wastewater						
<b>Location</b>	จุดระบายน้ำทิ้งของโครงการ						
<b>Date Analysis Commenced</b>	Dec 23, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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>							
Total Nitrogen as N *	mg/L	-	1.0	1.2	No Standard	Calculation	Rayong

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

**Sampling By** : Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Remark :

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

Approved by

Chanattagarn Imchom  
Section Head

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\_All\_GL.rpt ( 9:47AM)



## 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: 24132208**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3172236-1

Page 1 of 1

<b>Sample Number</b>	24132208-1							
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Dec 20, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤100	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.4	≤35	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-Norg (C), part NH3 (D)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

ทะเบียนเลขที่ ว-323-จ-0031

**Approved by**

D. Changchon

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24132208**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3172236-2

Page 1 of 1

<b>Sample Number</b>	24132208-1
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM
<b>Sample Description</b>	Wastewater
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ
<b>Date Analysis Commenced</b>	Dec 23, 2024
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Arsenic	mg/L	0.0003	0.0005	0.0009	≤0.25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.001	≤1	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

**Remark :**

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

**Technical Management**

*Savitree N.*

Savitree Noisangiam

Manager

ทะเบียนเลขที่ ว-204-จ-0007

**Approved by**

*Kanok Korn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24132208**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3172236-3

Page 1 of 1

<b>Sample Number</b>	24132208-1							
<b>Sampled Date</b>	Dec 20, 2024 2:20 PM							
<b>Sample Description</b>	Wastewater							
<b>Location</b>	จุดระบายน้ำทิ้งก่อนระบายออกของโครงการ							
<b>Date Analysis Commenced</b>	Dec 23, 2024							
<b>Condition of Sample</b>	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Iron	mg/L	0.003	0.005	0.24	No Standard	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Bangkok
<b>Water Testing</b>								
Nitrate as N *	mg/L	0.015	0.05	0.09	No Standard	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 (E)	Rayong

**Guideline :** Guideline (1) : Water Characteristics Discharge into Irrigation System, Royal Irrigation Department No.18/2561.

Guideline (2) : Notification of the Ministry of Natural Resources and Environment B.E. 2565 : The standard for controlling the discharge of wastewater from an electric power plant.

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

**Remark :**

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_All\_2GL.rpt ( 6:08PM)

# ภาคผนวก ค-5

---

คุณภาพน้ำผิวดิน



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

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

**Lot ID: 2466413**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3061017-1

Page 1 of 10

<b>Sample Number</b>	2466413-1						
<b>Sampled Date</b>	Jul 12, 2024 12:40 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	3.5	≥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		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	28.9	n'	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	148	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 :** Paramet Sattayakun , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

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

**Lot ID: 2466413**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3061017-1

Page 3 of 10

<b>Sample Number</b>	2466413-2						
<b>Sampled Date</b>	Jul 12, 2024 12:53 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	3.4	≥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		-	-	7.4	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	n'	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	182	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	33	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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

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

**Lot ID: 2466413**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3061017-1

Page 5 of 10

<b>Sample Number</b>	2466413-3						
<b>Sampled Date</b>	Jul 12, 2024 1:15 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	5.8	≥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	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.3	n'	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	122	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	110	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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

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

**Lot ID: 2466413**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3061017-1

Page 7 of 10

<b>Sample Number</b>	2466413-4						
<b>Sampled Date</b>	Jul 12, 2024 1:07 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	5.9	≥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		-	-	7.2	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.0	n'	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	119	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	105	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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2466413**

Date Received : Jul 12, 2024

Date Reported : Jul 20, 2024

Report Number : 3061017-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 9 of 10

<b>Sample Number</b>	2466413-5						
<b>Sampled Date</b>	Jul 12, 2024 1:19 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Jul 12, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	5.6	≥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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.7	n'	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	138	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	172	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 , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2479851**

Date Received : Aug 14, 2024

Date Reported : Aug 22, 2024

Report Number : 3089832-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2479851-1						
<b>Sampled Date</b>	Aug 14, 2024 11:00 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	2.4	≥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		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.5	n'	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	57	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 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

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2479851**

Date Received : Aug 14, 2024

Date Reported : Aug 22, 2024

Report Number : 3089833-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2479851-2						
<b>Sampled Date</b>	Aug 14, 2024 11:10 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	2.0	≥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		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.1	n'	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	61	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

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2479851**

Date Received : Aug 14, 2024

Date Reported : Aug 22, 2024

Report Number : 3089834-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 2

<b>Sample Number</b>	2479851-3						
<b>Sampled Date</b>	Aug 14, 2024 11:40 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	2.5	≥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		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.5	n'	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	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

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING  
No.0042

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 2479851**  
Date Received : Aug 14, 2024  
Date Reported : Aug 22, 2024  
Report Number : 3089835-1

Page 1 of 2

<b>Sample Number</b>	2479851-4						
<b>Sampled Date</b>	Aug 14, 2024 11:20 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.4	n'	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	59	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

**Sampling By :** Sansoen Khuiyoksui

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING

No.0042

**Lot ID: 2479851**

Date Received : Aug 14, 2024

Date Reported : Aug 22, 2024

Report Number : 3089836-1

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

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

**P/O** : 4210602061

**Project Name** : Monitoring EIA

**Project Location** : GNC

Page 1 of 2

<b>Sample Number</b>	2479851-5						
<b>Sampled Date</b>	Aug 14, 2024 11:55 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Aug 14, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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		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	6.0	≥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		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.8	n'	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	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

**Sampling By** : Sansoen Khuiyoksui

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24101341**

Date Received : Sep 27, 2024

Date Reported : Oct 05, 2024

Report Number : 3098591-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 1 of 6

<b>Sample Number</b>	24101341-3						
<b>Sampled Date</b>	Sep 27, 2024 11:45 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน						
<b>Date Analysis Commenced</b>	Sep 27, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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	4.6	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.2	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	54	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

Approved by

Photchana S.

Photchana Seeda

Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24101341**

Date Received : Sep 27, 2024

Date Reported : Oct 05, 2024

Report Number : 3098591-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 3 of 6

<b>Sample Number</b>	24101341-4						
<b>Sampled Date</b>	Sep 27, 2024 11:35 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Sep 27, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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	6.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.5	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	49	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	36	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

Approved by

Photchana S.

Photchana Seeda

Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24101341**

Date Received : Sep 27, 2024

Date Reported : Oct 05, 2024

Report Number : 3098591-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 5 of 6

<b>Sample Number</b>	24101341-5						
<b>Sampled Date</b>	Sep 27, 2024 11:55 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Sep 27, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, one amber glass bottle, two glass vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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	5.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.0	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	52	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	33	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

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

**Lot ID: 24109171**

Date Received : Oct 17, 2024

Date Reported : Oct 25, 2024

Report Number : 3117592-1

Page 1 of 10

<b>Sample Number</b>	24109171-1						
<b>Sampled Date</b>	Oct 17, 2024 10:15 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทั้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Oct 17, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	5.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	74	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24109171**  
Date Received : Oct 17, 2024  
Date Reported : Oct 25, 2024  
Report Number : 3117592-1

Page 3 of 10

<b>Sample Number</b>	24109171-2						
<b>Sampled Date</b>	Oct 17, 2024 10:41 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Oct 17, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	4.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.6	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	57	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24109171**

Date Received : Oct 17, 2024

Date Reported : Oct 25, 2024

Report Number : 3117592-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 5 of 10

<b>Sample Number</b>	24109171-3						
<b>Sampled Date</b>	Oct 17, 2024 11:15 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Oct 17, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.7	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.1	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	60	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	35	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda

Scientist (4)

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24109171**  
Date Received : Oct 17, 2024  
Date Reported : Oct 25, 2024  
Report Number : 3117592-1

Page 7 of 10

<b>Sample Number</b>	24109171-4						
<b>Sampled Date</b>	Oct 17, 2024 11:25 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Oct 17, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	7.1	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.8	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	54	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	41	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24109171**  
Date Received : Oct 17, 2024  
Date Reported : Oct 25, 2024  
Report Number : 3117592-1

Page 9 of 10

<b>Sample Number</b>	24109171-5						
<b>Sampled Date</b>	Oct 17, 2024 11:36 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Oct 17, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.6	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	52	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	37	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24120813**  
Date Received : Nov 22, 2024  
Date Reported : Nov 30, 2024  
Report Number : 3143789-1

Page 1 of 10

<b>Sample Number</b>	24120813-1						
<b>Sampled Date</b>	Nov 22, 2024 1:40 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Nov 22, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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, 24th ed., 2023, 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	6.5	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.1	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.1	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	124	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	77	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24120813**  
Date Received : Nov 22, 2024  
Date Reported : Nov 30, 2024  
Report Number : 3143789-1

Page 3 of 10

<b>Sample Number</b>	24120813-2
<b>Sampled Date</b>	Nov 22, 2024 1:55 PM
<b>Sample Description</b>	Surface water
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)
<b>Date Analysis Commenced</b>	Nov 22, 2024
<b>Condition of Sample</b>	Contained in two BOD bottles, 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, 24th ed., 2023, 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	6.4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.3	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	124	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	86	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24120813**  
Date Received : Nov 22, 2024  
Date Reported : Nov 30, 2024  
Report Number : 3143789-1

Page 5 of 10

<b>Sample Number</b>	24120813-3						
<b>Sampled Date</b>	Nov 22, 2024 2:12 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Nov 22, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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, 24th ed., 2023, 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	5.3	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.0	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	72	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	33	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24120813**  
Date Received : Nov 22, 2024  
Date Reported : Nov 30, 2024  
Report Number : 3143789-1

Page 7 of 10

<b>Sample Number</b>	24120813-4						
<b>Sampled Date</b>	Nov 22, 2024 2:10 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Nov 22, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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, 24th ed., 2023, 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	7.0	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.4	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	62	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**TESTING**  
**No.0042**  
**Lot ID: 24120813**  
Date Received : Nov 22, 2024  
Date Reported : Nov 30, 2024  
Report Number : 3143789-1

Page 9 of 10

<b>Sample Number</b>	24120813-5						
<b>Sampled Date</b>	Nov 22, 2024 2:25 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Nov 22, 2024						
<b>Condition of Sample</b>	Contained in two BOD bottles, 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, 24th ed., 2023, 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	6.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.1	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	62	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	27	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By** : Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24132205**  
Date Received : Dec 20, 2024  
Date Reported : Dec 27, 2024  
Report Number : 3172233-1

Page 1 of 10

<b>Sample Number</b>	24132205-1						
<b>Sampled Date</b>	Dec 20, 2024 11:45 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 1 : บริเวณคลองขุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	5.1	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.6	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	24.4	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	464	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	402	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Dej Changchon  
Senior Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**TESTING**  
**No.0042**  
**Lot ID: 24132205**  
Date Received : Dec 20, 2024  
Date Reported : Dec 27, 2024  
Report Number : 3172233-1

Page 3 of 10

<b>Sample Number</b>	24132205-2						
<b>Sampled Date</b>	Dec 20, 2024 11:55 AM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 2 : บริเวณคลองขุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	5.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.8	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	26.0	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	428	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	367	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Dej Changchon  
Senior Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

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

**Lot ID: 24132205**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3172233-1

Page 5 of 10

<b>Sample Number</b>	24132205-3						
<b>Sampled Date</b>	Dec 20, 2024 12:20 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนามาน						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	6.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	26.0	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	61	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	21	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By** : Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Dej Changchon  
Senior Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING

No.0042

**Lot ID: 24132205**

Date Received : Dec 20, 2024

Date Reported : Dec 27, 2024

Report Number : 3172233-1

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

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

**P/O :** 4210602061

**Project Name :** Monitoring EIA

**Project Location:** GNC

Page 7 of 10

<b>Sample Number</b>	24132205-4						
<b>Sampled Date</b>	Dec 20, 2024 12:10 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	6.9	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	6.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	26.2	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	51	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	22	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By :** Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Dej Changchon  
Senior Manager

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

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

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**TESTING**  
**No.0042**  
**Lot ID: 24132205**  
Date Received : Dec 20, 2024  
Date Reported : Dec 27, 2024  
Report Number : 3172233-1

Page 9 of 10

<b>Sample Number</b>	24132205-5						
<b>Sampled Date</b>	Dec 20, 2024 12:30 PM						
<b>Sample Description</b>	Surface water						
<b>Location</b>	จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 500 เมตร						
<b>Date Analysis Commenced</b>	Dec 20, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, two BOD bottles 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, 24th ed., 2023, 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	7.7	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	25.0	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	52	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

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

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

**Sampling By** : Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Approved by

Dej Changchon  
Senior Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

# ภาคผนวก ค-6

---

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 17 ตุลาคม 2567)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Division Cyanophyta</b>					
<b>Class Cyanophyceae</b>					
<b>Order Chroococcales</b>					
<b>Family Chroococcaceae</b>					
1. <i>Microcystis aeruginosa</i>	-	-	23	-	22
<b>Order Nostocales</b>					
<b>Family Oscillatoriaceae</b>					
2. <i>Oscillatoria</i> sp.	70	23	23	-	154
3. <i>Oscillatoria tenuis</i>	-	-	23	-	-
<b>Family Nostocaceae</b>					
4. <i>Anabaena azollae</i>	-	23	-	-	-
5. <i>Cylindrospermum</i> sp.	70	-	-	-	-
6. <i>Raphidiopsis</i> sp.	-	23	-	-	-



ตาราง ผลการวิเคราะห์แฟลกก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแฟลกก์ตอนพืช	ปริมาณแฟลกก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Family Rivulariaceae</b>					
7. <i>Calothrix</i> sp.	-	45	-	-	-
<b>Division Chlorophyta</b>					
<b>Class Chlorophyceae</b>					
<b>Order Volvocales</b>					
<b>Family Volvocaceae</b>					
8. <i>Eudorina elegans</i>	70	-	91	-	22
9. <i>Pandorina morum</i>	-	-	68	-	66
<b>Order Tetrasporales</b>					
<b>Family Palmellaceae</b>					
10. <i>Asterococcus superbus</i>	-	-	27	-	-
11. <i>Sphaerocystis shroeteri</i>	46	23	114	46	22
<b>Order Chlorococcales</b>					
<b>Family Hydrodictyaceae</b>					
12. <i>Pediastrum duplex</i>	-	-	23	23	-
13. <i>Pediastrum simplex</i>	-	-	23	23	22
<b>Family Coelastraceae</b>					
14. <i>Coelastrum microporum</i>	-	-	91	92	22
<b>Family Oocystaceae</b>					
15. <i>Ankistrodesmus falcatus</i>	23	23	-	-	-
16. <i>Dictyosphaerium pulchellum</i>	70	-	46	-	-
17. <i>Kirchneriella lunaris</i>	70	-	-	-	-
18. <i>Nephrocytium limneticum</i>	-	-	23	-	-
19. <i>Oocystis elliptica</i>	-	-	23	-	44
20. <i>Planktosphaeria gelatinosa</i>	-	-	-	-	22
21. <i>Tetraedron gracile</i>	-	45	-	23	-
22. <i>Tetraedron trigonum</i>	255	45	-	46	-

ตาราง ผลการวิเคราะห์แฟลกก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแฟลกก์ตอนพืช	ปริมาณแฟลกก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Family Scenedesmaceae</b>					
23. <i>Actinastrum hantzschii</i>	-	-	23	23	-
24. <i>Scenedesmus armatus</i>	-	-	23	46	-
25. <i>Scenedesmus dimorphus</i>	-	-	160	92	88
26. <i>Scenedesmus opoliensis</i>	-	-	-	23	22
27. <i>Scenedesmus</i> sp.	-	-	23	-	-
<b>Order Zygomatales</b>					
<b>Family Zygnemataceae</b>					
28. <i>Spirogyra</i> sp.	23	-	-	-	-
<b>Family Mesotaeniaceae</b>					
29. <i>Gonatozygon aculeatum</i>	46	-	-	-	-
<b>Family Desmidiaceae</b>					
30. <i>Arthodesmus convergens</i>	-	-	-	23	-
31. <i>Closterium calosporum</i>	-	-	23	-	-
32. <i>Closterium ehrenbergii</i>	-	-	-	23	110
33. <i>Closterium gracile</i>	-	45	46	23	-
34. <i>Closterium ralfsii</i>	23	23	-	-	-
35. <i>Cosmarium pochydermum</i>	-	-	46	-	-
36. <i>Cosmarium rectangulare</i>	-	-	68	23	-
37. <i>Cosmarium</i> sp.	70	45	-	23	-
38. <i>Euastrum spinulosum</i>	23	-	-	-	-
39. <i>Penium cucurbitinum</i>	-	-	-	-	22
40. <i>Staurastrum avicula</i>	-	-	-	46	-
41. <i>Staurastrum manfeldtii</i>	-	23	-	46	-
42. <i>Staurastrum muticum</i>	23	45	-	-	-
43. <i>Xanthidium antilopaeum</i>	23	-	-	-	-

ตาราง ผลการวิเคราะห์แฟลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแฟลงก์ตอนพืช	ปริมาณแฟลงก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Class Euglenophyceae</b>					
<b>Order Euglenales</b>					
<b>Family Euglenaceae</b>					
44. <i>Euglena acus</i>	418	249	274	252	110
45. <i>Euglena gracilis</i>	116	23	228	69	44
46. <i>Euglena oxyuris</i>	70	23	-	-	22
47. <i>Euglena</i> sp.	46	-	-	92	44
48. <i>Euglena splendens</i>	-	-	-	-	22
49. <i>Lepocinclis ovum</i>	371	317	182	207	22
50. <i>Phacus angulatus</i>	40	23	-	46	22
51. <i>Phacus hamatus</i>	70	45	46	23	44
52. <i>Phacus longicauda</i>	-	-	-	-	22
53. <i>Phacus myersi</i>	70	-	-	-	-
54. <i>Phacus platalea</i>	23	23	46	-	22
55. <i>Phacus pleuronectes</i>	116	45	-	23	-
56. <i>Phacus ranula</i>	46	45	114	-	-
57. <i>Phacus</i> sp.	116	115	114	46	88
58. <i>Phacus tortus</i>	46	45	91	92	-
59. <i>Strombomonas acuminata</i>	-	-	593	252	351
60. <i>Strombomonas australica</i>	23	23	-	46	44
61. <i>Strombomonas deflandrei</i>	70	159	182	138	285
62. <i>Strombomonas fluviatilis</i>	-	-	68	92	22
63. <i>Strombomonas gibberosa</i>	23	-	137	23	-
64. <i>Strombomonas girardiana</i>	46	-	46	115	44
65. <i>Strombomonas</i> sp.	-	-	205	115	66
66. <i>Trachelomonas conica</i>	-	-	46	-	-
67. <i>Trachelomonas crebea</i>	278	68	1,687	344	1,098
68. <i>Trachelomonas daugerdiana</i>	186	113	46	46	44

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
69. <i>Trachelomonas hispida</i>	812	385	228	92	88
70. <i>Trachelomonas lacustris</i>	23	23	-	23	-
71. <i>Trachelomonas mirabilis</i>	162	23	23	23	66
72. <i>Trachelomonas rugulosa</i>	348	408	137	-	22
73. <i>Trachelomonas scabra</i>	46	23	-	-	44
74. <i>Trachelomonas</i> sp.	-	-	205	46	176
75. <i>Trachelomonas superba</i>	186	45	91	23	22
76. <i>Trachelomonas volzii</i>	-	-	205	46	110
77. <i>Trachelomonas zingeri</i>	23	45	-	-	-
<b>Division Chromophyta</b>					
<b>Class Bacillariophyceae</b>					
<b>Order Biddulphiales</b>					
<b>Suborder Coscinodiscineae</b>					
<b>Family Thalassiosiraceae</b>					
78. <i>Cyclotella stelligera</i>	-	-	-	-	22
79. <i>Thalassiosira</i> sp.	-	-	23	-	-
<b>Family Aulacoseiraceae</b>					
80. <i>Aulacoseira granulata</i>	46	23	46	69	22
<b>Order Bacillariales</b>					
<b>Suborder Fragilariineae</b>					
<b>Family Fragilariaceae</b>					
81. <i>Fragilaria capucina</i>	-	-	46	-	-
82. <i>Synedra acus</i>	-	-	23	23	-
83. <i>Synedra ulna</i>	-	23	91	23	44
<b>Suborder Bacillariineae</b>					
<b>Family Eunotiaceae</b>					
84. <i>Eunotia lineolata</i>	23	-	-	23	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
85. <i>Eunotia pectinalis</i>	116	68	46	46	132
<b>Family Cymbellaceae</b>					
86. <i>Gomphonema parvulum</i>	46	23	-	23	-
<b>Family Naviculaceae</b>					
87. <i>Craticula cuspidata</i>	-	-	23	-	22
88. <i>Gyrosigma attenuatum</i>	-	-	-	-	22
89. <i>Navicula</i> sp.	-	-	-	23	-
90. <i>Pinnularia acrosphaeria</i>	23	-	-	-	-
91. <i>Pinnularia gibba</i>	23	-	46	23	-
92. <i>Pinnularia microstauron</i>	-	23	-	-	-
93. <i>Pinnularia</i> sp.	46	23	-	-	-
94. <i>Pinnularia subanglica</i>	-	-	23	-	-
95. <i>Stauroneis anceps</i>	-	-	46	-	-
<b>Family Bacillariaceae</b>					
96. <i>Tryblionella victoriae</i>	-	-	23	-	-
<b>Family Rhopalodiaceae</b>					
97. <i>Rhopalodia gibba</i>	-	-	23	-	-
<b>Family Surirellaceae</b>					
98. <i>Surirella elegans</i>	-	-	91	-	44
99. <i>Surirella linearis</i>	-	-	23	-	66
100. <i>Surirella robusta</i>	-	-	23	23	66
101. <i>Surirella tenera</i>	-	-	-	23	-
<b>Class Crysohyceae</b>					
<b>Order Synurales</b>					
<b>Family Mallomonadaceae</b>					
102. <i>Mallomonas litomesa</i>	70	23	137	-	88

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Class Dinophyceae</b>					
<b>Order Gonyaulacales</b>					
<b>Family Ceratiaceae</b>					
103. <i>Ceratium hirundinella</i>	-	-	23	-	-
<b>Order Peridiniales</b>					
<b>Family Peridiniaceae</b>					
104. <i>Peridinium gatunense</i>	46	91	68	46	-
<b>ชนิดแพลงก์ตอนพืช</b>	<b>50</b>	<b>43</b>	<b>62</b>	<b>52</b>	<b>49</b>
<b>ปริมาณแพลงก์ตอนพืช</b>	<b>5,118</b>	<b>2,996</b>	<b>6,828</b>	<b>3,263</b>	<b>4,110</b>
<b>ดัชนีความหลากหลายแพลงก์ตอนพืช</b>	<b>3.3605</b>	<b>3.2039</b>	<b>3.3424</b>	<b>3.5632</b>	<b>3.1415</b>
<b>ดัชนีความสม่ำเสมอแพลงก์ตอนพืช</b>	<b>0.8590</b>	<b>0.8518</b>	<b>0.8099</b>	<b>0.9018</b>	<b>0.8072</b>

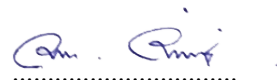
- Sample Location :**
1. สถานี 24109177-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร
  2. สถานี 24109177-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝ่ายทยายศร)
  3. สถานี 24109177-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน
  4. สถานี 24109177-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร
  5. สถานี 24109177-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 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

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
<b>Phylum Protozoa</b>					
<b>Subphylum Plasmodroma</b>					
<b>Class Sarcodina</b>					
<b>Subclass Rhizopoda</b>					
<b>Order Testacida</b>					
<b>Family Arcellidae</b>					
1. <i>Arcella</i> sp.	-	-	46	23	44
2. <i>Arcella vulgaris</i>	70	-	68	-	22
<b>Family Diffugiidae</b>					
3. <i>Centropyxis</i> sp.	-	-	-	-	44
4. <i>Diffugia acuminata</i>	-	-	-	69	66
5. <i>Diffugia oblonga</i>	-	-	46	-	-
<b>Family Euglyphidae</b>					
6. <i>Euglypha acanthophora</i>	-	45	91	-	88



ตาราง ผลการวิเคราะห์เพลงก่ตอนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

ชนิดเพลงก่ตอนสัตว์	ปริมาณเพลงก่ตอนสัตว์ (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
7. <i>Euglypha cristata</i>	-	-	46	-	-
8. <i>Euglypha rotunda</i>	-	-	68	-	66
<b>Subphylum Ciliophora</b>					
<b>Class Ciliata</b>					
<b>Subclass Spirotricha</b>					
<b>Order Tintinnida</b>					
<b>Family Codonellidae</b>					
9. <i>Tintinnopsis</i> sp.	-	-	91	-	176
<b>Subclass Peritricha</b>					
<b>Order Peritrichida</b>					
10. <i>Vorticella</i> sp.	-	-	-	46	-
<b>Phylum Rotifera</b>					
<b>Class Monogononta</b>					
<b>Order Ploima</b>					
<b>Family Brachionidae</b>					
11. <i>Anuraeopsis fissa</i>	23	-	46	-	-
12. <i>Colurella obtusa</i>	-	-	-	23	-
<b>Family Tricercidae</b>					
13. <i>Trichocerca pusilla</i>	-	-	-	-	22
<b>Family Synchaetidae</b>					
14. <i>Polyarthra dolichoptera</i>	-	-	46	-	-
15. <i>Polyarthra vulgaris</i>	-	23	23	-	-
<b>Phylum Arthropoda</b>					
<b>Class Crustacea</b>					
<b>Subclass Copepoda</b>					
16. Copepod nauplius	46	23	23	-	-

**ตาราง ผลการวิเคราะห์เพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)**

(ต่อ)

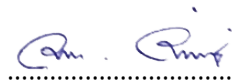
ชนิดเพลงก์ตอนสัตว์	ปริมาณเพลงก์ตอนสัตว์ (หน่วยต่อลิตร)				
	24109177-1	24109177-2	24109177-3	24109177-4	24109177-5
ชนิดเพลงก์ตอนสัตว์	3	3	11	4	8
ปริมาณเพลงก์ตอนสัตว์	139	91	594	161	528
ดัชนีความหลากหลายเพลงก์ตอนสัตว์	1.0091	1.0435	2.3134	1.2770	1.8637
ดัชนีความสม่ำเสมอเพลงก์ตอนสัตว์	0.9185	0.9498	0.9648	0.9212	0.8963

- Sample Location :**
1. สถานี 24109177-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร
  2. สถานี 24109177-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทิ้ง (บริเวณฝายทดยายศร)
  3. สถานี 24109177-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน
  4. สถานี 24109177-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานขึ้นไป 500 เมตร
  5. สถานี 24109177-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับแควหนุมานลงไป 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 17 ตุลาคม 2567)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	24109174-1	24109174-2	24109174-3	24109174-4	24109174-5
<b>Phylum Annelida</b> <b>Class Clitellata</b> <b>Order Lumbriculida</b> <b>Family Lumbriculidae</b> <i>Lumbriculus</i> sp. (ไส้เดือนน้ำ)	-	15	-	-	-
<b>Phylum Arthropoda</b> <b>Class Insecta</b> <b>Order Diptera</b> <b>Family Ceratopogonidae</b> <i>Culicoides</i> sp. (ริ้นเข็ม) <b>Family Chironomidae</b> <i>Chironomus</i> sp. (หนอนแดง)	-	-	30	-	-
	104	208	163	163	60

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 17 ตุลาคม 2567)

(ต่อ)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	24109174-1	24109174-2	24109174-3	24109174-4	24109174-5
<b>Phylum Mollusca</b> <b>Class Gastropoda</b> <b>Order Architaenioglossa</b> <b>Family Viviparidae</b> <i>Filopaludina</i> sp. (หอยขม)	30	-	-	-	-
สกุลสัตว์หน้าดิน	2	2	2	1	1
ปริมาณสัตว์หน้าดิน	134	223	193	163	60
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	0.5318	0.2465	0.4320	0.0000	0.0000

**Sample Location :** 1. สถานี 24109174-1 : จุดที่ 1 : บริเวณคลองชุมพลเหนือจุดระบายน้ำทิ้งขึ้นไป 500 เมตร

2. สถานี 24109174-2 : จุดที่ 2 : บริเวณคลองชุมพล ณ จุดระบายน้ำทิ้ง

(บริเวณฝายทดน้ำ)

3. สถานี 24109174-3 : จุดที่ 3 : บริเวณจุดบรรจบระหว่างคลองชุมพลกับแควหนุมาน

4. สถานี 24109174-4 : จุดที่ 4 : บริเวณแควหนุมานเหนือจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานขึ้นไป 500 เมตร

5. สถานี 24109174-5 : จุดที่ 5 : บริเวณแควหนุมานท้ายจุดบรรจบระหว่างคลองชุมพลกับ  
แควหนุมานลงไป 500 เมตร

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

.....  
 (นายอรรถวุฒิ กันทะวงศ์)

(นายอรรถวุฒิ กันทะวงศ์)

ผู้วิเคราะห์

.....  
 (นายอลงกต อินทรชาติ)

(นายอลงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา

# ภาคผนวก ค-7

คุณภาพน้ำใต้ดิน



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024  
Date Reported : Oct 24, 2024  
Report Number : 3146344-1

Page 1 of 1

<b>Sample Number</b>	24109172-1
<b>Sampled Date</b>	Oct 16, 2024 2:22 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Down gradient well no.1
<b>Date Analysis Commenced</b>	Oct 16, 2024
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD 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		-	-	7.7	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

**Sampling By** : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location:** GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024

Date Reported : Oct 24, 2024

Report Number : 3146344-2

Page 1 of 1

<b>Sample Number</b>	24109172-1						
<b>Sampled Date</b>	Oct 16, 2024 2:22 PM						
<b>Sample Description</b>	Ground water						
<b>Location</b>	Down gradient well no.1						
<b>Date Analysis Commenced</b>	Oct 16, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
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	5.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
Temperature	Degree C	-	-	32.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	372	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline :** Notification of the 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 :** Nattawut Athomprommarat , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024

Date Reported : Oct 24, 2024

Report Number : 3146345-1

Page 1 of 1

<b>Sample Number</b>	24109172-2
<b>Sampled Date</b>	Oct 16, 2024 1:45 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Down gradient well no.2
<b>Date Analysis Commenced</b>	Oct 16, 2024
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD 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		-	-	7.5	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, 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): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่เป็นบ่อน้ำทิ้งบนที่ศทางน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

**Sampling By** : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024

Date Reported : Oct 24, 2024

Report Number : 3146345-2

Page 1 of 1

<b>Sample Number</b>	24109172-2						
<b>Sampled Date</b>	Oct 16, 2024 1:45 PM						
<b>Sample Description</b>	Ground water						
<b>Location</b>	Down gradient well no.2						
<b>Date Analysis Commenced</b>	Oct 16, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
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	5.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
Temperature	Degree C	-	-	32.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	384	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline** : Notification of the 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** : Nattawut Athomprommarat , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024  
Date Reported : Oct 24, 2024  
Report Number : 3146346-1

Page 1 of 1

<b>Sample Number</b>	24109172-3
<b>Sampled Date</b>	Oct 16, 2024 2:50 PM
<b>Sample Description</b>	Ground water
<b>Location</b>	Up gradient well
<b>Date Analysis Commenced</b>	Oct 16, 2024
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD 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, 24th ed., 2023, 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): ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่บริโภคคือ 6.5-9.2

**Sampling By** : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda  
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : 4210602061  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 24109172**

Date Received : Oct 16, 2024

Date Reported : Oct 24, 2024

Report Number : 3146346-2

Page 1 of 1

<b>Sample Number</b>	24109172-3						
<b>Sampled Date</b>	Oct 16, 2024 2:50 PM						
<b>Sample Description</b>	Ground water						
<b>Location</b>	Up gradient well						
<b>Date Analysis Commenced</b>	Oct 16, 2024						
<b>Condition of Sample</b>	Contained in one amber glass bottle, three plastic bottle and two BOD bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
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	3.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-O (C)	Rayong
Oil & Grease	mg/L	-	3	3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
Temperature	Degree C	-	-	29.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1130	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

**Guideline** : Notification of the 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** : Nattawut Athomprommarat , Pattarapol Sawangjaitam

Remark :

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

Approved by

Photchana S.

Photchana Seeda  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

## ภาคผนวก ค-8

---

ระดับเสียงในบริเวณการทำงาน



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090652-1

Page 1 of 1

**Sample Number** 2479829-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Cooling Tower  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:46 AM - 10:46 AM	80.3	83.5	80.2
10:46 AM - 11:46 AM	80.2	81.4	80.2
11:46 AM - 12:46 PM	80.2	80.5	80.1
12:46 PM - 01:46 PM	80.2	80.5	80.1
01:46 PM - 02:46 PM	80.2	80.5	80.1
02:46 PM - 03:46 PM	80.3	81.7	80.2
03:46 PM - 04:46 PM	80.1	80.6	80.2
04:46 PM - 05:46 PM	70.6	79.5	52.3

Leq Average 8 hrs. (dB(A))

79.7

Lmax (dB(A))

83.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090653-1

Page 1 of 1

**Sample Number** 2479829-2  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Compressor  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:40 AM - 10:40 AM	74.7	75.8	74.2
10:40 AM - 11:40 AM	74.6	76.4	74.0
11:40 AM - 12:40 PM	73.6	75.7	72.4
12:40 PM - 01:40 PM	72.6	75.1	71.3
01:40 PM - 02:40 PM	72.2	74.5	70.9
02:40 PM - 03:40 PM	73.6	83.9	72.1
03:40 PM - 04:40 PM	72.6	74.5	71.6
04:40 PM - 05:40 PM	68.3	87.6	58.1

Leq Average 8 hrs. (dB(A))

73.1

Lmax (dB(A))

87.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090654-1

Page 1 of 1

**Sample Number** 2479829-3  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Boiler Feed Pump  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	80.7	81.7	80.5
10:00 AM - 11:00 AM	80.5	81.8	80.3
11:00 AM - 12:00 PM	80.5	81.7	80.3
12:00 PM - 01:00 PM	80.5	81.5	80.3
01:00 PM - 02:00 PM	80.5	81.6	80.3
02:00 PM - 03:00 PM	80.6	82.8	80.3
03:00 PM - 04:00 PM	80.5	81.7	80.3
04:00 PM - 05:00 PM	80.6	86.9	80.4

Leq Average 8 hrs. (dB(A))

80.6

Lmax (dB(A))

86.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090655-1

Page 1 of 1

**Sample Number** 2479829-4  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Turbine Accessories System GT1  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:33 AM - 10:33 AM	79.7	80.6	79.4
10:33 AM - 11:33 AM	79.5	80.3	79.2
11:33 AM - 12:33 PM	79.4	80.4	79.2
12:33 PM - 01:33 PM	79.4	80.2	79.2
01:33 PM - 02:33 PM	79.3	80.3	79.1
02:33 PM - 03:33 PM	79.5	85.7	79.2
03:33 PM - 04:33 PM	79.4	80.2	79.1
04:33 PM - 05:33 PM	82.1	86.1	79.4

Leq Average 8 hrs. (dB(A))

79.9

Lmax (dB(A))

86.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090656-1

Page 1 of 1

**Sample Number** 2479829-5  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Turbine Accessories System GT2  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:53 AM - 09:53 AM	67.6	78.2	66.0
09:53 AM - 10:53 AM	66.5	68.1	66.2
10:53 AM - 11:53 AM	66.5	67.4	66.2
11:53 AM - 12:53 PM	66.6	67.5	66.3
12:53 PM - 01:53 PM	66.6	67.6	66.3
01:53 PM - 02:53 PM	66.7	77.6	66.4
02:53 PM - 03:53 PM	66.6	67.7	66.3
03:53 PM - 04:53 PM	71.5	74.7	66.4

Leq Average 8 hrs. (dB(A))

67.7

Lmax (dB(A))

78.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090657-1

Page 1 of 1

**Sample Number** 2479829-6  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Generator  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:43 AM - 09:43 AM	75.9	78.4	75.7
09:43 AM - 10:43 AM	75.7	80.6	75.5
10:43 AM - 11:43 AM	75.7	79.1	75.4
11:43 AM - 12:43 PM	76.0	79.1	75.7
12:43 PM - 01:43 PM	76.2	79.2	75.9
01:43 PM - 02:43 PM	76.1	79.1	75.8
02:43 PM - 03:43 PM	76.0	78.2	75.8
03:43 PM - 04:43 PM	76.0	90.2	75.6

Leq Average 8 hrs. (dB(A))

76.0

Lmax (dB(A))

90.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479829**

Date Received : Aug 20, 2024  
Date Reported : Aug 23, 2024  
Report Number: 3090658-1

Page 1 of 1

**Sample Number** 2479829-7  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Lube Oil Skid  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:26 AM - 10:26 AM	74.4	78.6	74.2
10:26 AM - 11:26 AM	74.2	80.7	74.0
11:26 AM - 12:26 PM	74.2	78.2	73.9
12:26 PM - 01:26 PM	74.1	78.1	73.9
01:26 PM - 02:26 PM	74.0	78.7	73.8
02:26 PM - 03:26 PM	74.2	76.9	73.9
03:26 PM - 04:26 PM	74.3	77.7	74.0
04:26 PM - 05:26 PM	68.5	79.0	55.0

Leq Average 8 hrs. (dB(A))

73.8

Lmax (dB(A))

80.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024

Date Reported : Nov 29, 2024

Report Number: 3180201-1

Page 1 of 1

**Sample Number** 24120774-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Cooling Tower  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:10 AM - 10:10 AM	79.8	91.2	78.8
10:10 AM - 11:10 AM	79.7	82.5	78.7
11:10 AM - 12:10 PM	80.7	89.5	79.4
12:10 PM - 01:10 PM	81.3	90.6	80.0
01:10 PM - 02:10 PM	78.5	89.6	77.4
02:10 PM - 03:10 PM	80.4	90.1	79.2
03:10 PM - 04:10 PM	80.0	86.8	78.6
04:10 PM - 05:10 PM	81.6	87.8	80.1

Leq Average 8 hrs. (dB(A))

80.3

Lmax (dB(A))

91.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024  
Date Reported : Nov 29, 2024  
Report Number: 3180202-1

Page 1 of 1

**Sample Number** 24120774-2  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Compressor  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:05 AM - 09:05 AM	61.1	70.8	59.9
09:05 AM - 10:05 AM	60.5	71.9	59.5
10:05 AM - 11:05 AM	60.4	63.2	59.4
11:05 AM - 12:05 PM	60.7	67.5	59.3
12:05 PM - 01:05 PM	62.3	68.5	60.8
01:05 PM - 02:05 PM	61.4	70.2	60.1
02:05 PM - 03:05 PM	62.0	71.3	60.7
03:05 PM - 04:05 PM	61.7	64.8	60.9

Leq Average 8 hrs. (dB(A))

61.3

Lmax (dB(A))

71.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024

Date Reported : Nov 29, 2024

Report Number: 3180203-1

Page 1 of 1

**Sample Number** 24120774-3  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Boiler Feed Pump  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	78.7	84.4	78.3
10:15 AM - 11:15 AM	78.7	81.7	78.4
11:15 AM - 12:15 PM	78.6	82.5	78.3
12:15 PM - 01:15 PM	78.8	91.7	78.4
01:15 PM - 02:15 PM	79.8	83.8	78.9
02:15 PM - 03:15 PM	79.1	81.5	78.8
03:15 PM - 04:15 PM	79.3	84.9	79.0
04:15 PM - 05:15 PM	79.3	87.1	79.0

Leq Average 8 hrs. (dB(A))

79.1

Lmax (dB(A))

91.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024  
Date Reported : Nov 29, 2024  
Report Number: 3180204-1

Page 1 of 1

**Sample Number** 24120774-4  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Turbine Accessories System GT1  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:26 AM - 10:26 AM	77.6	83.9	77.3
10:26 AM - 11:26 AM	77.6	82.6	77.3
11:26 AM - 12:26 PM	77.6	80.3	77.3
12:26 PM - 01:26 PM	82.6	83.7	82.4
01:26 PM - 02:26 PM	83.0	88.5	82.3
02:26 PM - 03:26 PM	82.4	84.5	82.3
03:26 PM - 04:26 PM	82.4	84.3	82.2
04:26 PM - 05:26 PM	82.5	83.2	82.3

Leq Average 8 hrs. (dB(A))

81.3

Lmax (dB(A))

88.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024  
Date Reported : Nov 29, 2024  
Report Number: 3180205-1

Page 1 of 1

**Sample Number** 24120774-5  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Turbine Accessories System GT2  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:29 AM - 10:29 AM	78.5	81.2	78.2
10:29 AM - 11:29 AM	80.0	81.1	79.8
11:29 AM - 12:29 PM	78.5	83.5	78.2
12:29 PM - 01:29 PM	80.4	85.9	79.7
01:29 PM - 02:29 PM	79.8	81.9	79.7
02:29 PM - 03:29 PM	78.5	84.8	78.2
03:29 PM - 04:29 PM	79.8	81.7	79.6
04:29 PM - 05:29 PM	79.9	80.6	79.7

Leq Average 8 hrs. (dB(A))

79.5

Lmax (dB(A))

85.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024  
Date Reported : Nov 29, 2024  
Report Number: 3180206-1

Page 1 of 1

**Sample Number** 24120774-6  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Generator  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:10 AM - 10:10 AM	74.1	79.0	73.5
10:10 AM - 11:10 AM	73.9	76.4	73.5
11:10 AM - 12:10 PM	74.1	77.2	73.8
12:10 PM - 01:10 PM	74.6	84.5	73.9
01:10 PM - 02:10 PM	74.8	78.3	74.3
02:10 PM - 03:10 PM	74.3	79.1	74.0
03:10 PM - 04:10 PM	74.4	77.2	74.0
04:10 PM - 05:10 PM	74.4	81.1	74.0

Leq Average 8 hrs. (dB(A))

74.3

Lmax (dB(A))

84.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120774**

Date Received : Nov 26, 2024  
Date Reported : Nov 29, 2024  
Report Number: 3180207-1

Page 1 of 1

**Sample Number** 24120774-7  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Lube Oil Skid  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:10 AM - 10:10 AM	73.4	79.1	73.0
10:10 AM - 11:10 AM	73.4	76.4	73.1
11:10 AM - 12:10 PM	73.3	77.2	73.0
12:10 PM - 01:10 PM	73.5	86.4	73.1
01:10 PM - 02:10 PM	74.5	78.5	73.6
02:10 PM - 03:10 PM	73.8	76.2	73.5
03:10 PM - 04:10 PM	74.0	79.6	73.7
04:10 PM - 05:10 PM	74.0	81.8	73.7

Leq Average 8 hrs. (dB(A))

73.8

Lmax (dB(A))

86.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

**Technical Management**

Chontichak

Chonticha Subongkoch  
Scientist (3)

**Approved by**

Supot S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

## ภาคผนวก ค-9

---

ระดับความร้อนในบริเวณการทำงาน



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 1 of 6

**Sample Number** 2479830-1  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Condenser Exhaust Unit	120	30.4	27.7	36.7	36.5
Average (WBGT)		30.4			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 2 of 6

**Sample Number** 2479830-2  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณท่อส่งน้ำ	120	31.6	28.7	38.3	38.0
Average (WBGT)		31.6			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 3 of 6

**Sample Number** 2479830-3  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Generator Area 11	120	31.7	28.7	38.7	38.7
Average (WBGT)		31.7			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 4 of 6

**Sample Number** 2479830-4  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Generator Area 12	120	31.1	28.1	38.3	38.0
Average (WBGT)		31.1			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 5 of 6

**Sample Number** 2479830-5  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine Area 11	120	31.8	28.9	38.7	38.5
Average (WBGT)		31.8			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2479830**

Date Received : Aug 20, 2024

Date Reported : Aug 23, 2024

Report Number: 3053284-1

Page 6 of 6

**Sample Number** 2479830-6  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Aug 19, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine Area 12	120	31.7	28.9	38.3	38.0
Average (WBGT)		31.7			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 1 of 6

**Sample Number** 24120777-1  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Condenser Exhaust Unit	120	28.3	25.9	33.8	33.7
Average (WBGT)		28.3			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 2 of 6

**Sample Number** 24120777-2  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณท่อส่งน้ำ	120	28.8	26.7	33.7	33.5
Average (WBGT)		28.8			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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





## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 3 of 6

**Sample Number** 24120777-3  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Generator - Area 11	120	29.2	27.3	33.7	33.3
Average (WBGT)		29.2			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 4 of 6

**Sample Number** 24120777-4  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Generator - Area 12	120	29.0	26.8	34.2	33.9
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 5 of 6

**Sample Number** 24120777-5  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine Area 11	120	29.3	27.5	33.7	33.4
Average (WBGT)		29.3			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 24120777**  
Date Received : Nov 26, 2024  
Date Reported : Dec 02, 2024  
Report Number: 3143700-1

Page 6 of 6

**Sample Number** 24120777-6  
**Parameter** Heat Stress (Sampling Time : 12.00 PM - 02.00 PM)  
**Measurement Date** Nov 25, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : - )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine Area 12	120	28.9	26.8	34.0	33.8
Average (WBGT)		28.9			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

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

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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

# ภาคผนวก ค-10

ความเข้มแสงสว่างในบริเวณการทำงาน



## 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: 2479832 (1)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (1)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Administration Building : Canteen and Pantry Kitchen	2479832 (1)-1	19-Aug-24	Day time	1	400	432	150	300	Pass
		2479832 (1)-2	19-Aug-24	Day time	2	463				
2	Area : Administration Building : Women Toilets	2479832 (1)-3	19-Aug-24	Day time	1	951	570	50	100	Pass
		2479832 (1)-4	19-Aug-24	Day time	2	411				
		2479832 (1)-5	19-Aug-24	Day time	3	543				
		2479832 (1)-6	19-Aug-24	Day time	4	511				
		2479832 (1)-7	19-Aug-24	Day time	5	483				
		2479832 (1)-8	19-Aug-24	Day time	6	518				
3	Area : Administration Building : Men Toilets	2479832 (1)-9	19-Aug-24	Day time	1	240	398	50	100	Pass
		2479832 (1)-10	19-Aug-24	Day time	2	333				
		2479832 (1)-11	19-Aug-24	Day time	3	406				
		2479832 (1)-12	19-Aug-24	Day time	4	411				
		2479832 (1)-13	19-Aug-24	Day time	5	523				
		2479832 (1)-14	19-Aug-24	Day time	6	477				
4	Area : Administration Building : Walkway in Front of Reception	2479832 (1)-15	19-Aug-24	Day time	1	530	504	50	100	Pass
		2479832 (1)-16	19-Aug-24	Day time	2	450				
		2479832 (1)-17	19-Aug-24	Day time	3	533				
5	Spot : Administration Building : Admin Office Table	2479832 (1)-18	19-Aug-24	Day time	1	400	-	400-500	-	Pass
6	Spot : Administration Building : Purchasing Officer Table	2479832 (1)-19	19-Aug-24	Day time	1	520	-	400-500	-	Pass
7	Spot : Administration Building : Admin Manager Table	2479832 (1)-20	19-Aug-24	Day time	1	433	-	400-500	-	Pass
8	Spot : Administration Building : Photocopier	2479832 (1)-21	19-Aug-24	Day time	1	442	-	300-400	-	Pass
9	Area : Administration Building : Master document Room	2479832 (1)-22	19-Aug-24	Day time	1	527	528	150	300	Pass
		2479832 (1)-23	19-Aug-24	Day time	2	541				
		2479832 (1)-24	19-Aug-24	Day time	3	499				
		2479832 (1)-25	19-Aug-24	Day time	4	500				
		2479832 (1)-26	19-Aug-24	Day time	5	511				
		2479832 (1)-27	19-Aug-24	Day time	6	590				

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (1)**

Date Received : Aug 21, 2024

Date Reported : Aug 27, 2024

Report Number: 2479832 (1)-1

Page 2 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
10	Area : Administration Building : Admin Walkway	2479832 (1)-28	19-Aug-24	Day time	1	2,160	1311	50	100	Pass
		2479832 (1)-29	19-Aug-24	Day time	2	1,150				
		2479832 (1)-30	19-Aug-24	Day time	3	937				
		2479832 (1)-31	19-Aug-24	Day time	4	411				
		2479832 (1)-32	19-Aug-24	Day time	5	2,050				
		2479832 (1)-33	19-Aug-24	Day time	6	1,991				
		2479832 (1)-34	19-Aug-24	Day time	7	1,213				
		2479832 (1)-35	19-Aug-24	Day time	8	911				
		2479832 (1)-36	19-Aug-24	Day time	9	976				
11	Area : Administration Building : Meeting Room 2	2479832 (1)-37	19-Aug-24	Day time	1	350	342	150	300	Pass
		2479832 (1)-38	19-Aug-24	Day time	2	411				
		2479832 (1)-39	19-Aug-24	Day time	3	207				
		2479832 (1)-40	19-Aug-24	Day time	4	308				
		2479832 (1)-41	19-Aug-24	Day time	5	366				
		2479832 (1)-42	19-Aug-24	Day time	6	412				
12	Spot : Administration Building : Plant Manager Table	2479832 (1)-43	19-Aug-24	Day time	1	525	-	400-500	-	Pass
13	Spot : Administration Building : EHS Room Tabel 1	2479832 (1)-44	19-Aug-24	Day time	1	500	-	400-500	-	Pass
14	Area : Administration Building : Meeting Room 1	2479832 (1)-45	19-Aug-24	Day time	1	1,660	1191	150	300	Pass
		2479832 (1)-46	19-Aug-24	Day time	2	2,400				
		2479832 (1)-47	19-Aug-24	Day time	3	3,430				
		2479832 (1)-48	19-Aug-24	Day time	4	3,160				
		2479832 (1)-49	19-Aug-24	Day time	5	516				
		2479832 (1)-50	19-Aug-24	Day time	6	477				
		2479832 (1)-51	19-Aug-24	Day time	7	250				
		2479832 (1)-52	19-Aug-24	Day time	8	499				
		2479832 (1)-53	19-Aug-24	Day time	9	517				
		2479832 (1)-54	19-Aug-24	Day time	10	261				
		2479832 (1)-55	19-Aug-24	Day time	11	416				
		2479832 (1)-56	19-Aug-24	Day time	12	711				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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

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

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





## 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: 2479832 (2)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (2)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 1	2479832 (2)-1	19-Aug-24	Night time	1	261	-	200-300	-	Pass
2	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 2	2479832 (2)-2	19-Aug-24	Night time	1	307	-	200-300	-	Pass
3	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 3	2479832 (2)-3	19-Aug-24	Night time	1	266	-	200-300	-	Pass
4	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 4	2479832 (2)-4	19-Aug-24	Night time	1	210	-	200-300	-	Pass
5	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 5	2479832 (2)-5	19-Aug-24	Night time	1	204	-	200-300	-	Pass
6	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.1	2479832 (2)-6	19-Aug-24	Day time	1	209	-	200-300	-	Pass
7	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.2	2479832 (2)-7	19-Aug-24	Day time	1	210	-	200-300	-	Pass
8	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.3	2479832 (2)-8	19-Aug-24	Day time	1	207	-	200-300	-	Pass
9	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.4	2479832 (2)-9	19-Aug-24	Day time	1	216	-	200-300	-	Pass
10	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.5	2479832 (2)-10	19-Aug-24	Day time	1	211	-	200-300	-	Pass
11	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.6	2479832 (2)-11	19-Aug-24	Day time	1	209	-	200-300	-	Pass
12	Area : Control Building : 1st Floor : Stairs	2479832 (2)-12	19-Aug-24	Night time	1	845	767	50	100	Pass
		2479832 (2)-13	19-Aug-24	Night time	2	836				
		2479832 (2)-14	19-Aug-24	Night time	3	621				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (3)**

Date Received : Aug 21, 2024

Date Reported : Aug 27, 2024

Report Number: 2479832 (3)-2

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
2	Area : Control Building : 1st Floor : Walkway	2479832 (3)-1	19-Aug-24	Night time	1	118	97	50	100	Fail
		2479832 (3)-2	19-Aug-24	Night time	2	105				
		2479832 (3)-3	19-Aug-24	Night time	3	70				
		2479832 (3)-4	19-Aug-24	Night time	4	110				
		2479832 (3)-5	19-Aug-24	Night time	5	60				
		2479832 (3)-6	19-Aug-24	Night time	6	117				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (4)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (4)-1

Page 1 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Control Building : 2nd Floor : Stairs	2479832 (4)-1	19-Aug-24	Night time	1	107	111	50	100	Pass
		2479832 (4)-2	19-Aug-24	Night time	2	109				
		2479832 (4)-3	19-Aug-24	Night time	3	117				
2	Area : Control Building : 2nd Floor : Walkway	2479832 (4)-4	19-Aug-24	Day time	1	650	376	50	100	Pass
		2479832 (4)-5	19-Aug-24	Day time	2	404				
		2479832 (4)-6	19-Aug-24	Day time	3	335				
		2479832 (4)-7	19-Aug-24	Day time	4	411				
		2479832 (4)-8	19-Aug-24	Day time	5	347				
		2479832 (4)-9	19-Aug-24	Day time	6	206				
		2479832 (4)-10	19-Aug-24	Day time	7	302				
		2479832 (4)-11	19-Aug-24	Day time	8	319				
		2479832 (4)-12	19-Aug-24	Day time	9	406				
		2479832 (4)-13	19-Aug-24	Night time	1	730	394	50	100	Pass
		2479832 (4)-14	19-Aug-24	Night time	2	516				
		2479832 (4)-15	19-Aug-24	Night time	3	328				
		2479832 (4)-16	19-Aug-24	Night time	4	350				
		2479832 (4)-17	19-Aug-24	Night time	5	283				
		2479832 (4)-18	19-Aug-24	Night time	6	211				
		2479832 (4)-19	19-Aug-24	Night time	7	341				
		2479832 (4)-20	19-Aug-24	Night time	8	366				
		2479832 (4)-21	19-Aug-24	Night time	9	419				
3	Area : Control Building : 2nd Floor : Men Toilets	2479832 (4)-22	19-Aug-24	Day time	1	470	442	50	100	Pass
		2479832 (4)-23	19-Aug-24	Day time	2	360				
		2479832 (4)-24	19-Aug-24	Day time	3	311				
		2479832 (4)-25	19-Aug-24	Day time	4	409				
		2479832 (4)-26	19-Aug-24	Day time	5	375				
		2479832 (4)-27	19-Aug-24	Day time	6	730				
4	Area : Control Building : 2nd Floor : Women Toilets	2479832 (4)-28	19-Aug-24	Day time	1	361	303	50	100	Pass
		2479832 (4)-29	19-Aug-24	Day time	2	339				
		2479832 (4)-30	19-Aug-24	Day time	3	210				
5	Area : Control Building : 2nd Floor : Canteen and Pantry Room	2479832 (4)-31	19-Aug-24	Day time	1	1,570	1249	150	300	Pass
		2479832 (4)-32	19-Aug-24	Day time	2	1,285				
		2479832 (4)-33	19-Aug-24	Day time	3	891				

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (4)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (4)-1

Page 2 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
6	Spot : Control Building : 2nd Floor : Operation Manager Table	2479832 (4)-34	19-Aug-24	Day time	1	1,130	-	400-500	-	Pass
		2479832 (4)-35	19-Aug-24	Day time	2	1,180	-	300	-	
		2479832 (4)-36	19-Aug-24	Day time	3	1,731	-	200	-	
		2479832 (4)-37	19-Aug-24	Night time	1	453	-	400-500	-	Pass
7	Spot : Control Building : 2nd Floor : Control Room Desk 1	2479832 (4)-38	19-Aug-24	Night time	1	408	-	400-500	-	Pass
8	Spot : Control Building : 2nd Floor : Control Room Desk 2	2479832 (4)-39	19-Aug-24	Night time	1	404	-	400-500	-	Pass
9	Spot : Control Building : 2nd Floor : Control Room Desk 3	2479832 (4)-40	19-Aug-24	Night time	1	405	-	400-500	-	Pass
10	Spot : Control Building : 2nd Floor : Control Room Desk 4	2479832 (4)-41	19-Aug-24	Night time	1	408	-	400-500	-	Pass
11	Spot : Control Building : 2nd Floor : Control Room Desk 5	2479832 (4)-42	19-Aug-24	Night time	1	411	-	400-500	-	Pass
12	Spot : Control Building : 2nd Floor : DSC Room Desk 1	2479832 (4)-43	19-Aug-24	Day time	1	416	-	400-500	-	Pass
		2479832 (4)-44	19-Aug-24	Night time	1	409	-	400-500	-	Pass
13	Spot : Control Building : 2nd Floor : Photocopier	2479832 (4)-45	19-Aug-24	Day time	1	307	-	300-400	-	Pass
14	Spot : Control Building : 2nd Floor : Fax and Copy	2479832 (4)-46	19-Aug-24	Day time	1	309	-	300-400	-	Pass
15	Spot : Control Building : 2nd Floor : Computer No.1	2479832 (4)-47	19-Aug-24	Day time	1	407	-	400-500	-	Pass
16	Spot : Control Building : 2nd Floor : Computer No.2	2479832 (4)-48	19-Aug-24	Day time	1	411	-	400-500	-	Pass
17	Spot : Control Building : 2nd Floor : โต๊ะทำงาน Operation Office 1	2479832 (4)-49	19-Aug-24	Night time	1	410	-	400-500	-	Pass
18	Spot : Control Building : 2nd Floor : โต๊ะทำงาน Operation Office 2	2479832 (4)-50	19-Aug-24	Night time	1	415	-	400-500	-	Pass
19	Spot : Control Building : 2nd Floor : CCTV Room Table	2479832 (4)-51	19-Aug-24	Day time	1	411	-	400-500	-	Pass
20	Spot : Control Building : 2nd Floor : Control (Table No.1)	2479832 (4)-52	19-Aug-24	Day time	1	409	-	400-500	-	Pass

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (4)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (4)-1

Page 3 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
21	Spot : Control Building : 2nd Floor : Control (Table No.2)	2479832 (4)-53	19-Aug-24	Day time	1	411	-	400-500	-	Pass
22	Spot : Control Building : 2nd Floor : Computer Control No.1	2479832 (4)-54	19-Aug-24	Day time	1	407	-	400-500	-	Pass
23	Spot : Control Building : 2nd Floor : Computer Control No.2	2479832 (4)-55	19-Aug-24	Day time	1	404	-	400-500	-	Pass
24	Spot : Control Building : 2nd Floor : Computer Control No.3	2479832 (4)-56	19-Aug-24	Day time	1	409	-	400-500	-	Pass
25	Spot : Control Building : 2nd Floor : Computer Control No.4	2479832 (4)-57	19-Aug-24	Day time	1	403	-	400-500	-	Pass
26	Spot : Control Building : 2nd Floor : Computer Control No.5	2479832 (4)-58	19-Aug-24	Day time	1	410	-	400-500	-	Pass
27	Spot : Control Building : 2nd Floor : Computer Control No.6	2479832 (4)-59	19-Aug-24	Day time	1	416	-	400-500	-	Pass
28	Spot : Control Building : 2nd Floor : Computer Control No.7	2479832 (4)-60	19-Aug-24	Day time	1	440	-	400-500	-	Pass
29	Spot : Control Building : 2nd Floor : ตู้ควบคุม 3 (10MKA10GH001 Generator Control Panel)	2479832 (4)-61	19-Aug-24	Night time	1	217	-	200-300	-	Pass
30	Area : Control Building : 2nd Floor : ทางเดินภายในห้อง #1	2479832 (4)-62	19-Aug-24	Night time	1	231	219	50	100	Pass
		2479832 (4)-63	19-Aug-24	Night time	2	207				
31	Area : Control Building : 2nd Floor : ทางเดินภายในห้อง #2	2479832 (4)-64	19-Aug-24	Night time	1	180	178	50	100	Pass
		2479832 (4)-65	19-Aug-24	Night time	2	176				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (5)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (5)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Terminal & Switchyard Control Building : Terminal Control Room No.1	2479832 (5)-1	19-Aug-24	Day time	1	620	-	200-300	-	Pass
2	Spot : Terminal & Switchyard Control Building : Terminal Control Room No.2	2479832 (5)-2	19-Aug-24	Day time	1	631	-	200-300	-	Pass
3	Spot : Terminal & Switchyard Control Building : Battery Room No.1	2479832 (5)-3	19-Aug-24	Day time	1	520	-	200-300	-	Pass
4	Spot : Terminal & Switchyard Control Building : Switchgear Room No.1	2479832 (5)-4	19-Aug-24	Day time	1	250	-	200-300	-	Pass
5	Spot : Terminal & Switchyard Control Building : Switchgear Room No.2	2479832 (5)-5	19-Aug-24	Day time	1	272	-	200-300	-	Pass
6	Spot : Terminal & Switchyard Control Building : Switchyard Control Room No.1	2479832 (5)-6	19-Aug-24	Day time	1	463	-	200-300	-	Pass
7	Spot : Terminal & Switchyard Control Building : Switchyard Control Room No.2	2479832 (5)-7	19-Aug-24	Day time	1	440	-	200-300	-	Pass
8	Spot : Terminal & Switchyard Control Building : Battery Room No.2	2479832 (5)-8	19-Aug-24	Day time	1	287	-	200-300	-	Pass

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company





## 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: 2479832 (6)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (6)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Warehouse and Workshop Building : 1st Floor : Reception Room	2479832 (6)-1	19-Aug-24	Day time	1	1,497	748	50	100	Pass
		2479832 (6)-2	19-Aug-24	Day time	2	914				
		2479832 (6)-3	19-Aug-24	Day time	3	657				
		2479832 (6)-4	19-Aug-24	Day time	4	506				
		2479832 (6)-5	19-Aug-24	Day time	5	511				
		2479832 (6)-6	19-Aug-24	Day time	6	653				
		2479832 (6)-7	19-Aug-24	Day time	7	706				
		2479832 (6)-8	19-Aug-24	Day time	8	600				
		2479832 (6)-9	19-Aug-24	Day time	9	688				
2	Area : Warehouse and Workshop Building : 1st Floor : Warehouse Canteen and Pantry	2479832 (6)-10	19-Aug-24	Day time	1	777	860	150	300	Pass
		2479832 (6)-11	19-Aug-24	Day time	2	662				
		2479832 (6)-12	19-Aug-24	Day time	3	1,141				
3	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.1	2479832 (6)-13	19-Aug-24	Day time	1	411	-	400-500	-	Pass
4	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.2	2479832 (6)-14	19-Aug-24	Day time	1	409	-	400-500	-	Pass
5	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.3	2479832 (6)-15	19-Aug-24	Day time	1	466	-	400-500	-	Pass
6	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.4	2479832 (6)-16	19-Aug-24	Day time	1	435	-	400-500	-	Pass
7	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.5	2479832 (6)-17	19-Aug-24	Day time	1	481	-	400-500	-	Pass
8	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.6	2479832 (6)-18	19-Aug-24	Day time	1	482	-	400-500	-	Pass
9	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.7	2479832 (6)-19	19-Aug-24	Day time	1	466	-	400-500	-	Pass
10	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.8	2479832 (6)-20	19-Aug-24	Day time	1	495	-	400-500	-	Pass

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company





## 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: 2479832 (6)**

Date Received : Aug 21, 2024

Date Reported : Aug 27, 2024

Report Number: 2479832 (6)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GNC		Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average			
11	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.9	2479832 (6)-21	19-Aug-24	Day time	1	552	-	400-500	-			Pass
12	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.10	2479832 (6)-22	19-Aug-24	Day time	1	570	-	400-500	-			Pass
13	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.11	2479832 (6)-23	19-Aug-24	Day time	1	520	-	400-500	-			Pass
14	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.12	2479832 (6)-24	19-Aug-24	Day time	1	480	-	400-500	-			Pass
15	Spot : Warehouse and Workshop Building : 1st Floor : Photocopier	2479832 (6)-25	19-Aug-24	Day time	1	552	-	300-400	-			Pass
16	Spot : Warehouse and Workshop Building : 1st Floor : Maintenance Manager Table	2479832 (6)-26	19-Aug-24	Day time	1	575	-	400-500	-			Pass
17	Area : Warehouse and Workshop Building : 1st Floor : Meeting Room	2479832 (6)-27	19-Aug-24	Day time	1	1,303	1302	150	300			Pass
		2479832 (6)-28	19-Aug-24	Day time	2	1,166						
		2479832 (6)-29	19-Aug-24	Day time	3	1,070						
		2479832 (6)-30	19-Aug-24	Day time	4	1,563						
		2479832 (6)-31	19-Aug-24	Day time	5	1,510						
		2479832 (6)-32	19-Aug-24	Day time	6	1,414						
		2479832 (6)-33	19-Aug-24	Day time	7	1,311						
		2479832 (6)-34	19-Aug-24	Day time	8	1,077						

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (7)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (7)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Warehouse and Workshop Building : Ground Floor : Warehouse Room	2479832 (7)-1	19-Aug-24	Day time	1	329	1411	100	200	Pass
		2479832 (7)-2	19-Aug-24	Day time	2	5,860				
		2479832 (7)-3	19-Aug-24	Day time	3	503				
		2479832 (7)-4	19-Aug-24	Day time	4	713				
		2479832 (7)-5	19-Aug-24	Day time	5	864				
		2479832 (7)-6	19-Aug-24	Day time	6	1,086				
		2479832 (7)-7	19-Aug-24	Day time	7	416				
		2479832 (7)-8	19-Aug-24	Day time	8	450				
		2479832 (7)-9	19-Aug-24	Day time	9	6,270				
		2479832 (7)-10	19-Aug-24	Day time	10	2,240				
		2479832 (7)-11	19-Aug-24	Day time	11	862				
		2479832 (7)-12	19-Aug-24	Day time	12	780				
		2479832 (7)-13	19-Aug-24	Day time	13	661				
		2479832 (7)-14	19-Aug-24	Day time	14	709				
		2479832 (7)-15	19-Aug-24	Day time	15	611				
		2479832 (7)-16	19-Aug-24	Day time	16	1,002				
		2479832 (7)-17	19-Aug-24	Day time	17	1,069				
		2479832 (7)-18	19-Aug-24	Day time	18	972				
2	Area : Warehouse and Workshop Building : Ground Floor : Walkway	2479832 (7)-19	19-Aug-24	Day time	1	1,112	235	50	100	Pass
		2479832 (7)-20	19-Aug-24	Day time	2	150				
		2479832 (7)-21	19-Aug-24	Day time	3	160				
		2479832 (7)-22	19-Aug-24	Day time	4	103				
		2479832 (7)-23	19-Aug-24	Day time	5	107				
		2479832 (7)-24	19-Aug-24	Day time	6	117				
		2479832 (7)-25	19-Aug-24	Day time	7	106				
		2479832 (7)-26	19-Aug-24	Day time	8	107				
		2479832 (7)-27	19-Aug-24	Day time	9	149				
3	Area : Warehouse and Workshop Building : Ground Floor : Electrical Room/Fitness Room	2479832 (7)-28	19-Aug-24	Day time	1	451	387	50	100	Pass
		2479832 (7)-29	19-Aug-24	Day time	2	460				
		2479832 (7)-30	19-Aug-24	Day time	3	410				
		2479832 (7)-31	19-Aug-24	Day time	4	327				
		2479832 (7)-32	19-Aug-24	Day time	5	366				
		2479832 (7)-33	19-Aug-24	Day time	6	306				
4	Spot : Warehouse and Workshop Building : Ground Floor : C&I Cabinet	2479832 (7)-34	19-Aug-24	Day time	1	480	-	400-500	-	Pass

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (7)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (7)-1

Page 2 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
5	Spot : Warehouse and Workshop Building : Ground Floor : C&I Table	2479832 (7)-35	19-Aug-24	Day time	1	498	-	400-500	-	Pass
6	Spot : Warehouse and Workshop Building : Ground Floor : Instrument and Control	2479832 (7)-36	19-Aug-24	Day time	1	491	-	400-500	-	Pass
7	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #1	2479832 (7)-37	19-Aug-24	Day time	1	651	-	400-500	-	Pass
8	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #2	2479832 (7)-38	19-Aug-24	Day time	1	581	-	400-500	-	Pass
9	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #3	2479832 (7)-39	19-Aug-24	Day time	1	610	-	400-500	-	Pass
10	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical Workshop Room (Table No.3)	2479832 (7)-40	19-Aug-24	Day time	1	650	-	400-500	-	Pass

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 2479832 (8)**

Date Received : Aug 21, 2024  
Date Reported : Aug 27, 2024  
Report Number: 2479832 (8)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Water Treatment Control Building : Laboratory (หน้า Hood)	2479832 (8)-1	19-Aug-24	Night time	1	720	-	300-400	-	Pass
2	Spot : Water Treatment Control Building : Laboratory (หน้า Spectrophotometer)	2479832 (8)-2	19-Aug-24	Night time	1	678	-	400-500	-	Pass
3	Spot : Water Treatment Control Building : Laboratory (หน้าโต๊ะวัด pH)	2479832 (8)-3	19-Aug-24	Night time	1	465	-	400-500	-	Pass
4	Area : Water Treatment Control Building : ทางเดินหน้าห้อง Laboratory	2479832 (8)-4	19-Aug-24	Night time	1	120	95	25	50	Pass
		2479832 (8)-5	19-Aug-24	Night time	2	84				
		2479832 (8)-6	19-Aug-24	Night time	3	88				
		2479832 (8)-7	19-Aug-24	Night time	4	84				
		2479832 (8)-8	19-Aug-24	Night time	5	109				
		2479832 (8)-9	19-Aug-24	Night time	6	91				
		2479832 (8)-10	19-Aug-24	Night time	7	86				
		2479832 (8)-11	19-Aug-24	Night time	8	82				
		2479832 (8)-12	19-Aug-24	Night time	9	109				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## 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: 24120780 (1)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (1)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Administration Building : Canteen and Pantry Kitchen	24120780 (1)-1	25-Nov-24	Day time	1	521	476	150	300	Pass
		24120780 (1)-2	25-Nov-24	Day time	2	432				
2	Area : Administration Building : Women Toilets	24120780 (1)-3	25-Nov-24	Day time	1	414	396	50	100	Pass
		24120780 (1)-4	25-Nov-24	Day time	2	390				
		24120780 (1)-5	25-Nov-24	Day time	3	353				
		24120780 (1)-6	25-Nov-24	Day time	4	411				
		24120780 (1)-7	25-Nov-24	Day time	5	384				
		24120780 (1)-8	25-Nov-24	Day time	6	422				
3	Area : Administration Building : Men Toilets	24120780 (1)-9	25-Nov-24	Day time	1	256	313	50	100	Pass
		24120780 (1)-10	25-Nov-24	Day time	2	277				
		24120780 (1)-11	25-Nov-24	Day time	3	301				
		24120780 (1)-12	25-Nov-24	Day time	4	357				
		24120780 (1)-13	25-Nov-24	Day time	5	326				
		24120780 (1)-14	25-Nov-24	Day time	6	360				
4	Area : Administration Building : Walkway in Front of Reception	24120780 (1)-15	25-Nov-24	Day time	1	1,483	1575	50	100	Pass
		24120780 (1)-16	25-Nov-24	Day time	2	714				
		24120780 (1)-17	25-Nov-24	Day time	3	2,528				
5	Spot : Administration Building : Admin Office Table	24120780 (1)-18	25-Nov-24	Day time	1	442	-	400-500	-	Pass
6	Spot : Administration Building : Purchasing Officer Table	24120780 (1)-19	25-Nov-24	Day time	1	544	-	400-500	-	Pass
7	Spot : Administration Building : Admin Manager Table	24120780 (1)-20	25-Nov-24	Day time	1	459	-	400-500	-	Pass
8	Spot : Administration Building : Photocopier	24120780 (1)-21	25-Nov-24	Day time	1	344	-	300-400	-	Pass
9	Area : Administration Building : Master document Room	24120780 (1)-22	25-Nov-24	Day time	1	458	473	150	300	Pass
		24120780 (1)-23	25-Nov-24	Day time	2	512				
		24120780 (1)-24	25-Nov-24	Day time	3	466				
		24120780 (1)-25	25-Nov-24	Day time	4	443				
		24120780 (1)-26	25-Nov-24	Day time	5	480				
		24120780 (1)-27	25-Nov-24	Day time	6	477				

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (1)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (1)-1

Page 2 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
10	Area : Administration Building : Admin Walkway	24120780 (1)-28	25-Nov-24	Day time	1	992	1233	50	100	Pass
		24120780 (1)-29	25-Nov-24	Day time	2	562				
		24120780 (1)-30	25-Nov-24	Day time	3	1,282				
		24120780 (1)-31	25-Nov-24	Day time	4	1,844				
		24120780 (1)-32	25-Nov-24	Day time	5	1,385				
		24120780 (1)-33	25-Nov-24	Day time	6	1,286				
		24120780 (1)-34	25-Nov-24	Day time	7	1,229				
		24120780 (1)-35	25-Nov-24	Day time	8	1,272				
		24120780 (1)-36	25-Nov-24	Day time	9	1,246				
11	Area : Administration Building : Meeting Room 2	24120780 (1)-37	25-Nov-24	Day time	1	521	409	150	300	Pass
		24120780 (1)-38	25-Nov-24	Day time	2	392				
		24120780 (1)-39	25-Nov-24	Day time	3	336				
		24120780 (1)-40	25-Nov-24	Day time	4	414				
		24120780 (1)-41	25-Nov-24	Day time	5	420				
		24120780 (1)-42	25-Nov-24	Day time	6	372				
12	Spot : Administration Building : Plant Manager Table	24120780 (1)-43	25-Nov-24	Day time	1	407	-	400-500	-	Pass
13	Spot : Administration Building : EHS Room Tabel 1	24120780 (1)-44	25-Nov-24	Day time	1	512	-	400-500	-	Pass
14	Area : Administration Building : Meeting Room 1	24120780 (1)-45	25-Nov-24	Day time	1	364	487	150	300	Pass
		24120780 (1)-46	25-Nov-24	Day time	2	440				
		24120780 (1)-47	25-Nov-24	Day time	3	387				
		24120780 (1)-48	25-Nov-24	Day time	4	436				
		24120780 (1)-49	25-Nov-24	Day time	5	473				
		24120780 (1)-50	25-Nov-24	Day time	6	466				
		24120780 (1)-51	25-Nov-24	Day time	7	535				
		24120780 (1)-52	25-Nov-24	Day time	8	484				
		24120780 (1)-53	25-Nov-24	Day time	9	561				
		24120780 (1)-54	25-Nov-24	Day time	10	536				
		24120780 (1)-55	25-Nov-24	Day time	11	544				
		24120780 (1)-56	25-Nov-24	Day time	12	617				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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

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

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





## 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: 24120780 (2)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (2)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 1	24120780 (2)-1	25-Nov-24	Night time	1	270	-	200-300	-	Pass
2	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 2	24120780 (2)-2	25-Nov-24	Night time	1	256	-	200-300	-	Pass
3	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 3	24120780 (2)-3	25-Nov-24	Night time	1	299	-	200-300	-	Pass
4	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 4	24120780 (2)-4	25-Nov-24	Night time	1	312	-	200-300	-	Pass
5	Spot : Control Building : 1st Floor : MCC Room หน้าตู้ 5	24120780 (2)-5	25-Nov-24	Night time	1	202	-	200-300	-	Pass
6	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.1	24120780 (2)-6	25-Nov-24	Day time	1	210	-	200-300	-	Pass
7	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.2	24120780 (2)-7	25-Nov-24	Day time	1	204	-	200-300	-	Pass
8	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.3	24120780 (2)-8	25-Nov-24	Day time	1	206	-	200-300	-	Pass
9	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.4	24120780 (2)-9	25-Nov-24	Day time	1	205	-	200-300	-	Pass
10	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.5	24120780 (2)-10	25-Nov-24	Day time	1	207	-	200-300	-	Pass
11	Spot : Control Building : 1st Floor : Switchgear and Electrical : Room No.6	24120780 (2)-11	25-Nov-24	Day time	1	211	-	200-300	-	Pass
12	Area : Control Building : 1st Floor : Stairs	24120780 (2)-12	25-Nov-24	Night time	1	172	268	50	100	Pass
		24120780 (2)-13	25-Nov-24	Night time	2	123				
		24120780 (2)-14	25-Nov-24	Night time	3	509				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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

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

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





## 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: 24120780 (3)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (3)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
2	Area : Control Building : 1st Floor : Walkway	24120780 (3)-1	25-Nov-24	Night time	1	226	232	50	100	Pass
		24120780 (3)-2	25-Nov-24	Night time	2	177				
		24120780 (3)-3	25-Nov-24	Night time	3	219				
		24120780 (3)-4	25-Nov-24	Night time	4	300				
		24120780 (3)-5	25-Nov-24	Night time	5	226				
		24120780 (3)-6	25-Nov-24	Night time	6	242				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (4)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (4)-1

Page 1 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Control Building : 2nd Floor : Stairs	24120780 (4)-1	25-Nov-24	Night time	1	101	109	50	100	Pass
		24120780 (4)-2	25-Nov-24	Night time	2	117				
		24120780 (4)-3	25-Nov-24	Night time	3	109				
2	Area : Control Building : 2nd Floor : Walkway	24120780 (4)-4	25-Nov-24	Day time	1	720	329	50	100	Pass
		24120780 (4)-5	25-Nov-24	Day time	2	420				
		24120780 (4)-6	25-Nov-24	Day time	3	234				
		24120780 (4)-7	25-Nov-24	Day time	4	318				
		24120780 (4)-8	25-Nov-24	Day time	5	411				
		24120780 (4)-9	25-Nov-24	Day time	6	295				
		24120780 (4)-10	25-Nov-24	Day time	7	189				
		24120780 (4)-11	25-Nov-24	Day time	8	117				
		24120780 (4)-12	25-Nov-24	Day time	9	261				
		24120780 (4)-13	25-Nov-24	Night time	1	636	339	50	100	Pass
		24120780 (4)-14	25-Nov-24	Night time	2	347				
		24120780 (4)-15	25-Nov-24	Night time	3	339				
		24120780 (4)-16	25-Nov-24	Night time	4	329				
		24120780 (4)-17	25-Nov-24	Night time	5	407				
		24120780 (4)-18	25-Nov-24	Night time	6	282				
		24120780 (4)-19	25-Nov-24	Night time	7	158				
		24120780 (4)-20	25-Nov-24	Night time	8	296				
		24120780 (4)-21	25-Nov-24	Night time	9	259				
3	Area : Control Building : 2nd Floor : Men Toilets	24120780 (4)-22	25-Nov-24	Day time	1	203	284	50	100	Pass
		24120780 (4)-23	25-Nov-24	Day time	2	242				
		24120780 (4)-24	25-Nov-24	Day time	3	238				
		24120780 (4)-25	25-Nov-24	Day time	4	229				
		24120780 (4)-26	25-Nov-24	Day time	5	379				
		24120780 (4)-27	25-Nov-24	Day time	6	416				
4	Area : Control Building : 2nd Floor : Women Toilets	24120780 (4)-28	25-Nov-24	Day time	1	502	359	50	100	Pass
		24120780 (4)-29	25-Nov-24	Day time	2	349				
		24120780 (4)-30	25-Nov-24	Day time	3	226				
5	Area : Control Building : 2nd Floor : Canteen and Pantry Room	24120780 (4)-31	25-Nov-24	Day time	1	835	632	150	300	Pass
		24120780 (4)-32	25-Nov-24	Day time	2	506				
		24120780 (4)-33	25-Nov-24	Day time	3	555				

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (4)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (4)-1

Page 2 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
6	Spot : Control Building : 2nd Floor : Operation Manager Table	24120780 (4)-34	25-Nov-24	Day time	1	914	-	400-500	-	Pass
		24120780 (4)-35	25-Nov-24	Night time	1	436	-	400-500	-	Pass
7	Spot : Control Building : 2nd Floor : Control Room Desk 1	24120780 (4)-36	25-Nov-24	Night time	1	406	-	400-500	-	Pass
8	Spot : Control Building : 2nd Floor : Control Room Desk 2	24120780 (4)-37	25-Nov-24	Night time	1	405	-	400-500	-	Pass
9	Spot : Control Building : 2nd Floor : Control Room Desk 3	24120780 (4)-38	25-Nov-24	Night time	1	401	-	400-500	-	Pass
10	Spot : Control Building : 2nd Floor : Control Room Desk 4	24120780 (4)-39	25-Nov-24	Night time	1	412	-	400-500	-	Pass
11	Spot : Control Building : 2nd Floor : Control Room Desk 5	24120780 (4)-40	25-Nov-24	Night time	1	400	-	400-500	-	Pass
12	Spot : Control Building : 2nd Floor : DSC Room Desk 1	24120780 (4)-41	25-Nov-24	Day time	1	405	-	400-500	-	Pass
13	Spot : Control Building : 2nd Floor : Photocopier	24120780 (4)-42	25-Nov-24	Day time	1	304	-	300-400	-	Pass
14	Spot : Control Building : 2nd Floor : Fax and Copy	24120780 (4)-43	25-Nov-24	Day time	1	301	-	300-400	-	Pass
15	Spot : Control Building : 2nd Floor : Computer No.1	24120780 (4)-44	25-Nov-24	Day time	1	416	-	400-500	-	Pass
16	Spot : Control Building : 2nd Floor : Computer No.2	24120780 (4)-45	25-Nov-24	Day time	1	422	-	400-500	-	Pass
17	Spot : Control Building : 2nd Floor : โต๊ะทำงาน Operation Office 1	24120780 (4)-46	25-Nov-24	Night time	1	420	-	400-500	-	Pass
18	Spot : Control Building : 2nd Floor : โต๊ะทำงาน Operation Office 2	24120780 (4)-47	25-Nov-24	Night time	1	425	-	400-500	-	Pass
19	Spot : Control Building : 2nd Floor : CCTV Room Table	24120780 (4)-48	25-Nov-24	Day time	1	425	-	400-500	-	Pass
20	Spot : Control Building : 2nd Floor : Control (Table No.1)	24120780 (4)-49	25-Nov-24	Day time	1	411	-	400-500	-	Pass
21	Spot : Control Building : 2nd Floor : Control (Table No.2)	24120780 (4)-50	25-Nov-24	Day time	1	422	-	400-500	-	Pass

Technical Management

*Supot S.*

Supot Salamteh  
Section Head

Approved by

*Wichan Choonharat*

Wichan Choonharat  
Assistant Manager

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## 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: 24120780 (4)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (4)-1

Page 3 of 3

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
22	Spot : Control Building : 2nd Floor : Computer Control No.1	24120780 (4)-51	25-Nov-24	Day time	1	406	-	400-500	-	Pass
23	Spot : Control Building : 2nd Floor : Computer Control No.2	24120780 (4)-52	25-Nov-24	Day time	1	411	-	400-500	-	Pass
24	Spot : Control Building : 2nd Floor : Computer Control No.3	24120780 (4)-53	25-Nov-24	Day time	1	404	-	400-500	-	Pass
25	Spot : Control Building : 2nd Floor : Computer Control No.4	24120780 (4)-54	25-Nov-24	Day time	1	407	-	400-500	-	Pass
26	Spot : Control Building : 2nd Floor : Computer Control No.5	24120780 (4)-55	25-Nov-24	Day time	1	406	-	400-500	-	Pass
27	Spot : Control Building : 2nd Floor : Computer Control No.6	24120780 (4)-56	25-Nov-24	Day time	1	400	-	400-500	-	Pass
28	Spot : Control Building : 2nd Floor : Computer Control No.7	24120780 (4)-57	25-Nov-24	Day time	1	402	-	400-500	-	Pass
29	Spot : Control Building : 2nd Floor : ตู้ควบคุม 3 (10MKA10GH001 Generator Control Panel)	24120780 (4)-58	25-Nov-24	Night time	1	202	-	200-300	-	Pass
30	Area : Control Building : 2nd Floor : ทางเดินภายในห้อง #1	24120780 (4)-59	25-Nov-24	Night time	1	208	210	50	100	Pass
		24120780 (4)-60	25-Nov-24	Night time	2	211				
31	Area : Control Building : 2nd Floor : ทางเดินภายในห้อง #2	24120780 (4)-61	25-Nov-24	Night time	1	262	240	50	100	Pass
		24120780 (4)-62	25-Nov-24	Night time	2	217				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (5)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (5)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Terminal & Switchyard Control Building : Terminal Control Room No.1	24120780 (5)-1	25-Nov-24	Day time	1	685	-	200-300	-	Pass
2	Spot : Terminal & Switchyard Control Building : Terminal Control Room No.2	24120780 (5)-2	25-Nov-24	Day time	1	725	-	200-300	-	Pass
3	Spot : Terminal & Switchyard Control Building : Battery Room No.1	24120780 (5)-3	25-Nov-24	Day time	1	307	-	200-300	-	Pass
4	Spot : Terminal & Switchyard Control Building : Switchgear Room No.1	24120780 (5)-4	25-Nov-24	Day time	1	326	-	200-300	-	Pass
5	Spot : Terminal & Switchyard Control Building : Switchgear Room No.2	24120780 (5)-5	25-Nov-24	Day time	1	333	-	200-300	-	Pass
6	Spot : Terminal & Switchyard Control Building : Switchyard Control Room No.1	24120780 (5)-6	25-Nov-24	Day time	1	752	-	200-300	-	Pass
7	Spot : Terminal & Switchyard Control Building : Switchyard Control Room No.2	24120780 (5)-7	25-Nov-24	Day time	1	386	-	200-300	-	Pass
8	Spot : Terminal & Switchyard Control Building : Battery Room No.2	24120780 (5)-8	25-Nov-24	Day time	1	233	-	200-300	-	Pass

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (6)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (6)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Warehouse and Workshop Building : 1st Floor : Reception Room	24120780 (6)-1	25-Nov-24	Day time	1	724	715	50	100	Pass
		24120780 (6)-2	25-Nov-24	Day time	2	156				
		24120780 (6)-3	25-Nov-24	Day time	3	576				
		24120780 (6)-4	25-Nov-24	Day time	4	1,158				
		24120780 (6)-5	25-Nov-24	Day time	5	542				
		24120780 (6)-6	25-Nov-24	Day time	6	1,318				
		24120780 (6)-7	25-Nov-24	Day time	7	155				
		24120780 (6)-8	25-Nov-24	Day time	8	277				
		24120780 (6)-9	25-Nov-24	Day time	9	1,526				
2	Area : Warehouse and Workshop Building : 1st Floor : Warehouse Canteen and Pantry	24120780 (6)-10	25-Nov-24	Day time	1	301	330	150	300	Pass
		24120780 (6)-11	25-Nov-24	Day time	2	311				
		24120780 (6)-12	25-Nov-24	Day time	3	377				
3	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.1	24120780 (6)-13	25-Nov-24	Day time	1	401	-	400-500	-	Pass
4	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.2	24120780 (6)-14	25-Nov-24	Day time	1	418	-	400-500	-	Pass
5	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.3	24120780 (6)-15	25-Nov-24	Day time	1	466	-	400-500	-	Pass
6	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.4	24120780 (6)-16	25-Nov-24	Day time	1	409	-	400-500	-	Pass
7	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.5	24120780 (6)-17	25-Nov-24	Day time	1	459	-	400-500	-	Pass
8	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.6	24120780 (6)-18	25-Nov-24	Day time	1	499	-	400-500	-	Pass
9	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.7	24120780 (6)-19	25-Nov-24	Day time	1	406	-	400-500	-	Pass
10	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.8	24120780 (6)-20	25-Nov-24	Day time	1	437	-	400-500	-	Pass

Technical Management

*Supot S.*

Supot Salamteh  
Section Head

Approved by

*Wichan Choonharat*

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (6)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (6)-1

Page 2 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
11	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.9	24120780 (6)-21	25-Nov-24	Day time	1	495	-	400-500	-	Pass
12	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.10	24120780 (6)-22	25-Nov-24	Day time	1	499	-	400-500	-	Pass
13	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.11	24120780 (6)-23	25-Nov-24	Day time	1	416	-	400-500	-	Pass
14	Spot : Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.12	24120780 (6)-24	25-Nov-24	Day time	1	472	-	400-500	-	Pass
15	Spot : Warehouse and Workshop Building : 1st Floor : Photocopier	24120780 (6)-25	25-Nov-24	Day time	1	663	-	300-400	-	Pass
16	Spot : Warehouse and Workshop Building : 1st Floor : Key Room	24120780 (6)-26	26-Nov-24	Day time	1	412	-	400-500	-	Pass
17	Area : Warehouse and Workshop Building : 1st Floor : Meeting Room	24120780 (6)-27	25-Nov-24	Day time	1	351	309	150	300	Pass
		24120780 (6)-28	25-Nov-24	Day time	2	334				
		24120780 (6)-29	25-Nov-24	Day time	3	357				
		24120780 (6)-30	25-Nov-24	Day time	4	311				
		24120780 (6)-31	25-Nov-24	Day time	5	324				
		24120780 (6)-32	25-Nov-24	Day time	6	344				
		24120780 (6)-33	25-Nov-24	Day time	7	221				
		24120780 (6)-34	25-Nov-24	Day time	8	230				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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





## 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: 24120780 (7)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (7)-1

Page 1 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Warehouse and Workshop Building : Ground Floor : Warehouse Room	24120780 (7)-1	25-Nov-24	Day time	1	168	286	100	200	Pass
		24120780 (7)-2	25-Nov-24	Day time	2	186				
		24120780 (7)-3	25-Nov-24	Day time	3	240				
		24120780 (7)-4	25-Nov-24	Day time	4	178				
		24120780 (7)-5	25-Nov-24	Day time	5	224				
		24120780 (7)-6	25-Nov-24	Day time	6	219				
		24120780 (7)-7	25-Nov-24	Day time	7	227				
		24120780 (7)-8	25-Nov-24	Day time	8	275				
		24120780 (7)-9	25-Nov-24	Day time	9	184				
		24120780 (7)-10	25-Nov-24	Day time	10	198				
		24120780 (7)-11	25-Nov-24	Day time	11	486				
		24120780 (7)-12	25-Nov-24	Day time	12	421				
		24120780 (7)-13	25-Nov-24	Day time	13	409				
		24120780 (7)-14	25-Nov-24	Day time	14	398				
		24120780 (7)-15	25-Nov-24	Day time	15	392				
		24120780 (7)-16	25-Nov-24	Day time	16	353				
		24120780 (7)-17	25-Nov-24	Day time	17	312				
		24120780 (7)-18	25-Nov-24	Day time	18	277				
2	Area : Warehouse and Workshop Building : Ground Floor : Walkway	24120780 (7)-19	25-Nov-24	Day time	1	436	205	50	100	Pass
		24120780 (7)-20	25-Nov-24	Day time	2	124				
		24120780 (7)-21	25-Nov-24	Day time	3	130				
		24120780 (7)-22	25-Nov-24	Day time	4	134				
		24120780 (7)-23	25-Nov-24	Day time	5	112				
		24120780 (7)-24	25-Nov-24	Day time	6	136				
		24120780 (7)-25	25-Nov-24	Day time	7	144				
		24120780 (7)-26	25-Nov-24	Day time	8	216				
		24120780 (7)-27	25-Nov-24	Day time	9	411				
3	Area : Warehouse and Workshop Building : Ground Floor : Electrical Room/Fitness Room	24120780 (7)-28	25-Nov-24	Day time	1	290	266	50	100	Pass
		24120780 (7)-29	25-Nov-24	Day time	2	295				
		24120780 (7)-30	25-Nov-24	Day time	3	246				
		24120780 (7)-31	25-Nov-24	Day time	4	211				
		24120780 (7)-32	25-Nov-24	Day time	5	321				
		24120780 (7)-33	25-Nov-24	Day time	6	233				
4	Spot : Warehouse and Workshop Building : Ground Floor : C&I Cabinet	24120780 (7)-34	25-Nov-24	Day time	1	413	-	400-500	-	Pass

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (7)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (7)-1

Page 2 of 2

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
5	Spot : Warehouse and Workshop Building : Ground Floor : C&I Table	24120780 (7)-35	25-Nov-24	Day time	1	516	-	400-500	-	Pass
6	Spot : Warehouse and Workshop Building : Ground Floor : Instrument and Control	24120780 (7)-36	25-Nov-24	Day time	1	423	-	400-500	-	Pass
7	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #1	24120780 (7)-37	25-Nov-24	Day time	1	427	-	400-500	-	Pass
8	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #2	24120780 (7)-38	25-Nov-24	Day time	1	429	-	400-500	-	Pass
9	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical #3	24120780 (7)-39	25-Nov-24	Day time	1	473	-	400-500	-	Pass
10	Spot : Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical Workshop Room (Table No.3)	24120780 (7)-40	25-Nov-24	Day time	1	483	-	400-500	-	Pass

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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



## 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: 24120780 (8)**

Date Received : Nov 26, 2024  
Date Reported : Nov 27, 2024  
Report Number: 24120780 (8)-1

Page 1 of 1

GNC										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Water Treatment Control Building : Laboratory (หน้า Hood)	24120780 (8)-1	25-Nov-24	Night time	1	774	-	300-400	-	Pass
2	Spot : Water Treatment Control Building : Laboratory (หน้า Spectrophotometer)	24120780 (8)-2	25-Nov-24	Night time	1	844	-	400-500	-	Pass
3	Spot : Water Treatment Control Building : Laboratory (หน้าโต๊ะวัด pH)	24120780 (8)-3	25-Nov-24	Night time	1	459	-	400-500	-	Pass
4	Area : Water Treatment Control Building : ทางเดินหน้าห้อง Laboratory	24120780 (8)-4	25-Nov-24	Night time	1	119	122	25	50	Pass
		24120780 (8)-5	25-Nov-24	Night time	2	106				
		24120780 (8)-6	25-Nov-24	Night time	3	115				
		24120780 (8)-7	25-Nov-24	Night time	4	207				
		24120780 (8)-8	25-Nov-24	Night time	5	96				
		24120780 (8)-9	25-Nov-24	Night time	6	137				
		24120780 (8)-10	25-Nov-24	Night time	7	122				
		24120780 (8)-11	25-Nov-24	Night time	8	109				
		24120780 (8)-12	25-Nov-24	Night time	9	90				

**Measurement by :** Chanon Booncheun

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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

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

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

## ภาคผนวก ค-11

---

การตรวจสอบความถูกต้องของระบบ CEMs ประจำปี พ.ศ. 2567



## 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: 2457400  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998058-1

Page 1 of 4

Sample Number 2457400-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter NOx

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	05 Nov 24	10:40	11:00	7.80	8.81	18.37	19.18	0.81
2	05 Nov 24	11:01	11:21	8.73	9.89	20.40	21.40	0.99
3	05 Nov 24	11:22	11:42	6.55	8.02	15.45	17.51	2.06
4	05 Nov 24	11:43	12:03	6.50	8.30	15.29	18.09	2.80
5	05 Nov 24	12:04	12:24	6.02	7.98	14.16	17.39	3.23
6*	05 Nov 24	12:25	12:45	5.19	7.49	12.22	16.43	4.21
7*	05 Nov 24	12:46	13:06	5.86	8.48	13.74	18.45	4.70
8*	05 Nov 24	13:07	13:27	5.38	8.25	12.66	18.00	5.34
9	05 Nov 24	13:28	13:48	15.94	15.81	34.54	32.05	-2.48
10	05 Nov 24	13:49	14:09	16.86	17.74	36.03	35.45	-0.58
11	05 Nov 24	14:10	14:30	18.47	20.77	39.31	41.44	2.13
12	05 Nov 24	14:31	14:51	18.46	21.65	39.28	43.09	3.81
Average						25.87	27.29	1.42
Confidence Coefficient (CC)								1.53
Relative Accuracy (Compared with Emission Standard : 60 ppm) (%)								4.91
Relative Accuracy Criteria <sup>1/</sup> (Compared with RM Emission Standard)								≤ 10%

Reference Method : US EPA Method 7E

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of NOx is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 2 (PS-2) compared with Emission Standard 60 ppm at 7%O2  
RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457400  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998058-1

Page 2 of 4

Sample Number 2457400-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter SO2

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	05 Nov 24	10:40	11:00	0.71	0.65	1.67	1.41	-0.26
2	05 Nov 24	11:01	11:21	0.62	0.56	1.45	1.22	-0.24
3	05 Nov 24	11:22	11:42	0.65	0.58	1.54	1.27	-0.27
4	05 Nov 24	11:43	12:03	0.60	0.51	1.42	1.12	-0.30
5	05 Nov 24	12:04	12:24	0.50	0.53	1.17	1.15	-0.02
6	05 Nov 24	12:25	12:45	0.44	0.52	1.05	1.14	0.10
7	05 Nov 24	12:46	13:06	0.50	0.55	1.18	1.19	0.01
8	05 Nov 24	13:07	13:27	0.56	0.52	1.33	1.14	-0.19
9	05 Nov 24	13:28	13:48	0.79	0.68	1.72	1.38	-0.34
10*	05 Nov 24	13:49	14:09	0.99	0.81	2.11	1.62	-0.49
11*	05 Nov 24	14:10	14:30	0.95	0.79	2.02	1.59	-0.43
12*	05 Nov 24	14:31	14:51	0.92	0.73	1.96	1.46	-0.50
Average						1.39	1.22	-0.17
Confidence Coefficient (CC)								0.12
Relative Accuracy (Compared with Emission Standard : 6 ppm) (%)								4.80
Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard)								≤ 10%

Reference Method : US EPA Method 6C

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of SO2 is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 2 (PS-2) compared with Emission Standard 6 ppm at 7%O2  
RA Result is within Criteria

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457400  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998058-1

Page 3 of 4

Sample Number 2457400-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter CO

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	05 Nov 24	10:40	11:00	51.38	50.79	120.93	110.60	-10.33
2	05 Nov 24	11:01	11:21	52.87	51.64	123.62	111.74	-11.88
3	05 Nov 24	11:22	11:42	50.16	49.21	118.34	107.45	-10.89
4	05 Nov 24	11:43	12:03	50.19	49.15	118.04	107.11	-10.93
5	05 Nov 24	12:04	12:24	48.60	47.25	114.25	102.95	-11.30
6	05 Nov 24	12:25	12:45	47.57	46.22	112.01	101.37	-10.65
7	05 Nov 24	12:46	13:06	49.47	47.62	116.10	103.62	-12.48
8	05 Nov 24	13:07	13:27	49.64	48.34	116.91	105.42	-11.50
9*	05 Nov 24	13:28	13:48	58.70	54.83	127.18	111.17	-16.01
10	05 Nov 24	13:49	14:09	61.66	58.41	131.78	116.72	-15.06
11*	05 Nov 24	14:10	14:30	62.38	58.92	132.74	117.57	-15.17
12*	05 Nov 24	14:31	14:51	62.50	59.05	133.01	117.54	-15.47
Average						119.11	107.44	-11.67
Confidence Coefficient (CC)								1.10
Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)								1.85
Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard)								≤ 5%

Reference Method : US EPA Method 10

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of CO is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 4 (PS-4) compared with Emission Standard 690 ppm at 7%O2  
RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt





## 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: 2457400  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998058-1

Page 4 of 4

Sample Number 2457400-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter O2

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual		Difference
		Start	Stop	CEMs (%)	RM (%)	
1*	05 Nov 24	10:40	11:00	14.99	14.52	-0.48
2*	05 Nov 24	11:01	11:21	14.96	14.48	-0.48
3*	05 Nov 24	11:22	11:42	15.01	14.53	-0.47
4	05 Nov 24	11:43	12:03	14.99	14.52	-0.47
5	05 Nov 24	12:04	12:24	14.99	14.52	-0.47
6	05 Nov 24	12:25	12:45	15.00	14.56	-0.44
7	05 Nov 24	12:46	13:06	14.98	14.51	-0.46
8	05 Nov 24	13:07	13:27	15.00	14.53	-0.47
9	05 Nov 24	13:28	13:48	14.48	14.04	-0.44
10	05 Nov 24	13:49	14:09	14.40	13.94	-0.45
11	05 Nov 24	14:10	14:30	14.37	13.93	-0.43
12	05 Nov 24	14:31	14:51	14.37	13.92	-0.45
Average				14.73	14.28	-0.45
Confidence Coefficient (CC)						-
Relative Accuracy (Compared in Actual) (%)						0.45
Relative Accuracy Criteria <sup>1/</sup> (%)						≤ 1%

Reference Method : US EPA Method 3A

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of O2 is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 3 (PS-3)

RA Result is within Criteria

Sampled By : Saksit Phaisanphisut

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457419  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3160406-1

Page 1 of 2

Sample Number 2457419-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter Flowrate

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Flowrate Data		Difference
		Start	Stop	CEMs (Nm3/Hr)	RM (Nm3/Hr)	
1*	05 Nov 24	10:30	10:49	319,010	294,872	-24,138
2*	05 Nov 24	10:50	11:09	323,006	294,496	-28,510
3	05 Nov 24	11:10	11:29	320,106	300,053	-20,053
4	05 Nov 24	11:30	11:49	318,329	303,180	-15,149
5	05 Nov 24	11:50	12:09	310,228	302,880	-7,348
6	05 Nov 24	12:10	12:29	310,699	302,880	-7,819
7	05 Nov 24	12:30	12:49	303,910	301,514	-2,396
8	05 Nov 24	12:50	13:09	317,508	301,512	-15,996
9	05 Nov 24	13:10	13:29	319,522	304,464	-15,058
10*	05 Nov 24	13:30	13:49	404,386	379,286	-25,100
11	05 Nov 24	13:50	14:09	411,434	398,588	-12,846
12	05 Nov 24	14:10	14:29	415,223	401,120	-14,103
Average				336,329	324,021	-12,308
Confidence Coefficient (CC)						4,173
Relative Accuracy <sup>1/</sup> (Compared with RM) (%)						5.09
Relative Accuracy Criteria (Compared with RM)						≤ 20 %

Reference Method : US EPA Method 2

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of Flowrate is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 6 (PS-6)

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457419  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3160406-1

Page 2 of 2

Sample Number 2457419-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter Stack Temperature

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Temperature Data		Difference
		Start	Stop	CEMs (°C)	RM (°C)	
1	05 Nov 24	10:30	10:49	106.0	112.0	6.0
2*	05 Nov 24	10:50	11:09	106.2	113.0	6.8
3*	05 Nov 24	11:10	11:29	106.2	113.0	6.8
4	05 Nov 24	11:30	11:49	106.3	112.0	5.7
5	05 Nov 24	11:50	12:09	106.0	112.0	6.0
6	05 Nov 24	12:10	12:29	105.3	112.0	6.7
7	05 Nov 24	12:30	12:49	105.3	112.0	6.8
8	05 Nov 24	12:50	13:09	106.1	112.0	5.9
9	05 Nov 24	13:10	13:29	106.0	112.0	6.0
10*	05 Nov 24	13:30	13:49	113.1	121.2	8.1
11	05 Nov 24	13:50	14:09	114.3	120.0	5.7
12	05 Nov 24	14:10	14:29	114.7	121.0	6.3
Average				107.8	113.9	6.1
Confidence Coefficient (CC)						0.3
Relative Accuracy <sup>1/</sup> (Compared with RM) (%)						5.6
Relative Accuracy Criteria (Compared with RM)						≤ 20 %

Reference Method : US EPA Method 2

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of Stack Temperature is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 6 (PS-6)

RA Result is within Criteria

Sampled By : Saksit Phaisanphisut

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457402  
Date Received: Nov 06, 2024  
Date Reported: Nov 14, 2024  
Report Number: 3160403-1

Page 1 of 2

Sample Number 2457402-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter Relative Response Audit

### Relative Response Audit Test Report

No Sample	Date	Time		CEMS Values		RM Values (mg/m <sup>3</sup> at 7% O <sub>2</sub> )	Allowable Range		Criterion
		Start	Stop	(%Opacity)	(mg/m <sup>3</sup> at 7% O <sub>2</sub> )		Minimum	Maximum	
1	5-Nov-24	10:30	11:30	12.25	5.54	1.49	-1.46	12.54	Pass
2	5-Nov-24	11:40	12:40	11.12	5.02	3.02	-1.98	12.02	Pass
3	5-Nov-24	12:50	13:50	11.13	5.03	1.96	-1.97	12.03	Pass
4	5-Nov-24	14:00	14:48	11.23	5.07	0.80	-1.93	12.07	Pass
5	5-Nov-24	15:00	15:48	11.49	5.19	0.41	-1.81	12.19	Pass

Remark: - Relative Response Audit is refer to 40 CFR Part 60 Appendix B : Performance Specification 11 : Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Source (PS-11)  
- Correlation Equation of Linear curve  $Y = 0.4554X - 0.0419$   
- Emission limit 28 mg/m<sup>3</sup> from Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



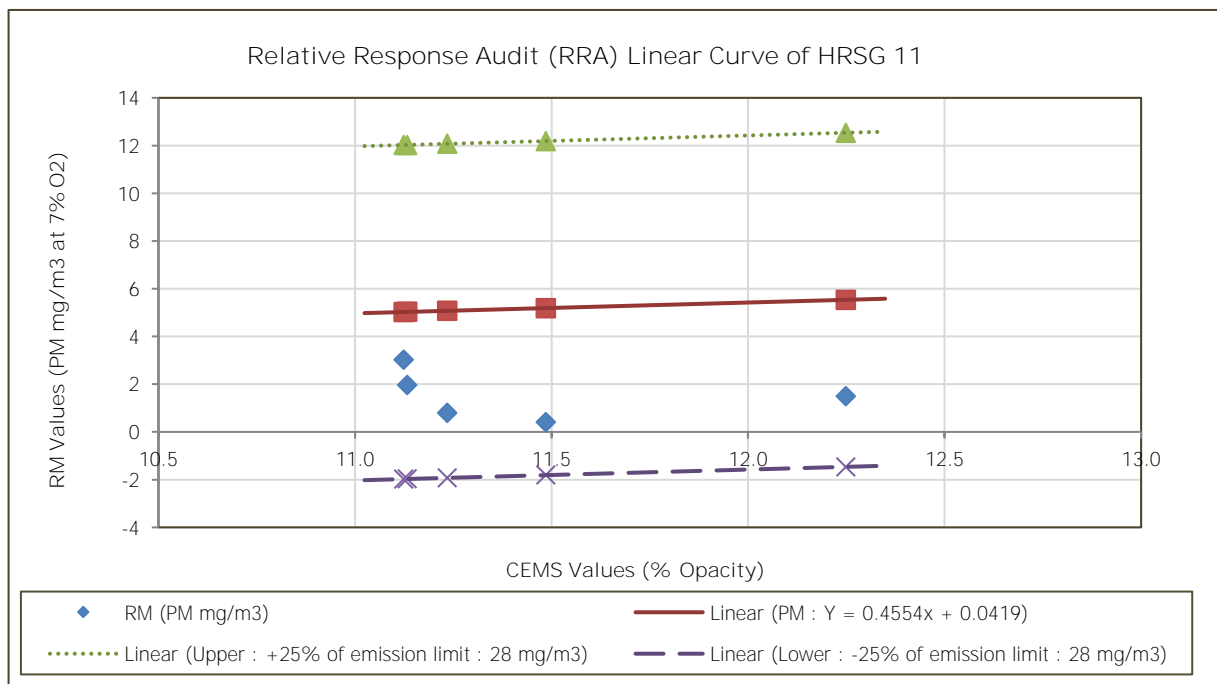
## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457402  
Date Received: Nov 06, 2024  
Date Reported: Nov 14, 2024  
Report Number: 3160403-1

Page 2 of 2

Sample Number 2457402-1  
Sampled Date Nov 05, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 11  
Parameter Relative Response Audit



Sampled By : Saksit Phaisanphisut

Technical Management

*Wichan Choonharat*

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

*Sarayuth Jittranont*

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 1 of 10

**Sample Number** 2457402-2  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	285524	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 %O <sub>2</sub>	at 14.6 % O <sub>2</sub>				
Air Testing										
Total Suspended Particulate	10:30 AM - 11:30 AM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong  
Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanok Korn Anek*

Kanok Korn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 2 of 10

**Sample Number** 2457402-2  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	285524	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	10:30 AM - 11:30 AM	g/s	-	-	<0.040	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)





## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 3 of 10

**Sample Number** 2457402-3  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	9.00	%	Flow Rate (Actual O2)	286006	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 %O <sub>2</sub>	at 14.5 % O <sub>2</sub>				
Air Testing										
Total Suspended Particulate	11:40 AM - 12:40 PM	mg/m3	-	0.5	1.4	0.64	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanok Korn Anek*

Kanok Korn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 4 of 10

**Sample Number** 2457402-3  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	9.00	%	Flow Rate (Actual O2)	286006	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	11:40 AM - 12:40 PM	g/s	-	-	0.05	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 5 of 10

**Sample Number** 2457402-4  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.91	%	Flow Rate (Actual O2)	285680	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 %O <sub>2</sub>	at 14.5 % O <sub>2</sub>				
Air Testing										
Total Suspended Particulate	12:50 PM - 01:50 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**  
Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 6 of 10

**Sample Number** 2457402-4  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.4	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	12.8	m/s
Type of Fuel	Natural Gas		Moisture	8.91	%	Flow Rate (Actual O2)	285680	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	12:50 PM - 01:50 PM	g/s	-	-	<0.04	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 7 of 10

**Sample Number** 2457402-5  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	13.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	16.9	m/s
Type of Fuel	Natural Gas		Moisture	8.79	%	Flow Rate (Actual O2)	366873	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 13.9 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	02:00 PM - 02:48 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 8 of 10

**Sample Number** 2457402-5  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	13.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	16.9	m/s
Type of Fuel	Natural Gas		Moisture	8.79	%	Flow Rate (Actual O2)	366873	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	02:00 PM - 02:48 PM	g/s	-	-	<0.051	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

### Remark :

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

**Technical Management**

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 9 of 10

**Sample Number** 2457402-6  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	13.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	16.9	m/s
Type of Fuel	Natural Gas		Moisture	8.84	%	Flow Rate (Actual O2)	366581	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 %O <sub>2</sub>	at 13.9 % O <sub>2</sub>				
Air Testing										
Total Suspended Particulate	03:00 PM - 03:48 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:05AM)





## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** 4210602061  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 2457402**

Date Received : Nov 06, 2024  
Date Reported : Nov 15, 2024  
Report Number: 2998071-1

Page 10 of 10

**Sample Number** 2457402-6  
**Sampled Date** Nov 05, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	13.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	122	°C	Gas Velocity	16.9	m/s
Type of Fuel	Natural Gas		Moisture	8.84	%	Flow Rate (Actual O2)	366581	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	03:00 PM - 03:48 PM	g/s	-	-	<0.051	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2023 (B.E. 2566) on Emission Standard from Power Plants.

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

### Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457401  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998049-1

Page 1 of 4

Sample Number 2457401-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter NOx

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	04 Nov 24	14:30	14:50	25.16	25.44	54.22	52.95	-1.27
2	04 Nov 24	14:51	15:11	24.18	25.31	52.87	52.84	-0.04
3	04 Nov 24	15:12	15:32	23.53	25.73	51.63	53.33	1.70
4	04 Nov 24	15:33	15:53	23.01	25.95	50.59	53.58	2.99
5	04 Nov 24	15:54	16:14	22.37	26.03	49.18	53.99	4.81
6	04 Nov 24	16:15	16:35	22.05	26.22	48.51	54.58	6.07
7	04 Nov 24	16:36	16:56	21.57	26.08	47.50	54.34	6.84
8	04 Nov 24	16:57	17:17	20.48	25.30	45.25	52.81	7.57
9	04 Nov 24	17:18	17:38	20.59	25.75	45.53	53.73	8.21
10*	04 Nov 24	17:39	17:59	21.43	26.75	47.27	55.59	8.32
11*	04 Nov 24	18:00	18:20	21.71	27.36	47.81	56.95	9.14
12*	04 Nov 24	18:21	18:41	21.32	27.13	47.01	56.57	9.56
Average						49.48	53.57	4.10
Confidence Coefficient (CC)								2.63
Relative Accuracy (Compared with RM) (%)								12.56
Relative Accuracy Criteria <sup>1/</sup> (Compared with RM)								≤ 20%

Reference Method : US EPA Method 7E

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of NOx is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 2 (PS-2)

RA Result is within Criteria

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457401  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998049-1

Page 2 of 4

Sample Number 2457401-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter SO2

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	04 Nov 24	14:30	14:50	0.65	0.63	1.41	1.32	-0.09
2	04 Nov 24	14:51	15:11	0.65	0.61	1.43	1.28	-0.15
3	04 Nov 24	15:12	15:32	0.76	0.66	1.68	1.37	-0.31
4	04 Nov 24	15:33	15:53	0.87	0.71	1.92	1.47	-0.45
5*	04 Nov 24	15:54	16:14	0.89	0.69	1.95	1.43	-0.52
6*	04 Nov 24	16:15	16:35	0.88	0.70	1.93	1.46	-0.48
7	04 Nov 24	16:36	16:56	0.89	0.72	1.97	1.50	-0.47
8*	04 Nov 24	16:57	17:17	0.88	0.68	1.94	1.41	-0.52
9	04 Nov 24	17:18	17:38	0.87	0.73	1.92	1.52	-0.40
10	04 Nov 24	17:39	17:59	0.88	0.77	1.94	1.60	-0.35
11	04 Nov 24	18:00	18:20	0.84	0.71	1.86	1.48	-0.38
12	04 Nov 24	18:21	18:41	0.79	0.65	1.74	1.36	-0.38
Average						1.76	1.43	-0.33
Confidence Coefficient (CC)								0.10
Relative Accuracy (Compared with Emission Standard : 6 ppm) (%)								7.17
Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard)								≤ 10%

Reference Method : US EPA Method 6C

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of SO2 is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 2 (PS-2) compared with Emission Standard 6 ppm at 7%O2  
RA Result is within Criteria

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457401  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998049-1

Page 3 of 4

Sample Number 2457401-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter CO

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual O2		Corrected Value at 7% O2		Difference
		Start	Stop	CEMs (ppm)	RM (ppm)	CEMs (ppm)	RM (ppm)	
1	04 Nov 24	14:30	14:50	24.77	25.38	53.37	52.83	-0.54
2	04 Nov 24	14:51	15:11	24.95	25.58	54.56	53.40	-1.16
3	04 Nov 24	15:12	15:32	24.92	25.51	54.68	52.87	-1.81
4	04 Nov 24	15:33	15:53	24.89	25.42	54.74	52.48	-2.26
5	04 Nov 24	15:54	16:14	24.85	25.41	54.64	52.70	-1.94
6	04 Nov 24	16:15	16:35	24.79	25.32	54.54	52.71	-1.83
7	04 Nov 24	16:36	16:56	24.77	25.28	54.56	52.67	-1.88
8	04 Nov 24	16:57	17:17	24.85	25.34	54.91	52.89	-2.02
9	04 Nov 24	17:18	17:38	24.74	25.21	54.71	52.61	-2.10
10*	04 Nov 24	17:39	17:59	24.73	25.14	54.53	52.25	-2.28
11*	04 Nov 24	18:00	18:20	24.75	25.09	54.50	52.22	-2.29
12*	04 Nov 24	18:21	18:41	24.74	25.06	54.54	52.25	-2.29
Average						54.52	52.80	-1.73
Confidence Coefficient (CC)								0.41
Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)								0.31
Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard)								≤ 5%

Reference Method : US EPA Method 10

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of CO is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 4 (PS-4) compared with Emission Standard 690 ppm at 7%O2  
RA Result is within Criteria

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jitranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## Analysis / Test Report

Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
P/O : 4210602061  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457401  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 2998049-1

Page 4 of 4

Sample Number 2457401-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter O2

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Raw Data at Actual		Difference
		Start	Stop	CEMs (%)	RM (%)	
1	04 Nov 24	14:30	14:50	14.45	14.22	-0.23
2	04 Nov 24	14:51	15:11	14.54	14.24	-0.30
3	04 Nov 24	15:12	15:32	14.57	14.19	-0.37
4*	04 Nov 24	15:33	15:53	14.58	14.17	-0.41
5*	04 Nov 24	15:54	16:14	14.58	14.20	-0.38
6	04 Nov 24	16:15	16:35	14.58	14.22	-0.36
7	04 Nov 24	16:36	16:56	14.59	14.23	-0.36
8	04 Nov 24	16:57	17:17	14.61	14.24	-0.37
9	04 Nov 24	17:18	17:38	14.61	14.24	-0.37
10*	04 Nov 24	17:39	17:59	14.60	14.21	-0.39
11	04 Nov 24	18:00	18:20	14.59	14.22	-0.37
12	04 Nov 24	18:21	18:41	14.60	14.23	-0.36
Average				14.57	14.23	-0.34
Confidence Coefficient (CC)						-
Relative Accuracy (Compared in Actual) (%)						0.34
Relative Accuracy Criteria <sup>1/</sup> (%)						≤ 1%

Reference Method : US EPA Method 3A

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of O2 is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 3 (PS-3)

RA Result is within Criteria

Sampled By : Saksit Phaisanphisut

Technical Management



Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by



Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457422  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3160408-1

Page 1 of 2

Sample Number 2457422-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter Flowrate

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Flowrate Data		Difference
		Start	Stop	CEMs (Nm3/Hr)	RM (Nm3/Hr)	
1*	04 Nov 24	11:40	11:59	372,514	362,378	-10,136
2	04 Nov 24	12:00	12:19	372,437	363,956	-8,481
3	04 Nov 24	12:20	12:39	371,698	363,958	-7,740
4*	04 Nov 24	12:40	12:59	371,242	361,454	-9,788
5	04 Nov 24	13:00	13:19	370,850	362,217	-8,633
6	04 Nov 24	13:20	13:39	371,225	363,326	-7,899
7	04 Nov 24	13:40	13:59	355,985	363,342	7,357
8*	04 Nov 24	14:00	14:19	353,698	362,682	8,984
9	04 Nov 24	14:20	14:39	354,474	362,277	7,803
10	04 Nov 24	14:40	14:59	354,670	360,060	5,390
11	04 Nov 24	15:00	15:19	353,792	360,044	6,252
12	04 Nov 24	15:20	15:39	354,670	361,161	6,491
Average				362,200	362,260	60
Confidence Coefficient (CC)						6,040
Relative Accuracy <sup>1/</sup> (Compared with RM) (%)						1.68
Relative Accuracy Criteria (Compared with RM)						≤ 20 %

Reference Method : US EPA Method 2

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of Flowrate is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 6 (PS-6)

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt



## 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: 2457422  
Date Received : Nov 06, 2024  
Date Reported : Nov 14, 2024  
Report Number : 3160408-1

Page 2 of 2

Sample Number 2457422-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter Stack Temperature

### Relative Accuracy Test Audit Report

Run No.	Date	Time		Temperature Data		Difference
		Start	Stop	CEMs (°C)	RM (°C)	
1*	04 Nov 24	11:40	11:59	109.9	117.0	7.1
2	04 Nov 24	12:00	12:19	109.6	116.0	6.4
3	04 Nov 24	12:20	12:39	109.9	116.0	6.1
4	04 Nov 24	12:40	12:59	112.1	119.0	6.9
5*	04 Nov 24	13:00	13:19	111.6	119.0	7.4
6*	04 Nov 24	13:20	13:39	110.8	119.0	8.2
7	04 Nov 24	13:40	13:59	112.0	119.0	7.0
8	04 Nov 24	14:00	14:19	110.9	118.0	7.1
9	04 Nov 24	14:20	14:39	111.1	118.0	6.9
10	04 Nov 24	14:40	14:59	111.1	118.0	6.9
11	04 Nov 24	15:00	15:19	111.1	118.0	6.9
12	04 Nov 24	15:20	15:39	111.5	118.0	6.5
Average				111.0	117.8	6.7
Confidence Coefficient (CC)						0.3
Relative Accuracy <sup>1/</sup> (Compared with RM) (%)						5.9
Relative Accuracy Criteria (Compared with RM)						≤ 20 %

Reference Method : US EPA Method 2

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of Stack Temperature is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 6 (PS-6)

RA Result is within Criteria

Sampled By : Saksit Phaisanphisut

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\Stack\_CEMs1.rpt





## 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: 2457403  
Date Received: Nov 06, 2024  
Date Reported: Nov 14, 2024  
Report Number: 3160405-1

Page 1 of 2

Sample Number 2457403-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter Relative Response Audit

### Relative Response Audit Test Report

No Sample	Date	Time		CEMS Values		RM Values (mg/m <sup>3</sup> at 7% O <sub>2</sub> )	Allowable Range		Criterion
		Start	Stop	(% Opacity)	(mg/m <sup>3</sup> at 7% O <sub>2</sub> )		Minimum	Maximum	
1	4-Nov-24	11:40	12:28	5.96	2.32	1.86	-4.68	9.32	Pass
2	4-Nov-24	12:40	13:28	5.94	2.31	1.42	-4.69	9.31	Pass
3	4-Nov-24	13:40	14:28	6.26	2.43	0.96	-4.57	9.43	Pass
4	4-Nov-24	14:40	15:28	6.13	2.38	0.48	-4.62	9.38	Pass
5	4-Nov-24	15:40	16:28	6.28	2.44	0.96	-4.56	9.44	Pass

Remark: - Relative Response Audit is refer to 40 CFR Part 60 Appendix B : Performance Specification 11 : Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Source (PS-11)  
- Correlation Equation of Linear curve  $Y = 0.3628X + 0.1576$   
- Emission limit 28 mg/m<sup>3</sup> from Environmental Impact Assessment Report of Gulf NC Co., Ltd.

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

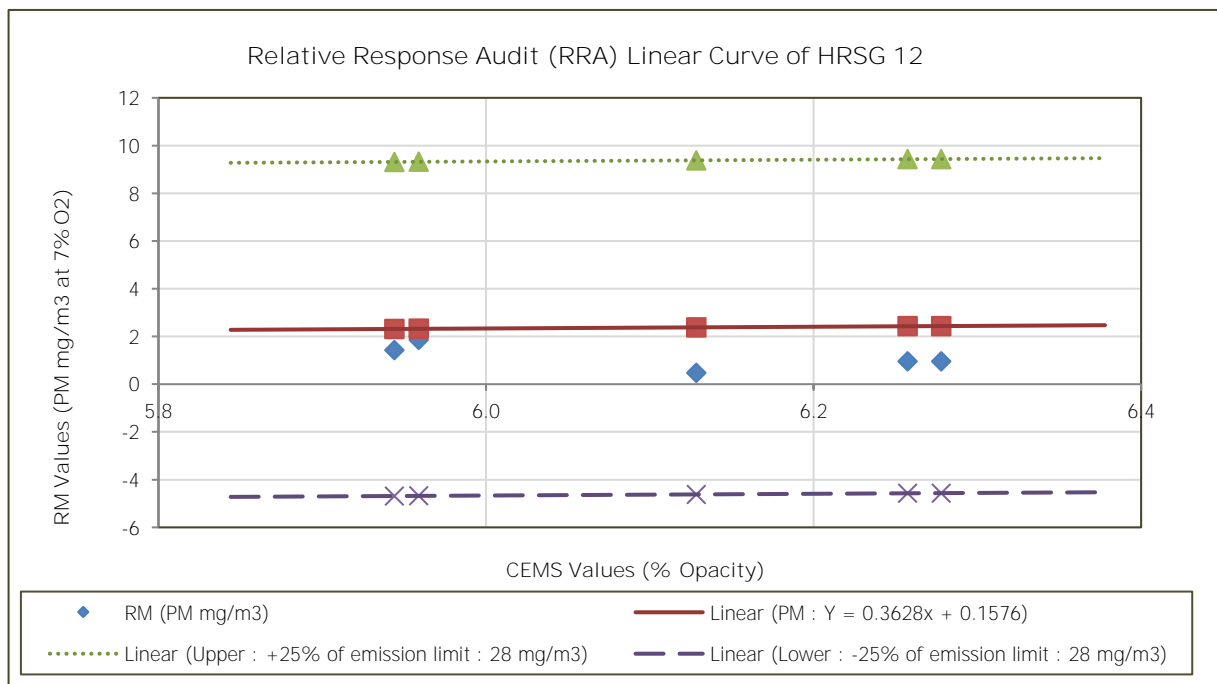
Client : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

P/O :  
Project Name : Monitoring EIA  
Project Location : GNC

Lot ID: 2457403  
Date Received: Nov 06, 2024  
Date Reported: Nov 14, 2024  
Report Number: 3160405-1

Page 2 of 2

Sample Number 2457403-1  
Sampled Date Nov 04, 2024  
Sample Description Emission from Stationary Source  
Location ปล่อง HRSG 12  
Parameter Relative Response Audit



Sampled By : Saksit Phaisanphisut

Technical Management

*Wichan Choonharat*

Wichan Choonharat  
Manager

ทะเบียนเลขที่ ว-204-ค-0006

Approved by

*Sarayuth Jittranont*

Sarayuth Jittranont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0003

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. Part of the ALS Group

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 1 of 10

**Sample Number** 2457403-2  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	117	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.08	%	Flow Rate (Actual O2)	353490	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.3 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	11:40 AM - 12:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 2 of 10

**Sample Number** 2457403-2  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	117	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.08	%	Flow Rate (Actual O2)	353490	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	11:40 AM - 12:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

Remark :

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

**Technical Management**

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 3 of 10

**Sample Number** 2457403-3  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	116	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	8.88	%	Flow Rate (Actual O2)	354794	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.3 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	12:40 PM - 01:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 4 of 10

**Sample Number** 2457403-3  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.8	%
Type of Process	Combustion		Stack Temperature	116	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	8.88	%	Flow Rate (Actual O2)	354794	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	12:40 PM - 01:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 5 of 10

**Sample Number** 2457403-4  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.4	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	119	°C	Gas Velocity	16.2	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	353474	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.4 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	01:40 PM - 02:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)





## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 6 of 10

**Sample Number** 2457403-4  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.4	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	119	°C	Gas Velocity	16.2	m/s
Type of Fuel	Natural Gas		Moisture	8.92	%	Flow Rate (Actual O2)	353474	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	01:40 PM - 02:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

Remark :

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 7 of 10

**Sample Number** 2457403-5  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	118	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.03	%	Flow Rate (Actual O2)	353381	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.3 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	02:40 PM - 03:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 8 of 10

**Sample Number** 2457403-5  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	118	°C	Gas Velocity	16.1	m/s
Type of Fuel	Natural Gas		Moisture	9.03	%	Flow Rate (Actual O2)	353381	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	02:40 PM - 03:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

Remark :

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

**Technical Management**

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 9 of 10

**Sample Number** 2457403-6  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	118	°C	Gas Velocity	16.0	m/s
Type of Fuel	Natural Gas		Moisture	9.24	%	Flow Rate (Actual O2)	349652	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Result at 14.3 % O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
---------	--------------	------	-----	-----------	-----------------------------	---------------------------------	---------------	---------------	--------	------------------

### Air Testing

Total Suspended Particulate	03:40 PM - 04:28 PM	mg/m3	-	0.5	<0.5	<0.5	28	60	U.S. Environmental Protection Agency 40 CFR method 5, Appendix A, 2020 (Include sampling)	Bangkok
-----------------------------	---------------------	-------	---	-----	------	------	----	----	---	---------

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

Technical Management

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)



## Analysis / Test Report

TESTING  
No.0009

**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: 2457403**

Date Received : Nov 06, 2024

Date Reported : Nov 15, 2024

Report Number: 2998062-1

Page 10 of 10

**Sample Number** 2457403-6  
**Sampled Date** Nov 04, 2024  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** Nov 07, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	757	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.6	%
Type of Process	Combustion		Stack Temperature	118	°C	Gas Velocity	16.0	m/s
Type of Fuel	Natural Gas		Moisture	9.24	%	Flow Rate (Actual O2)	349652	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	03:40 PM - 04:28 PM	g/s	-	-	<0.049	1.7	-	Calculated	Bangkok

### Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.

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

**Sampling By :** Saksit Phaisanphisut ทะเบียนเลขที่ ว-204-จ-0024

Remark :

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

**Technical Management**

*Orawan R.*

Orawan Rakyong

Scientist (3)

ทะเบียนเลขที่ ว-204-จ-0027

**Approved by**

*Kanokkorn Anek*

Kanokkorn Anek

Assistant General Manager

ทะเบียนเลขที่ ว-204-ค-0004

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

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

14494-21/ EMAIL

S:\Reports\\_Air Stack\_O2\_2GL.rpt ( 8:11AM)