

# ภาคผนวก ค

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ใบรับรองผลการตรวจวิเคราะห์



# ภาคผนวก ค-1

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คุณภาพอากาศในบรรยากาศ



## Analysis / Test Report



TESTING  
No.0009

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418536  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number: 2913253-1

Page 1 of 1

Sample Description Air Quality  
Location วัดหนองน้ำส้ม (GPS 47P 683755, 1584181)  
Date Analysis Commenced Mar 08, 2024  
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag, 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) |
|---------------|-----------------------|-------------------------------------|------------------------------------|-----------------------------|------------------------------|
| 2418536-1     | Feb 28 - Feb 29, 2024 | 0.083                               | 0.036                              | 759                         | 33                           |
| 2418536-2     | Feb 29 - Mar 01, 2024 | 0.082                               | 0.052                              | 759                         | 33                           |
| 2418536-3     | Mar 01 - Mar 02, 2024 | 0.097                               | 0.060                              | 759                         | 34                           |
| 2418536-4     | Mar 02 - Mar 03, 2024 | 0.082                               | 0.068                              | 759                         | 33                           |
| 2418536-5     | Mar 03 - Mar 04, 2024 | 0.095                               | 0.050                              | 759                         | 33                           |
| 2418536-6     | Mar 04 - Mar 05, 2024 | 0.086                               | 0.049                              | 759                         | 34                           |
| 2418536-7     | Mar 05 - Mar 06, 2024 | 0.084                               | 0.044                              | 759                         | 34                           |
| Guideline     |                       | 0.33                                | 0.12                               | -                           | -                            |

### Reference Method

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

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

Sampled By : Thanit Janjop

### Remark :

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

Approved by

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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

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## Analysis / Test Report



TESTING  
No.0009

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418536  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number: 2936743-1

Page 1 of 1

Sample Description Air Quality  
Location โรงเรียนวัดนางาฬ (GPS 47P 684438, 1587210)  
Date Analysis Commenced Mar 08, 2024  
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag, 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) |
|---------------|-----------------------|-------------------------------------|------------------------------------|-----------------------------|------------------------------|
| 2418536-8     | Feb 28 - Feb 29, 2024 | 0.083                               | 0.047                              | 759                         | 36                           |
| 2418536-9     | Feb 29 - Mar 01, 2024 | 0.084                               | 0.048                              | 759                         | 35                           |
| 2418536-10    | Mar 01 - Mar 02, 2024 | 0.098                               | 0.058                              | 759                         | 36                           |
| 2418536-11    | Mar 02 - Mar 03, 2024 | 0.093                               | 0.066                              | 759                         | 36                           |
| 2418536-12    | Mar 03 - Mar 04, 2024 | 0.099                               | 0.050                              | 759                         | 35                           |
| 2418536-13    | Mar 04 - Mar 05, 2024 | 0.088                               | 0.045                              | 759                         | 36                           |
| 2418536-14    | Mar 05 - Mar 06, 2024 | 0.087                               | 0.042                              | 759                         | 36                           |
| Guideline     |                       | 0.33                                | 0.12                               | -                           | -                            |

### Reference Method

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

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

Sampled By : Thanit Janjop

### Remark :

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

Approved by

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report



TESTING  
No.0009

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418536  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number: 2936744-1

Page 1 of 1

Sample Description Air Quality  
Location โรงเรียนวัดดอนทราย (GPS 47P 687981, 1587129)  
Date Analysis Commenced Mar 08, 2024  
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag, 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) |
|---------------|-----------------------|-------------------------------------|------------------------------------|-----------------------------|------------------------------|
| 2418536-15    | Feb 28 - Feb 29, 2024 | 0.095                               | 0.050                              | 759                         | 34                           |
| 2418536-16    | Feb 29 - Mar 01, 2024 | 0.089                               | 0.055                              | 759                         | 34                           |
| 2418536-17    | Mar 01 - Mar 02, 2024 | 0.094                               | 0.064                              | 759                         | 35                           |
| 2418536-18    | Mar 02 - Mar 03, 2024 | 0.099                               | 0.065                              | 759                         | 34                           |
| 2418536-19    | Mar 03 - Mar 04, 2024 | 0.099                               | 0.054                              | 759                         | 34                           |
| 2418536-20    | Mar 04 - Mar 05, 2024 | 0.101                               | 0.050                              | 759                         | 35                           |
| 2418536-21    | Mar 05 - Mar 06, 2024 | 0.147                               | 0.067                              | 759                         | 36                           |
| Guideline     |                       | 0.33                                | 0.12                               | -                           | -                            |

### Reference Method

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

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

Sampled By : Thanit Janjop

### Remark :

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

Approved by

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report



TESTING  
No.0009

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418536  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number: 2936746-1

Page 1 of 1

Sample Description Air Quality  
Location สวนอุตสาหกรรมโรจนะ ระยะที่ 1-4 (GPS 47P 676951, 1583181)  
Date Analysis Commenced Mar 08, 2024  
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag, 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) |
|---------------|-----------------------|-------------------------------------|------------------------------------|-----------------------------|------------------------------|
| 2418536-22    | Feb 28 - Feb 29, 2024 | 0.084                               | 0.020                              | 759                         | 36                           |
| 2418536-23    | Feb 29 - Mar 01, 2024 | 0.106                               | 0.055                              | 759                         | 36                           |
| 2418536-24    | Mar 01 - Mar 02, 2024 | 0.101                               | 0.053                              | 759                         | 37                           |
| 2418536-25    | Mar 02 - Mar 03, 2024 | 0.094                               | 0.047                              | 759                         | 37                           |
| 2418536-26    | Mar 03 - Mar 04, 2024 | 0.096                               | 0.050                              | 759                         | 36                           |
| 2418536-27    | Mar 04 - Mar 05, 2024 | 0.101                               | 0.051                              | 759                         | 37                           |
| 2418536-28    | Mar 05 - Mar 06, 2024 | 0.096                               | 0.050                              | 759                         | 37                           |
| Guideline     |                       | 0.33                                | 0.12                               | -                           | -                            |

### Reference Method

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

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

Sampled By : Thanit Janjop

### Remark :

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

Approved by

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418531  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2913246-1

Page 1 of 1

Sample Description Air Quality  
Location บ้านนาใหม่ (GPS 47P 683755, 1584181)  
Parameter Sulfur Dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                      | 2418531-1<br>Feb 28, 2024 | 2418531-2<br>Feb 29, 2024 | 2418531-3<br>Mar 01, 2024 | 2418531-4<br>Mar 02, 2024 | 2418531-5<br>Mar 03, 2024 | 2418531-6<br>Mar 04, 2024 | 2418531-7<br>Mar 05, 2024 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 10:00 AM - 11:00 AM       | 0.001                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     |
| 11:00 AM - 12:00 PM       | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     |
| 12:00 PM - 01:00 PM       | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     |
| 01:00 PM - 02:00 PM       | 0.001                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 02:00 PM - 03:00 PM       | 0.001                     | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.002                     |
| 03:00 PM - 04:00 PM       | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     |
| 04:00 PM - 05:00 PM       | 0.002                     | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 05:00 PM - 06:00 PM       | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     |
| 06:00 PM - 07:00 PM       | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     |
| 07:00 PM - 08:00 PM       | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 08:00 PM - 09:00 PM       | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 09:00 PM - 10:00 PM       | 0.002                     | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 10:00 PM - 11:00 PM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 11:00 PM - 12:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 12:00 AM - 01:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 01:00 AM - 02:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 02:00 AM - 03:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | <0.001                    | 0.002                     |
| 03:00 AM - 04:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 04:00 AM - 05:00 AM       | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 05:00 AM - 06:00 AM       | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 06:00 AM - 07:00 AM       | 0.001                     | 0.001                     | 0.001                     | 0.002                     | 0.001                     | 0.002                     | 0.002                     |
| 07:00 AM - 08:00 AM       | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 08:00 AM - 09:00 AM       | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 09:00 AM - 10:00 AM       | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| Average                   | 0.002                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.001                     | 0.002                     |
| 1hr - Maximum             | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     | 0.002                     |
| 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

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418531  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2934679-1

Page 1 of 1

Sample Description Air Quality  
Location โรงเชื่อมเหล็ก (GPS 47P 684438, 1587210)  
Parameter Sulfur Dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                      | 2418531-8<br>Feb 28, 2024 | 2418531-9<br>Feb 29, 2024 | 2418531-10<br>Mar 01, 2024 | 2418531-11<br>Mar 02, 2024 | 2418531-12<br>Mar 03, 2024 | 2418531-13<br>Mar 04, 2024 | 2418531-14<br>Mar 05, 2024 |
|---------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 12:00 PM - 01:00 PM       | 0.002                     | 0.001                     | 0.001                      | 0.002                      | 0.002                      | 0.001                      | 0.001                      |
| 01:00 PM - 02:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | 0.001                      | 0.002                      |
| 02:00 PM - 03:00 PM       | 0.002                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | 0.002                      | 0.002                      |
| 03:00 PM - 04:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | 0.002                      | 0.002                      |
| 04:00 PM - 05:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | 0.001                      | 0.002                      |
| 05:00 PM - 06:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | 0.002                      | 0.002                      |
| 06:00 PM - 07:00 PM       | 0.002                     | 0.002                     | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 07:00 PM - 08:00 PM       | 0.002                     | 0.002                     | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 08:00 PM - 09:00 PM       | 0.002                     | 0.002                     | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 09:00 PM - 10:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.002                      | 0.001                      | 0.002                      |
| 10:00 PM - 11:00 PM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.002                      | 0.001                      | 0.001                      |
| 11:00 PM - 12:00 AM       | 0.002                     | 0.001                     | 0.002                      | 0.001                      | 0.002                      | 0.001                      | 0.001                      |
| 12:00 AM - 01:00 AM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 01:00 AM - 02:00 AM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 02:00 AM - 03:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 03:00 AM - 04:00 AM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 04:00 AM - 05:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 05:00 AM - 06:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 06:00 AM - 07:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 07:00 AM - 08:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 08:00 AM - 09:00 AM       | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 09:00 AM - 10:00 AM       | 0.001                     | 0.001                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 10:00 AM - 11:00 AM       | 0.001                     | 0.002                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| 11:00 AM - 12:00 PM       | 0.001                     | 0.002                     | 0.002                      | 0.001                      | 0.001                      | 0.001                      | 0.001                      |
| Average                   | 0.001                     | 0.001                     | 0.001                      | 0.001                      | 0.001                      | 0.001                      | 0.002                      |
| 1hr - Maximum             | 0.002                     | 0.002                     | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 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

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prankhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418531

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2934680-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** โรงเรียนวัดดอนพญา (GPS 47P 687981, 1587129)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Feb 28, 2024 - Mar 06, 2024  
**Measurement by** Thanit Janjop

| Time                      | 2418531-15<br>Feb 28, 2024 | 2418531-16<br>Feb 29, 2024 | 2418531-17<br>Mar 01, 2024 | 2418531-18<br>Mar 02, 2024 | 2418531-19<br>Mar 03, 2024 | 2418531-20<br>Mar 04, 2024 | 2418531-21<br>Mar 05, 2024 |
|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 11:00 AM - 12:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 12:00 PM - 01:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 01:00 PM - 02:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 02:00 PM - 03:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 03:00 PM - 04:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 04:00 PM - 05:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 PM - 06:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 06:00 PM - 07:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 07:00 PM - 08:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 08:00 PM - 09:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 09:00 PM - 10:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 10:00 PM - 11:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 11:00 PM - 12:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 12:00 AM - 01:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 01:00 AM - 02:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 02:00 AM - 03:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 03:00 AM - 04:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 04:00 AM - 05:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 AM - 06:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 06:00 AM - 07:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 07:00 AM - 08:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 08:00 AM - 09:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 09:00 AM - 10:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 10:00 AM - 11:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| Average                   | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 1hr - Maximum             | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 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

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prankhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418531

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2934681-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** สวนอุตสาหกรรมโรจนะ ระยะที่ 1-4 (GPS 47P 676951, 1583181)  
**Parameter** Sulfur Dioxide (ppm)  
**Measurement Date** Feb 28, 2024 - Mar 06, 2024  
**Measurement by** Thanit Janjop

| Time                      | 2418531-22<br>Feb 28, 2024 | 2418531-23<br>Feb 29, 2024 | 2418531-24<br>Mar 01, 2024 | 2418531-25<br>Mar 02, 2024 | 2418531-26<br>Mar 03, 2024 | 2418531-27<br>Mar 04, 2024 | 2418531-28<br>Mar 05, 2024 |
|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 01:00 PM - 02:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 02:00 PM - 03:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 03:00 PM - 04:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 04:00 PM - 05:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 PM - 06:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 06:00 PM - 07:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 07:00 PM - 08:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 08:00 PM - 09:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 09:00 PM - 10:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 10:00 PM - 11:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 11:00 PM - 12:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 12:00 AM - 01:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 01:00 AM - 02:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 02:00 AM - 03:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 03:00 AM - 04:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 04:00 AM - 05:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 AM - 06:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 06:00 AM - 07:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 07:00 AM - 08:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 08:00 AM - 09:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 09:00 AM - 10:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 10:00 AM - 11:00 AM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 11:00 AM - 12:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 12:00 PM - 01:00 PM       | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| Average                   | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 1hr - Maximum             | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 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

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Approved by

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418529  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2913242-1

Page 1 of 1

Sample Description Air Quality  
Location วัดหนองน้ำสน (GPS 47P 683755, 1584181)  
Parameter Nitrogen dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                   | 2418529-1<br>Feb 28, 2024 | 2418529-2<br>Feb 29, 2024 | 2418529-3<br>Mar 01, 2024 | 2418529-4<br>Mar 02, 2024 | 2418529-5<br>Mar 03, 2024 | 2418529-6<br>Mar 04, 2024 | 2418529-7<br>Mar 05, 2024 |
|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 10:00 AM - 11:00 AM    | 0.010                     | 0.009                     | 0.011                     | 0.009                     | 0.009                     | 0.010                     | 0.008                     |
| 11:00 AM - 12:00 PM    | 0.011                     | 0.009                     | 0.009                     | 0.008                     | 0.007                     | 0.014                     | 0.009                     |
| 12:00 PM - 01:00 PM    | 0.008                     | 0.008                     | 0.012                     | 0.006                     | 0.005                     | 0.011                     | 0.010                     |
| 01:00 PM - 02:00 PM    | 0.008                     | 0.007                     | 0.013                     | 0.005                     | 0.005                     | 0.007                     | 0.008                     |
| 02:00 PM - 03:00 PM    | 0.002                     | 0.006                     | 0.010                     | 0.010                     | 0.005                     | 0.005                     | 0.007                     |
| 03:00 PM - 04:00 PM    | 0.005                     | 0.006                     | 0.008                     | 0.007                     | 0.005                     | 0.004                     | 0.006                     |
| 04:00 PM - 05:00 PM    | 0.005                     | 0.006                     | 0.008                     | 0.010                     | 0.005                     | 0.005                     | 0.005                     |
| 05:00 PM - 06:00 PM    | 0.005                     | 0.007                     | 0.008                     | 0.008                     | 0.006                     | 0.005                     | 0.006                     |
| 06:00 PM - 07:00 PM    | 0.006                     | 0.010                     | 0.009                     | 0.010                     | 0.006                     | 0.005                     | 0.006                     |
| 07:00 PM - 08:00 PM    | 0.019                     | 0.015                     | 0.011                     | 0.013                     | 0.008                     | 0.008                     | 0.009                     |
| 08:00 PM - 09:00 PM    | 0.020                     | 0.017                     | 0.013                     | 0.012                     | 0.012                     | 0.015                     | 0.016                     |
| 09:00 PM - 10:00 PM    | 0.021                     | 0.014                     | 0.020                     | 0.008                     | 0.013                     | 0.019                     | 0.021                     |
| 10:00 PM - 11:00 PM    | 0.020                     | 0.015                     | 0.025                     | 0.011                     | 0.019                     | 0.016                     | 0.010                     |
| 11:00 PM - 12:00 AM    | 0.017                     | 0.016                     | 0.024                     | 0.013                     | 0.018                     | 0.016                     | 0.008                     |
| 12:00 AM - 01:00 AM    | 0.012                     | 0.013                     | 0.022                     | 0.015                     | 0.017                     | 0.015                     | 0.008                     |
| 01:00 AM - 02:00 AM    | 0.010                     | 0.013                     | 0.019                     | 0.012                     | 0.016                     | 0.013                     | 0.014                     |
| 02:00 AM - 03:00 AM    | 0.010                     | 0.012                     | 0.014                     | 0.012                     | 0.013                     | 0.010                     | 0.011                     |
| 03:00 AM - 04:00 AM    | 0.009                     | 0.009                     | 0.012                     | 0.011                     | 0.010                     | 0.011                     | 0.010                     |
| 04:00 AM - 05:00 AM    | 0.008                     | 0.009                     | 0.009                     | 0.009                     | 0.010                     | 0.010                     | 0.010                     |
| 05:00 AM - 06:00 AM    | 0.007                     | 0.011                     | 0.007                     | 0.008                     | 0.009                     | 0.010                     | 0.010                     |
| 06:00 AM - 07:00 AM    | 0.009                     | 0.011                     | 0.008                     | 0.009                     | 0.009                     | 0.009                     | 0.010                     |
| 07:00 AM - 08:00 AM    | 0.012                     | 0.012                     | 0.012                     | 0.011                     | 0.008                     | 0.010                     | 0.011                     |
| 08:00 AM - 09:00 AM    | 0.011                     | 0.012                     | 0.011                     | 0.014                     | 0.010                     | 0.010                     | 0.011                     |
| 09:00 AM - 10:00 AM    | 0.011                     | 0.011                     | 0.010                     | 0.014                     | 0.009                     | 0.009                     | 0.010                     |
| Average                | 0.011                     | 0.011                     | 0.013                     | 0.010                     | 0.010                     | 0.010                     | 0.010                     |
| 1hr - Maximum          | 0.021                     | 0.017                     | 0.025                     | 0.015                     | 0.019                     | 0.019                     | 0.021                     |
| 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

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418529  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2934676-1

Page 1 of 1

Sample Description Air Quality  
Location โรงสีมันสำปะหลัง (GPS 47P 684438, 1587210)  
Parameter Nitrogen dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                   | 2418529-8<br>Feb 28, 2024 | 2418529-9<br>Feb 29, 2024 | 2418529-10<br>Mar 01, 2024 | 2418529-11<br>Mar 02, 2024 | 2418529-12<br>Mar 03, 2024 | 2418529-13<br>Mar 04, 2024 | 2418529-14<br>Mar 05, 2024 |
|------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 12:00 PM - 01:00 PM    | 0.001                     | <0.001                    | 0.001                      | 0.001                      | 0.002                      | 0.001                      | <0.001                     |
| 01:00 PM - 02:00 PM    | 0.002                     | <0.001                    | 0.001                      | 0.002                      | 0.001                      | <0.001                     | <0.001                     |
| 02:00 PM - 03:00 PM    | 0.001                     | 0.002                     | <0.001                     | 0.006                      | 0.003                      | <0.001                     | 0.001                      |
| 03:00 PM - 04:00 PM    | <0.001                    | 0.004                     | <0.001                     | <0.001                     | 0.001                      | 0.001                      | <0.001                     |
| 04:00 PM - 05:00 PM    | 0.002                     | 0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 PM - 06:00 PM    | <0.001                    | <0.001                    | <0.001                     | 0.002                      | <0.001                     | <0.001                     | <0.001                     |
| 06:00 PM - 07:00 PM    | <0.001                    | 0.001                     | <0.001                     | 0.002                      | <0.001                     | <0.001                     | <0.001                     |
| 07:00 PM - 08:00 PM    | 0.002                     | 0.001                     | 0.002                      | 0.003                      | 0.001                      | 0.002                      | 0.006                      |
| 08:00 PM - 09:00 PM    | 0.003                     | 0.001                     | 0.003                      | 0.001                      | 0.002                      | 0.001                      | 0.006                      |
| 09:00 PM - 10:00 PM    | 0.003                     | 0.001                     | 0.004                      | <0.001                     | 0.003                      | 0.002                      | 0.003                      |
| 10:00 PM - 11:00 PM    | 0.003                     | 0.001                     | 0.006                      | 0.001                      | 0.002                      | 0.002                      | 0.005                      |
| 11:00 PM - 12:00 AM    | 0.002                     | 0.001                     | 0.006                      | 0.002                      | 0.002                      | 0.002                      | 0.003                      |
| 12:00 AM - 01:00 AM    | 0.001                     | 0.001                     | 0.004                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 01:00 AM - 02:00 AM    | <0.001                    | 0.002                     | 0.004                      | 0.002                      | 0.002                      | 0.001                      | <0.001                     |
| 02:00 AM - 03:00 AM    | <0.001                    | <0.001                    | 0.002                      | 0.001                      | 0.002                      | <0.001                     | 0.001                      |
| 03:00 AM - 04:00 AM    | <0.001                    | <0.001                    | 0.001                      | 0.001                      | 0.001                      | <0.001                     | 0.001                      |
| 04:00 AM - 05:00 AM    | <0.001                    | <0.001                    | <0.001                     | <0.001                     | <0.001                     | <0.001                     | <0.001                     |
| 05:00 AM - 06:00 AM    | <0.001                    | <0.001                    | <0.001                     | <0.001                     | <0.001                     | <0.001                     | 0.001                      |
| 06:00 AM - 07:00 AM    | 0.002                     | 0.001                     | <0.001                     | 0.001                      | <0.001                     | <0.001                     | 0.001                      |
| 07:00 AM - 08:00 AM    | 0.002                     | 0.001                     | 0.001                      | 0.002                      | <0.001                     | 0.001                      | <0.001                     |
| 08:00 AM - 09:00 AM    | 0.001                     | <0.001                    | 0.001                      | 0.002                      | <0.001                     | <0.001                     | <0.001                     |
| 09:00 AM - 10:00 AM    | <0.001                    | <0.001                    | <0.001                     | 0.001                      | <0.001                     | <0.001                     | 0.001                      |
| 10:00 AM - 11:00 AM    | 0.001                     | <0.001                    | <0.001                     | <0.001                     | <0.001                     | <0.001                     | 0.001                      |
| 11:00 AM - 12:00 PM    | 0.001                     | <0.001                    | <0.001                     | 0.001                      | 0.001                      | <0.001                     | <0.001                     |
| Average                | 0.001                     | 0.001                     | 0.002                      | 0.002                      | 0.001                      | <0.001                     | 0.002                      |
| 1hr - Maximum          | 0.003                     | 0.004                     | 0.006                      | 0.006                      | 0.003                      | 0.002                      | 0.006                      |
| 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

*Orawan R.*

Orawan Rakyong  
Scientist (3)

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyuthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418529  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2934677-1

Page 1 of 1

Sample Description Air Quality  
Location โรงเจินวัดคลองพุดซา (GPS 47P 687981, 1587129)  
Parameter Nitrogen dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                   | 2418529-15<br>Feb 28, 2024 | 2418529-16<br>Feb 29, 2024 | 2418529-17<br>Mar 01, 2024 | 2418529-18<br>Mar 02, 2024 | 2418529-19<br>Mar 03, 2024 | 2418529-20<br>Mar 04, 2024 | 2418529-21<br>Mar 05, 2024 |
|------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 11:00 AM - 12:00 PM    | <0.001                     | 0.001                      | 0.002                      | 0.001                      | <0.001                     | 0.006                      | 0.002                      |
| 12:00 PM - 01:00 PM    | 0.003                      | 0.001                      | 0.002                      | <0.001                     | <0.001                     | 0.005                      | 0.002                      |
| 01:00 PM - 02:00 PM    | 0.001                      | <0.001                     | 0.003                      | <0.001                     | <0.001                     | 0.001                      | 0.002                      |
| 02:00 PM - 03:00 PM    | 0.001                      | <0.001                     | 0.002                      | 0.001                      | <0.001                     | <0.001                     | 0.003                      |
| 03:00 PM - 04:00 PM    | 0.001                      | <0.001                     | 0.002                      | <0.001                     | <0.001                     | <0.001                     | 0.001                      |
| 04:00 PM - 05:00 PM    | <0.001                     | <0.001                     | 0.003                      | 0.002                      | <0.001                     | <0.001                     | 0.002                      |
| 05:00 PM - 06:00 PM    | <0.001                     | 0.002                      | 0.002                      | 0.002                      | <0.001                     | <0.001                     | 0.004                      |
| 06:00 PM - 07:00 PM    | 0.001                      | 0.002                      | 0.002                      | 0.003                      | <0.001                     | <0.001                     | 0.002                      |
| 07:00 PM - 08:00 PM    | 0.007                      | 0.006                      | 0.004                      | 0.006                      | 0.002                      | 0.006                      | 0.004                      |
| 08:00 PM - 09:00 PM    | 0.010                      | 0.007                      | 0.006                      | 0.004                      | 0.005                      | 0.006                      | 0.004                      |
| 09:00 PM - 10:00 PM    | 0.010                      | 0.006                      | 0.009                      | 0.004                      | 0.009                      | 0.007                      | 0.006                      |
| 10:00 PM - 11:00 PM    | 0.009                      | 0.006                      | 0.010                      | 0.004                      | 0.009                      | 0.008                      | 0.007                      |
| 11:00 PM - 12:00 AM    | 0.005                      | 0.005                      | 0.009                      | 0.004                      | 0.008                      | 0.006                      | 0.006                      |
| 12:00 AM - 01:00 AM    | 0.003                      | 0.004                      | 0.009                      | 0.005                      | 0.006                      | 0.006                      | 0.004                      |
| 01:00 AM - 02:00 AM    | 0.002                      | 0.003                      | 0.007                      | 0.004                      | 0.004                      | 0.004                      | 0.006                      |
| 02:00 AM - 03:00 AM    | 0.002                      | 0.002                      | 0.005                      | 0.004                      | 0.003                      | 0.003                      | 0.003                      |
| 03:00 AM - 04:00 AM    | 0.002                      | 0.002                      | 0.003                      | 0.003                      | 0.003                      | 0.002                      | 0.002                      |
| 04:00 AM - 05:00 AM    | <0.001                     | 0.003                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 05:00 AM - 06:00 AM    | 0.001                      | 0.003                      | 0.001                      | 0.002                      | 0.002                      | 0.002                      | 0.002                      |
| 06:00 AM - 07:00 AM    | 0.003                      | 0.003                      | 0.002                      | 0.003                      | 0.002                      | 0.002                      | 0.002                      |
| 07:00 AM - 08:00 AM    | 0.003                      | 0.004                      | 0.003                      | 0.004                      | 0.002                      | 0.003                      | 0.003                      |
| 08:00 AM - 09:00 AM    | 0.004                      | 0.004                      | 0.003                      | 0.006                      | 0.002                      | 0.003                      | 0.004                      |
| 09:00 AM - 10:00 AM    | 0.003                      | 0.004                      | 0.003                      | 0.005                      | 0.002                      | 0.002                      | 0.004                      |
| 10:00 AM - 11:00 AM    | 0.002                      | 0.002                      | 0.002                      | 0.002                      | 0.003                      | 0.003                      | 0.002                      |
| Average                | 0.003                      | 0.003                      | 0.004                      | 0.003                      | 0.003                      | 0.003                      | 0.003                      |
| 1hr - Maximum          | 0.010                      | 0.007                      | 0.010                      | 0.006                      | 0.009                      | 0.008                      | 0.007                      |
| 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)

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

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Orawan Rakyong  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyuthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418529  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2934678-1

Page 1 of 1

Sample Description Air Quality  
Location สวนอุตสาหกรรมโรจนะ ระยะที่ 1-4 (GPS 47P 676951, 1583181)  
Parameter Nitrogen dioxide (ppm)  
Measurement Date Feb 28, 2024 - Mar 06, 2024  
Measurement by Thanit Janjop

| Time                   | 2418529-22<br>Feb 28, 2024 | 2418529-23<br>Feb 29, 2024 | 2418529-24<br>Mar 01, 2024 | 2418529-25<br>Mar 02, 2024 | 2418529-26<br>Mar 03, 2024 | 2418529-27<br>Mar 04, 2024 | 2418529-28<br>Mar 05, 2024 |
|------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 01:00 PM - 02:00 PM    | 0.005                      | 0.006                      | 0.008                      | 0.006                      | 0.005                      | 0.006                      | 0.008                      |
| 02:00 PM - 03:00 PM    | 0.005                      | 0.005                      | 0.007                      | 0.007                      | 0.005                      | 0.008                      | 0.008                      |
| 03:00 PM - 04:00 PM    | 0.005                      | 0.006                      | 0.010                      | 0.008                      | 0.006                      | 0.008                      | 0.009                      |
| 04:00 PM - 05:00 PM    | 0.006                      | 0.007                      | 0.010                      | 0.009                      | 0.007                      | 0.008                      | <0.001                     |
| 05:00 PM - 06:00 PM    | 0.007                      | 0.008                      | 0.009                      | 0.010                      | 0.008                      | 0.009                      | 0.013                      |
| 06:00 PM - 07:00 PM    | 0.012                      | 0.010                      | 0.014                      | 0.011                      | 0.010                      | 0.009                      | 0.012                      |
| 07:00 PM - 08:00 PM    | 0.005                      | 0.011                      | 0.018                      | 0.012                      | 0.012                      | 0.013                      | 0.014                      |
| 08:00 PM - 09:00 PM    | 0.013                      | 0.010                      | 0.016                      | 0.013                      | 0.014                      | 0.014                      | 0.008                      |
| 09:00 PM - 10:00 PM    | 0.011                      | 0.009                      | 0.015                      | 0.006                      | 0.013                      | 0.010                      | 0.016                      |
| 10:00 PM - 11:00 PM    | 0.010                      | 0.008                      | 0.011                      | 0.008                      | 0.013                      | 0.008                      | 0.014                      |
| 11:00 PM - 12:00 AM    | 0.008                      | 0.008                      | 0.010                      | 0.009                      | 0.011                      | 0.008                      | 0.008                      |
| 12:00 AM - 01:00 AM    | 0.007                      | 0.007                      | 0.010                      | 0.007                      | 0.008                      | 0.007                      | 0.007                      |
| 01:00 AM - 02:00 AM    | 0.006                      | 0.006                      | 0.009                      | 0.006                      | 0.007                      | 0.006                      | 0.008                      |
| 02:00 AM - 03:00 AM    | 0.006                      | 0.005                      | 0.006                      | 0.005                      | 0.006                      | 0.005                      | 0.005                      |
| 03:00 AM - 04:00 AM    | 0.005                      | 0.004                      | 0.005                      | 0.006                      | 0.005                      | 0.006                      | 0.006                      |
| 04:00 AM - 05:00 AM    | 0.004                      | 0.004                      | 0.004                      | 0.005                      | 0.005                      | 0.005                      | 0.005                      |
| 05:00 AM - 06:00 AM    | 0.004                      | 0.005                      | 0.004                      | 0.004                      | 0.005                      | 0.005                      | 0.005                      |
| 06:00 AM - 07:00 AM    | 0.004                      | 0.005                      | 0.004                      | 0.004                      | 0.004                      | 0.005                      | 0.004                      |
| 07:00 AM - 08:00 AM    | 0.005                      | 0.005                      | 0.004                      | 0.004                      | 0.005                      | 0.006                      | 0.004                      |
| 08:00 AM - 09:00 AM    | 0.005                      | 0.006                      | 0.004                      | 0.004                      | 0.005                      | 0.005                      | 0.004                      |
| 09:00 AM - 10:00 AM    | 0.005                      | 0.005                      | 0.004                      | 0.004                      | 0.006                      | 0.006                      | 0.005                      |
| 10:00 AM - 11:00 AM    | 0.005                      | 0.006                      | 0.006                      | 0.004                      | 0.008                      | 0.007                      | 0.006                      |
| 11:00 AM - 12:00 PM    | 0.006                      | 0.007                      | 0.004                      | 0.004                      | 0.008                      | 0.008                      | 0.007                      |
| Average                | 0.006                      | 0.007                      | 0.008                      | 0.007                      | 0.008                      | 0.008                      | 0.008                      |
| 1hr - Maximum          | 0.013                      | 0.011                      | 0.018                      | 0.013                      | 0.014                      | 0.014                      | 0.016                      |
| 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)

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

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418533

Date Received : Mar 07, 2024

Date Reported : Mar 14, 2024

Report Number : 2933588-1

Page 1 of 1

Sample Number 2418533-1 to 7  
Parameter Temperature  
Location วัดหนองน้ำส้ม (GPS 47P 0683755, 1584181)  
Sampling Date Feb 28 - Mar 06, 2024  
Sampling by Thanit Janjop

| Time                | Temperature (°C)      |                       |                       |                       |                       |                       |                       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                     | Feb 28 - Feb 29, 2024 | Feb 29 - Mar 01, 2024 | Mar 01 - Mar 02, 2024 | Mar 02 - Mar 03, 2024 | Mar 03 - Mar 04, 2024 | Mar 04 - Mar 05, 2024 | Mar 05 - Mar 06, 2024 |
| 10:00 AM - 11:00 AM | 33.1                  | 32.2                  | 32.5                  | 31.7                  | 32.3                  | 33.3                  | 32.8                  |
| 11:00 AM - 12:00 PM | 33.7                  | 34.4                  | 33.6                  | 32.9                  | 33.9                  | 35.0                  | 34.7                  |
| 12:00 PM - 01:00 PM | 34.8                  | 36.0                  | 35.5                  | 32.0                  | 34.0                  | 37.2                  | 36.4                  |
| 01:00 PM - 02:00 PM | 35.2                  | 36.0                  | 34.8                  | 33.2                  | 35.0                  | 37.3                  | 38.6                  |
| 02:00 PM - 03:00 PM | 35.5                  | 37.6                  | 35.9                  | 34.0                  | 35.6                  | 38.0                  | 38.9                  |
| 03:00 PM - 04:00 PM | 36.2                  | 36.6                  | 37.2                  | 32.5                  | 34.7                  | 37.7                  | 38.9                  |
| 04:00 PM - 05:00 PM | 36.0                  | 35.4                  | 36.2                  | 32.3                  | 35.3                  | 36.9                  | 38.2                  |
| 05:00 PM - 06:00 PM | 35.3                  | 34.9                  | 34.3                  | 32.8                  | 34.3                  | 35.9                  | 36.6                  |
| 06:00 PM - 07:00 PM | 32.5                  | 32.8                  | 32.7                  | 31.8                  | 32.7                  | 33.3                  | 32.7                  |
| 07:00 PM - 08:00 PM | 30.6                  | 30.8                  | 31.5                  | 30.6                  | 31.2                  | 31.7                  | 29.4                  |
| 08:00 PM - 09:00 PM | 30.1                  | 29.7                  | 31.1                  | 28.4                  | 30.5                  | 30.6                  | 29.0                  |
| 09:00 PM - 10:00 PM | 29.5                  | 29.0                  | 29.5                  | 28.2                  | 30.1                  | 30.0                  | 29.3                  |
| 10:00 PM - 11:00 PM | 28.2                  | 27.8                  | 28.7                  | 27.8                  | 29.7                  | 29.3                  | 27.8                  |
| 11:00 PM - 12:00 AM | 27.8                  | 27.7                  | 27.8                  | 27.2                  | 29.0                  | 28.9                  | 27.6                  |
| 12:00 AM - 01:00 AM | 27.3                  | 27.3                  | 27.3                  | 26.7                  | 28.4                  | 28.9                  | 27.8                  |
| 01:00 AM - 02:00 AM | 27.3                  | 27.5                  | 27.5                  | 26.7                  | 27.7                  | 28.1                  | 27.6                  |
| 02:00 AM - 03:00 AM | 27.1                  | 27.0                  | 27.1                  | 26.8                  | 26.8                  | 27.1                  | 25.6                  |
| 03:00 AM - 04:00 AM | 26.8                  | 26.7                  | 27.0                  | 27.0                  | 27.1                  | 26.7                  | 25.6                  |
| 04:00 AM - 05:00 AM | 26.5                  | 26.8                  | 26.8                  | 26.6                  | 26.7                  | 26.6                  | 26.1                  |
| 05:00 AM - 06:00 AM | 26.4                  | 26.6                  | 26.5                  | 26.4                  | 26.5                  | 26.4                  | 26.1                  |
| 06:00 AM - 07:00 AM | 26.5                  | 26.1                  | 26.6                  | 26.6                  | 26.5                  | 26.1                  | 26.0                  |
| 07:00 AM - 08:00 AM | 27.0                  | 26.6                  | 26.4                  | 26.7                  | 27.0                  | 26.8                  | 26.6                  |
| 08:00 AM - 09:00 AM | 28.9                  | 28.4                  | 28.2                  | 27.7                  | 29.0                  | 29.4                  | 28.8                  |
| 09:00 AM - 10:00 AM | 31.2                  | 30.9                  | 29.7                  | 29.5                  | 31.4                  | 31.2                  | 30.2                  |
| Average - 24 hr     | 30.6                  | 30.6                  | 30.6                  | 29.4                  | 30.6                  | 31.4                  | 30.9                  |
| Max - 1 hr          | 36.2                  | 37.6                  | 37.2                  | 34.0                  | 35.6                  | 38.0                  | 38.9                  |
| Min - 1 hr          | 26.4                  | 26.1                  | 26.4                  | 26.4                  | 26.5                  | 26.1                  | 25.6                  |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418533

Date Received : Mar 07, 2024

Date Reported : Mar 14, 2024

Report Number : 2933595-1

Page 1 of 1

Sample Number 2418533-8 to 14  
Parameter Temperature  
Location โรงเรียนวัดนางชี (GPS 47P 0684438, 1587210)  
Sampling Date Feb 28 - Mar 06, 2024  
Sampling by Thanit Janjop

| Time                | Temperature (°C)      |                       |                       |                       |                       |                       |                       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                     | Feb 28 - Feb 29, 2024 | Feb 29 - Mar 01, 2024 | Mar 01 - Mar 02, 2024 | Mar 02 - Mar 03, 2024 | Mar 03 - Mar 04, 2024 | Mar 04 - Mar 05, 2024 | Mar 05 - Mar 06, 2024 |
| 12:00 PM - 01:00 PM | 35.3                  | 34.5                  | 34.4                  | 33.7                  | 35.1                  | 34.9                  | 35.5                  |
| 01:00 PM - 02:00 PM | 35.5                  | 35.1                  | 35.0                  | 35.3                  | 36.0                  | 36.7                  | 37.6                  |
| 02:00 PM - 03:00 PM | 35.9                  | 36.1                  | 36.4                  | 35.0                  | 36.0                  | 36.7                  | 37.5                  |
| 03:00 PM - 04:00 PM | 36.5                  | 36.3                  | 36.6                  | 34.7                  | 35.8                  | 37.3                  | 38.8                  |
| 04:00 PM - 05:00 PM | 36.0                  | 35.1                  | 36.0                  | 32.9                  | 35.3                  | 38.9                  | 38.4                  |
| 05:00 PM - 06:00 PM | 35.1                  | 34.1                  | 34.9                  | 33.1                  | 34.5                  | 36.7                  | 38.8                  |
| 06:00 PM - 07:00 PM | 33.2                  | 32.5                  | 33.8                  | 32.5                  | 33.4                  | 34.7                  | 34.9                  |
| 07:00 PM - 08:00 PM | 31.6                  | 28.6                  | 32.1                  | 31.1                  | 32.0                  | 31.7                  | 31.2                  |
| 08:00 PM - 09:00 PM | 30.5                  | 28.4                  | 31.1                  | 28.8                  | 31.2                  | 30.1                  | 29.2                  |
| 09:00 PM - 10:00 PM | 29.2                  | 27.1                  | 30.1                  | 28.4                  | 30.3                  | 29.8                  | 29.2                  |
| 10:00 PM - 11:00 PM | 28.7                  | 26.2                  | 29.5                  | 28.3                  | 29.7                  | 29.3                  | 28.3                  |
| 11:00 PM - 12:00 AM | 28.1                  | 26.0                  | 28.7                  | 27.9                  | 29.0                  | 28.6                  | 27.8                  |
| 12:00 AM - 01:00 AM | 27.6                  | 28.1                  | 28.3                  | 27.5                  | 28.7                  | 28.2                  | 27.8                  |
| 01:00 AM - 02:00 AM | 27.5                  | 28.2                  | 28.1                  | 27.0                  | 28.4                  | 28.1                  | 27.5                  |
| 02:00 AM - 03:00 AM | 27.2                  | 27.1                  | 27.5                  | 27.2                  | 27.6                  | 27.5                  | 26.4                  |
| 03:00 AM - 04:00 AM | 27.2                  | 27.0                  | 27.5                  | 27.0                  | 27.3                  | 27.1                  | 26.1                  |
| 04:00 AM - 05:00 AM | 27.0                  | 26.9                  | 27.1                  | 27.0                  | 27.0                  | 27.0                  | 26.4                  |
| 05:00 AM - 06:00 AM | 27.0                  | 26.7                  | 27.0                  | 27.1                  | 26.8                  | 26.7                  | 26.4                  |
| 06:00 AM - 07:00 AM | 27.0                  | 27.4                  | 27.0                  | 27.0                  | 26.7                  | 26.5                  | 26.4                  |
| 07:00 AM - 08:00 AM | 27.1                  | 28.1                  | 27.1                  | 27.2                  | 27.1                  | 26.7                  | 26.6                  |
| 08:00 AM - 09:00 AM | 28.9                  | 30.1                  | 28.9                  | 28.8                  | 28.8                  | 28.6                  | 28.2                  |
| 09:00 AM - 10:00 AM | 30.5                  | 32.6                  | 29.5                  | 31.1                  | 30.6                  | 29.9                  | 30.3                  |
| 10:00 AM - 11:00 AM | 32.4                  | 33.5                  | 31.4                  | 32.6                  | 32.7                  | 32.3                  | 32.2                  |
| 11:00 AM - 12:00 PM | 33.9                  | 34.1                  | 33.4                  | 33.4                  | 34.2                  | 34.2                  | 34.6                  |
| Average - 24 hr     | 30.8                  | 30.4                  | 30.9                  | 30.2                  | 31.0                  | 31.2                  | 31.1                  |
| Max - 1 hr          | 36.5                  | 36.3                  | 36.6                  | 35.3                  | 36.0                  | 38.9                  | 38.8                  |
| Min - 1 hr          | 27.0                  | 26.0                  | 27.0                  | 27.0                  | 26.7                  | 26.5                  | 26.1                  |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418533

Date Received :Mar 07, 2024

Date Reported :Mar 14, 2024

Report Number :2933602-1

Page 1 of 1

Sample Number 2418533-15 to 21  
Parameter Temperature  
Location โรงเรือนวัดอุณหภูมิ (GPS 47P 0687981, 1587129)  
Sampling Date Feb 28 - Mar 06, 2024  
Sampling by Thanit Janjop

| Time                | Temperature (°C)      |                       |                       |                       |                       |                       |                       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                     | Feb 28 - Feb 29, 2024 | Feb 29 - Mar 01, 2024 | Mar 01 - Mar 02, 2024 | Mar 02 - Mar 03, 2024 | Mar 03 - Mar 04, 2024 | Mar 04 - Mar 05, 2024 | Mar 05 - Mar 06, 2024 |
| 11:00 AM - 12:00 PM | 36.6                  | 33.9                  | 32.9                  | 34.3                  | 33.2                  | 34.2                  | 34.5                  |
| 12:00 PM - 01:00 PM | 36.2                  | 34.4                  | 34.0                  | 34.4                  | 33.9                  | 36.6                  | 35.3                  |
| 01:00 PM - 02:00 PM | 35.0                  | 35.1                  | 35.1                  | 33.2                  | 34.7                  | 36.1                  | 36.5                  |
| 02:00 PM - 03:00 PM | 35.6                  | 35.4                  | 35.6                  | 35.4                  | 34.9                  | 36.1                  | 37.6                  |
| 03:00 PM - 04:00 PM | 36.2                  | 35.4                  | 35.6                  | 32.3                  | 35.3                  | 36.9                  | 37.8                  |
| 04:00 PM - 05:00 PM | 35.3                  | 34.9                  | 35.0                  | 32.7                  | 34.5                  | 36.6                  | 37.3                  |
| 05:00 PM - 06:00 PM | 34.2                  | 33.6                  | 33.4                  | 32.1                  | 33.6                  | 34.5                  | 35.5                  |
| 06:00 PM - 07:00 PM | 31.4                  | 31.5                  | 32.1                  | 31.1                  | 32.3                  | 32.9                  | 31.0                  |
| 07:00 PM - 08:00 PM | 30.1                  | 29.5                  | 31.1                  | 28.9                  | 31.4                  | 30.9                  | 29.3                  |
| 08:00 PM - 09:00 PM | 29.4                  | 28.6                  | 29.7                  | 28.2                  | 30.5                  | 29.7                  | 28.8                  |
| 09:00 PM - 10:00 PM | 28.6                  | 27.8                  | 28.9                  | 27.9                  | 29.3                  | 28.9                  | 27.7                  |
| 10:00 PM - 11:00 PM | 27.7                  | 27.6                  | 28.4                  | 27.5                  | 28.6                  | 28.2                  | 26.8                  |
| 11:00 PM - 12:00 AM | 27.3                  | 27.2                  | 27.6                  | 26.8                  | 28.2                  | 27.8                  | 27.1                  |
| 12:00 AM - 01:00 AM | 27.1                  | 27.1                  | 27.5                  | 26.8                  | 27.8                  | 27.9                  | 27.0                  |
| 01:00 AM - 02:00 AM | 26.8                  | 27.0                  | 27.1                  | 27.0                  | 27.1                  | 27.1                  | 25.9                  |
| 02:00 AM - 03:00 AM | 26.8                  | 26.8                  | 26.8                  | 26.7                  | 27.1                  | 26.8                  | 25.9                  |
| 03:00 AM - 04:00 AM | 26.5                  | 26.5                  | 27.0                  | 26.6                  | 26.7                  | 26.5                  | 25.6                  |
| 04:00 AM - 05:00 AM | 26.4                  | 26.5                  | 26.5                  | 26.6                  | 26.5                  | 26.4                  | 26.0                  |
| 05:00 AM - 06:00 AM | 26.4                  | 26.4                  | 26.6                  | 26.5                  | 26.4                  | 26.2                  | 26.0                  |
| 06:00 AM - 07:00 AM | 26.6                  | 26.1                  | 26.4                  | 26.4                  | 26.5                  | 25.9                  | 25.7                  |
| 07:00 AM - 08:00 AM | 27.6                  | 26.7                  | 27.3                  | 27.6                  | 27.3                  | 27.5                  | 27.1                  |
| 08:00 AM - 09:00 AM | 29.8                  | 29.3                  | 28.3                  | 29.0                  | 29.8                  | 29.5                  | 28.9                  |
| 09:00 AM - 10:00 AM | 31.2                  | 31.1                  | 30.5                  | 31.1                  | 31.6                  | 30.8                  | 31.8                  |
| 10:00 AM - 11:00 AM | 32.6                  | 32.3                  | 32.2                  | 32.6                  | 33.3                  | 32.7                  | 32.9                  |
| Average - 24 hr     | 30.5                  | 30.0                  | 30.2                  | 29.7                  | 30.4                  | 30.7                  | 30.3                  |
| Max - 1 hr          | 36.6                  | 35.4                  | 35.6                  | 35.4                  | 35.3                  | 36.9                  | 37.8                  |
| Min - 1 hr          | 26.4                  | 26.1                  | 26.4                  | 26.4                  | 26.4                  | 25.9                  | 25.6                  |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418533

Date Received :Mar 07, 2024

Date Reported :Mar 14, 2024

Report Number :2933609-1

Page 1 of 1

Sample Number 2418533-22 to 28  
Parameter Temperature  
Location สวนอุตสาหกรรมโรจนะ ระยะที่ 1-4 (GPS 47P 0676951, 1583181)  
Sampling Date Feb 28 - Mar 06, 2024  
Sampling by Thanit Janjop

| Time                | Temperature (°C)      |                       |                       |                       |                       |                       |                       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                     | Feb 28 - Feb 29, 2024 | Feb 29 - Mar 01, 2024 | Mar 01 - Mar 02, 2024 | Mar 02 - Mar 03, 2024 | Mar 03 - Mar 04, 2024 | Mar 04 - Mar 05, 2024 | Mar 05 - Mar 06, 2024 |
| 01:00 PM - 02:00 PM | 36.8                  | 36.0                  | 36.5                  | 31.6                  | 35.9                  | 37.2                  | 37.5                  |
| 02:00 PM - 03:00 PM | 36.5                  | 36.5                  | 35.5                  | 33.2                  | 35.8                  | 37.2                  | 38.3                  |
| 03:00 PM - 04:00 PM | 36.1                  | 36.1                  | 36.1                  | 31.5                  | 36.0                  | 37.3                  | 38.4                  |
| 04:00 PM - 05:00 PM | 34.9                  | 35.1                  | 35.8                  | 32.7                  | 34.8                  | 36.1                  | 37.2                  |
| 05:00 PM - 06:00 PM | 34.8                  | 34.7                  | 35.1                  | 32.9                  | 34.7                  | 35.5                  | 37.0                  |
| 06:00 PM - 07:00 PM | 33.3                  | 33.3                  | 34.0                  | 32.6                  | 33.9                  | 34.9                  | 34.4                  |
| 07:00 PM - 08:00 PM | 31.7                  | 31.4                  | 32.8                  | 31.6                  | 32.7                  | 33.4                  | 31.6                  |
| 08:00 PM - 09:00 PM | 30.5                  | 29.9                  | 31.8                  | 29.4                  | 31.7                  | 31.1                  | 31.0                  |
| 09:00 PM - 10:00 PM | 29.7                  | 29.3                  | 30.4                  | 29.0                  | 31.1                  | 30.3                  | 29.5                  |
| 10:00 PM - 11:00 PM | 28.8                  | 28.7                  | 29.8                  | 28.8                  | 30.1                  | 29.9                  | 29.0                  |
| 11:00 PM - 12:00 AM | 28.7                  | 28.3                  | 29.0                  | 28.2                  | 29.2                  | 29.3                  | 28.3                  |
| 12:00 AM - 01:00 AM | 28.3                  | 28.1                  | 28.6                  | 27.6                  | 28.8                  | 28.8                  | 27.7                  |
| 01:00 AM - 02:00 AM | 28.1                  | 28.3                  | 27.9                  | 27.3                  | 28.4                  | 28.6                  | 27.1                  |
| 02:00 AM - 03:00 AM | 27.8                  | 27.8                  | 27.6                  | 27.3                  | 28.2                  | 28.2                  | 26.6                  |
| 03:00 AM - 04:00 AM | 27.7                  | 27.7                  | 27.3                  | 27.3                  | 27.7                  | 27.7                  | 26.2                  |
| 04:00 AM - 05:00 AM | 27.2                  | 27.5                  | 27.6                  | 27.1                  | 27.5                  | 27.2                  | 26.0                  |
| 05:00 AM - 06:00 AM | 27.0                  | 27.1                  | 27.2                  | 27.0                  | 27.1                  | 26.8                  | 26.2                  |
| 06:00 AM - 07:00 AM | 26.7                  | 27.1                  | 26.8                  | 26.6                  | 26.8                  | 27.0                  | 26.2                  |
| 07:00 AM - 08:00 AM | 27.0                  | 27.1                  | 27.0                  | 26.7                  | 27.0                  | 26.7                  | 26.7                  |
| 08:00 AM - 09:00 AM | 28.3                  | 28.4                  | 27.8                  | 28.3                  | 28.6                  | 28.8                  | 28.6                  |
| 09:00 AM - 10:00 AM | 30.5                  | 30.3                  | 29.9                  | 30.0                  | 30.9                  | 30.9                  | 30.9                  |
| 10:00 AM - 11:00 AM | 32.3                  | 31.8                  | 32.0                  | 32.6                  | 33.2                  | 33.6                  | 32.7                  |
| 11:00 AM - 12:00 PM | 33.8                  | 33.1                  | 30.6                  | 34.0                  | 34.9                  | 34.8                  | 34.5                  |
| 12:00 PM - 01:00 PM | 34.2                  | 34.5                  | 33.3                  | 35.3                  | 35.9                  | 36.4                  | 35.9                  |
| Average - 24 hr     | 30.9                  | 30.8                  | 30.9                  | 29.9                  | 31.3                  | 31.6                  | 31.1                  |
| Max - 1 hr          | 36.8                  | 36.5                  | 36.5                  | 35.3                  | 36.0                  | 37.3                  | 38.4                  |
| Min - 1 hr          | 26.7                  | 27.1                  | 26.8                  | 26.6                  | 26.8                  | 26.7                  | 26.0                  |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyuthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418538  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number :2913255-1

Page 1 of 2

Sample Number : 2418538-1 to 7  
Parameter : Wind Speed / Wind Direction  
Location : วัดหนองน้ำส้ม (GPS 47P 0683755, 1584181)  
Sampling Date : Feb 28 - Mar 06, 2024  
Sampling by : Thanit Janjop

| Time                | Feb 28 - Feb 29, 2024 |             | Feb 29 - Mar 01, 2024 |             | Mar 01 - Mar 02, 2024 |             | Mar 02 - Mar 03, 2024 |             | Mar 03 - Mar 04, 2024 |             | Mar 04 - Mar 05, 2024 |             | Mar 05 - Mar 06, 2024 |             |     |       |       |     |     |       |     |
|---------------------|-----------------------|-------------|-----------------------|-------------|-----------------------|-------------|-----------------------|-------------|-----------------------|-------------|-----------------------|-------------|-----------------------|-------------|-----|-------|-------|-----|-----|-------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) | WS<br>(m/s)           | WD<br>(deg) |     |       |       |     |     |       |     |
| 10:00 AM - 11:00 AM | 0.2                   | -           | -                     | 1.3         | 124.0                 | SE          | 0.6                   | 126.0       | SE                    | 0.0         | -                     | -           | 0.6                   | 95.0        | E   | 0.7   | 334.0 | NNW | 0.0 | -     | -   |
| 11:00 AM - 12:00 PM | 1.4                   | 287.0       | WNW                   | 0.0         | -                     | -           | 0.4                   | 290.0       | WNW                   | 0.5         | 115.0                 | ESE         | 1.2                   | 130.0       | SE  | 0.5   | 298.0 | WNW | 1.0 | 123.0 | ESE |
| 12:00 PM - 01:00 PM | 1.0                   | 245.0       | WSW                   | 0.3         | 134.0                 | SE          | 0.1                   | -           | -                     | 0.9         | 113.0                 | ESE         | 0.7                   | 342.0       | NNW | 0.0   | -     | -   | 0.3 | 298.0 | WNW |
| 01:00 PM - 02:00 PM | 0.5                   | 195.0       | SSW                   | 2.0         | 253.0                 | WSW         | 0.9                   | 47.0        | NE                    | 0.2         | -                     | -           | 0.5                   | 119.0       | ESE | 1.6   | 274.0 | W   | 0.0 | -     | -   |
| 02:00 PM - 03:00 PM | 0.2                   | -           | -                     | 0.5         | 21.0                  | NNE         | 0.0                   | -           | -                     | 0.0         | -                     | 0.4         | 125.0                 | SE          | 0.4 | 313.0 | NW    | 0.2 | -   | -     |     |
| 03:00 PM - 04:00 PM | 1.5                   | 141.0       | SE                    | 0.2         | -                     | -           | 0.8                   | 286.0       | WNW                   | 0.1         | -                     | -           | 0.0                   | -           | -   | 0.0   | -     | -   | 0.0 | -     | -   |
| 04:00 PM - 05:00 PM | 0.1                   | -           | -                     | 0.2         | -                     | -           | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.0                   | -           | -   | 0.5   | 296.0 | WNW | 0.2 | -     | -   |
| 05:00 PM - 06:00 PM | 0.6                   | 275.0       | W                     | 0.0         | -                     | -           | 0.1                   | -           | -                     | 0.1         | -                     | -           | 0.1                   | -           | -   | 0.0   | -     | -   | 0.6 | 285.0 | WNW |
| 06:00 PM - 07:00 PM | 0.0                   | -           | -                     | 0.4         | 359.0                 | N           | 0.1                   | -           | -                     | 0.1         | -                     | -           | 0.0                   | -           | -   | 0.5   | 284.0 | WNW | 0.0 | -     | -   |
| 07:00 PM - 08:00 PM | 0.3                   | 288.0       | WNW                   | 0.8         | 265.0                 | W           | 0.5                   | 126.0       | SE                    | 0.2         | -                     | -           | 0.2                   | -           | -   | 0.0   | -     | -   | 0.1 | -     | -   |
| 08:00 PM - 09:00 PM | 0.6                   | 299.0       | WNW                   | 0.1         | -                     | -           | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.0                   | -           | -   | 0.0   | -     | -   | 0.0 | -     | -   |
| 09:00 PM - 10:00 PM | 0.0                   | -           | -                     | 0.5         | 309.0                 | NW          | 0.0                   | -           | -                     | 0.1         | -                     | -           | 0.1                   | -           | -   | 0.1   | -     | -   | 1.3 | 265.0 | W   |
| 10:00 PM - 11:00 PM | 0.2                   | -           | -                     | 0.0         | -                     | -           | 0.1                   | -           | -                     | 0.1         | -                     | -           | 0.0                   | -           | -   | 0.2   | -     | -   | 1.0 | 257.0 | WSW |
| 11:00 PM - 12:00 AM | 0.0                   | -           | -                     | 0.1         | -                     | -           | 0.0                   | -           | -                     | 0.2         | -                     | -           | 0.0                   | -           | -   | 0.0   | -     | -   | 0.4 | 280.0 | W   |
| 12:00 AM - 01:00 AM | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.3                   | 100.0       | E                     | 0.6         | 114.0                 | ESE         | 0.5                   | 266.0       | W   | 0.0   | -     | -   | 0.7 | 296.0 | WNW |
| 01:00 AM - 02:00 AM | 0.1                   | -           | -                     | 0.1         | -                     | -           | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.1                   | -           | -   | 0.0   | -     | -   | 0.0 | -     | -   |
| 02:00 AM - 03:00 AM | 0.0                   | -           | -                     | 0.1         | -                     | -           | 1.5                   | 122.0       | ESE                   | 0.0         | -                     | -           | 0.0                   | -           | -   | 0.0   | -     | -   | 0.4 | 118.0 | ESE |
| 03:00 AM - 04:00 AM | 0.1                   | -           | -                     | 0.0         | -                     | -           | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.0                   | -           | -   | 0.2   | -     | -   | 0.2 | -     | -   |
| 04:00 AM - 05:00 AM | 0.1                   | -           | -                     | 0.1         | -                     | -           | 0.5                   | 140.0       | SE                    | 0.1         | -                     | -           | 0.1                   | -           | -   | 0.1   | -     | -   | 0.0 | -     | -   |
| 05:00 AM - 06:00 AM | 0.0                   | -           | -                     | 0.1         | -                     | -           | 0.0                   | -           | -                     | 0.0         | -                     | -           | 0.0                   | -           | -   | 0.0   | -     | -   | 0.0 | -     | -   |
| 06:00 AM - 07:00 AM | 0.2                   | -           | -                     | 0.0         | -                     | -           | 0.1                   | -           | -                     | 0.5         | 124.0                 | SE          | 0.2                   | -           | -   | 0.8   | 124.0 | SE  | 0.0 | -     | -   |
| 07:00 AM - 08:00 AM | 0.2                   | -           | -                     | 0.3         | 125.0                 | SE          | 1.4                   | 112.0       | ESE                   | 1.3         | 114.0                 | ESE         | 0.6                   | 115.0       | ESE | 1.0   | 118.0 | ESE | 0.5 | 172.0 | S   |
| 08:00 AM - 09:00 AM | 0.9                   | 120.0       | ESE                   | 0.2         | -                     | -           | 2.4                   | 123.0       | ESE                   | 2.0         | 127.0                 | SE          | 0.0                   | -           | -   | 1.8   | 174.0 | S   | 0.0 | -     | -   |
| 09:00 AM - 10:00 AM | 1.0                   | 298.0       | WNW                   | 0.5         | 132.0                 | SE          | 1.0                   | 171.0       | S                     | 1.0         | 112.0                 | ESE         | 1.0                   | 159.0       | SSE | 0.3   | 127.0 | SE  | 0.2 | -     | -   |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyuthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

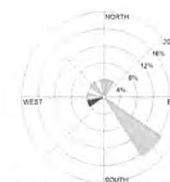
Lot ID: 2418538  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number :2913255-1

Page 2 of 2

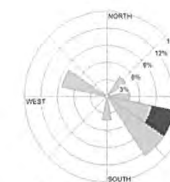
### Wind Rose



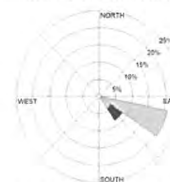
Date : Feb 28-29, 2024



Date : Feb 29-Mar 01, 2024



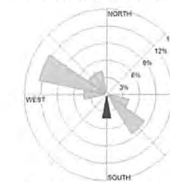
Date : Mar 01-02, 2023



Date : Mar 02-03, 2023



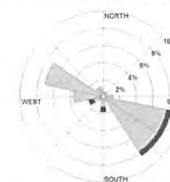
Date : Mar 03-04, 2023



Date : Mar 04-05, 2023



Date : Mar 05-06, 2023



Date : Feb 28-Mar 06, 2024

| WS(m/s)  | %     |
|----------|-------|
| ≥ 10.0   | 0.00  |
| 8.0-10.0 | 0.00  |
| 5.5-8.0  | 0.00  |
| 3.3-5.5  | 0.00  |
| 1.7-3.3  | 2.38  |
| 0.3-1.7  | 35.12 |
| Calms    | 62.50 |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418538  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number : 2913255-1

Page 1 of 2

Sample Number : 2418538-8 to 14  
Parameter : Wind Speed / Wind Direction  
Location : โรงสีน้ำตาล (GPS 47P 0684438, 1587210)  
Sampling Date : Feb 28 - Mar 06, 2024  
Sampling by : Thanit Janjop

| Time                | Feb 28 - Feb 29, 2024 |             |     | Feb 29 - Mar 01, 2024 |             |     | Mar 01 - Mar 02, 2024 |             |     | Mar 02 - Mar 03, 2024 |             |     | Mar 03 - Mar 04, 2024 |             |     | Mar 04 - Mar 05, 2024 |             |     | Mar 05 - Mar 06, 2024 |             |     |
|---------------------|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     |
| 12:00 PM - 01:00 PM | 1.0                   | 175.0       | S   | 1.0                   | 122.0       | ESE | 0.0                   | -           | -   | 0.9                   | 139.0       | SE  | 1.1                   | 162.0       | SSE | 1.0                   | 143.0       | SE  | 0.9                   | 156.0       | SSE |
| 01:00 PM - 02:00 PM | 1.7                   | 166.0       | SSE | 0.1                   | -           | -   | 1.2                   | 106.0       | ESE | 0.0                   | -           | -   | 0.7                   | 113.0       | ESE | 0.0                   | -           | -   | 2.9                   | 126.0       | SE  |
| 02:00 PM - 03:00 PM | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.6                   | 112.0       | ESE | 0.2                   | -           | -   | 0.7                   | 190.0       | S   | 1.1                   | 200.0       | SSW | 0.8                   | 180.0       | S   |
| 03:00 PM - 04:00 PM | 0.8                   | 151.0       | SSE | 0.2                   | -           | -   | 1.2                   | 146.0       | SE  | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 3.1                   | 148.0       | SSE |
| 04:00 PM - 05:00 PM | 2.3                   | 106.0       | ESE | 0.9                   | 135.0       | SE  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.7                   | 129.0       | SE  | 1.6                   | 289.0       | WNW | 1.0                   | 203.0       | SSW |
| 05:00 PM - 06:00 PM | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.1                   | -           | -   | 1.7                   | 235.0       | SW  | 1.4                   | 155.0       | SSE | 1.9                   | 168.0       | SSE | 0.1                   | -           | -   |
| 06:00 PM - 07:00 PM | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 07:00 PM - 08:00 PM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.5                   | 136.0       | SE  | 0.7                   | 66.0        | ENE | 0.1                   | -           | -   | 0.5                   | 141.0       | SE  | 0.1                   | -           | -   |
| 08:00 PM - 09:00 PM | 2.6                   | 148.0       | SSE | 0.1                   | -           | -   | 1.3                   | 129.0       | SE  | 0.3                   | 52.0        | NE  | 0.1                   | -           | -   | 2.4                   | 118.0       | ESE | 0.0                   | -           | -   |
| 09:00 PM - 10:00 PM | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.2                   | 132.0       | SE  | 0.3                   | 183.0       | S   |
| 10:00 PM - 11:00 PM | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.1                   | -           | -   | 0.9                   | 149.0       | SSE | 0.3                   | 148.0       | SSE | 0.0                   | -           | -   |
| 11:00 PM - 12:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.9                   | 121.0       | ESE | 0.0                   | -           | -   | 1.8                   | 123.0       | ESE |
| 12:00 AM - 01:00 AM | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.6                   | 206.0       | SSW | 0.0                   | -           | -   | 2.0                   | 145.0       | SE  |
| 01:00 AM - 02:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.5                   | 135.0       | SE  | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   |
| 02:00 AM - 03:00 AM | 0.1                   | -           | -   | 0.5                   | 156.0       | SSE | 0.3                   | 89.0        | E   | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 03:00 AM - 04:00 AM | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.1                   | -           | -   | 0.4                   | 134.0       | SE  | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 04:00 AM - 05:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.1                   | 124.0       | SE  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   |
| 05:00 AM - 06:00 AM | 0.1                   | -           | -   | 0.1                   | -           | -   | 0.6                   | 132.0       | SE  | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 06:00 AM - 07:00 AM | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.2                   | -           | -   | 0.3                   | 140.0       | SE  |
| 07:00 AM - 08:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.4                   | 56.0        | NE  | 0.3                   | 62.0        | ENE | 0.2                   | -           | -   | 0.3                   | 125.0       | SE  | 0.1                   | -           | -   |
| 08:00 AM - 09:00 AM | 1.1                   | 116.0       | ESE | 0.9                   | 245.0       | WSW | 0.1                   | -           | -   | 0.2                   | -           | -   | 0.6                   | 85.0        | E   | 0.7                   | 101.0       | E   | 1.5                   | 50.0        | NE  |
| 09:00 AM - 10:00 AM | 0.4                   | 140.0       | SE  | 1.0                   | 212.0       | SSW | 0.0                   | -           | -   | 0.5                   | 126.0       | SE  | 4.1                   | 134.0       | SE  | 3.8                   | 117.0       | ESE | 1.2                   | 141.0       | SE  |
| 10:00 AM - 11:00 AM | 0.1                   | -           | -   | 1.1                   | 223.0       | SW  | 1.0                   | 119.0       | ESE | 0.0                   | -           | -   | 1.8                   | 146.0       | SE  | 1.7                   | 111.0       | ESE | 3.5                   | 142.0       | SE  |
| 11:00 AM - 12:00 PM | 0.2                   | -           | -   | 0.5                   | 241.0       | WSW | 1.7                   | 138.0       | SE  | 1.0                   | 120.0       | ESE | 2.1                   | 165.0       | SSE | 0.6                   | 156.0       | SSE | 3.0                   | 135.0       | SE  |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418538  
Date Received : Mar 07, 2024  
Date Reported : Mar 14, 2024  
Report Number : 2913255-1

Page 2 of 2

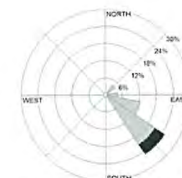
### Wind Rose



Date : Feb 28-29, 2024



Date : Feb 29-Mar 01, 2024



Date : Mar 01-02, 2023



Date : Mar 02-03, 2023



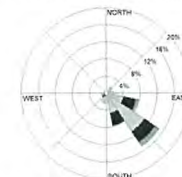
Date : Mar 03-04, 2023



Date : Mar 04-05, 2023



Date : Mar 05-06, 2023



Date : Feb 28-Mar 06, 2024

| WS(m/s)  | %     |
|----------|-------|
| > 10.0   | 0.00  |
| 8.0-10.0 | 0.00  |
| 5.5-8.0  | 0.00  |
| 3.3-5.5  | 1.79  |
| 1.7-3.3  | 9.52  |
| 0.3-1.7  | 31.55 |
| Calms    | 57.14 |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418538

Date Received :Mar 07, 2024

Date Reported :Mar 14, 2024

Report Number :2913255-1

Page 1 of 2

Sample Number 2418538-15 to 21

Parameter Wind Speed / Wind Direction

Location โรงเรือนวัดลมพุดชา (GPS 47P 0687981, 1587129)

Sampling Date Feb 28 - Mar 06, 2024

Sampling by Thanit Janjop

| Time                | Feb 28 - Feb 29, 2024 |             |     | Feb 29 - Mar 01, 2024 |             |     | Mar 01 - Mar 02, 2024 |             |     | Mar 02 - Mar 03, 2024 |             |     | Mar 03 - Mar 04, 2024 |             |     | Mar 04 - Mar 05, 2024 |             |     | Mar 05 - Mar 06, 2024 |             |     |
|---------------------|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     |
| 11:00 AM - 12:00 PM | 0.3                   | 319.0       | NW  | 2.0                   | 183.0       | S   | 3.0                   | 157.0       | SSE | 0.3                   | 64.0        | ENE | 1.3                   | 296.0       | WNW | 2.5                   | 241.0       | WSW | 1.6                   | 241.0       | WSW |
| 12:00 PM - 01:00 PM | 1.0                   | 306.0       | NW  | 2.1                   | 231.0       | SW  | 3.7                   | 200.0       | SSW | 0.6                   | 53.0        | NE  | 1.8                   | 119.0       | ESE | 1.4                   | 253.0       | WSW | 0.7                   | 144.0       | SE  |
| 01:00 PM - 02:00 PM | 0.5                   | 271.0       | W   | 1.6                   | 121.0       | ESE | 1.3                   | 172.0       | S   | 2.1                   | 257.0       | WSW | 0.3                   | 66.0        | ENE | 1.9                   | 317.0       | NW  | 1.6                   | 209.0       | SSW |
| 02:00 PM - 03:00 PM | 1.7                   | 236.0       | SW  | 2.6                   | 217.0       | SW  | 1.8                   | 141.0       | SE  | 0.6                   | 330.0       | NNW | 1.5                   | 163.0       | SSE | 1.4                   | 254.0       | WSW | 1.4                   | 249.0       | WSW |
| 03:00 PM - 04:00 PM | 1.0                   | 255.0       | WSW | 4.8                   | 190.0       | S   | 2.1                   | 180.0       | S   | 2.1                   | 254.0       | WSW | 2.4                   | 253.0       | WSW | 1.0                   | 309.0       | NW  | 1.9                   | 254.0       | WSW |
| 04:00 PM - 05:00 PM | 1.3                   | 153.0       | SSE | 0.9                   | 219.0       | SW  | 2.0                   | 157.0       | SSE | 1.0                   | 266.0       | W   | 2.2                   | 169.0       | S   | 1.8                   | 330.0       | NNW | 0.9                   | 250.0       | WSW |
| 05:00 PM - 06:00 PM | 1.0                   | 221.0       | SW  | 2.4                   | 184.0       | S   | 2.1                   | 110.0       | ESE | 0.6                   | 265.0       | W   | 1.1                   | 202.0       | SSW | 0.4                   | 231.0       | SW  | 1.0                   | 258.0       | WSW |
| 06:00 PM - 07:00 PM | 2.0                   | 240.0       | WSW | 1.8                   | 194.0       | SSW | 0.8                   | 125.0       | SE  | 0.5                   | 107.0       | ESE | 0.0                   | -           | -   | 0.6                   | 151.0       | SSE | 0.0                   | -           | -   |
| 07:00 PM - 08:00 PM | 0.8                   | 219.0       | SW  | 1.8                   | 163.0       | SSE | 0.3                   | 163.0       | SSE | 2.2                   | 133.0       | SE  | 0.0                   | -           | -   | 0.9                   | 169.0       | S   | 0.7                   | 148.0       | SSE |
| 08:00 PM - 09:00 PM | 0.7                   | 137.0       | SE  | 0.7                   | 165.0       | SSE | 1.0                   | 215.0       | SW  | 1.6                   | 149.0       | SSE | 1.1                   | 130.0       | SE  | 1.4                   | 133.0       | SE  | 0.5                   | 158.0       | SSE |
| 09:00 PM - 10:00 PM | 1.4                   | 104.0       | ESE | 1.7                   | 131.0       | SE  | 0.6                   | 204.0       | SSW | 0.6                   | 131.0       | SE  | 0.6                   | 201.0       | SSW | 0.9                   | 258.0       | WSW | 0.5                   | 240.0       | WSW |
| 10:00 PM - 11:00 PM | 1.1                   | 128.0       | SE  | 1.5                   | 127.0       | SE  | 1.1                   | 110.0       | ESE | 0.8                   | 100.0       | E   | 0.1                   | -           | -   | 1.0                   | 125.0       | SE  | 1.4                   | 240.0       | WSW |
| 11:00 PM - 12:00 AM | 0.9                   | 107.0       | ESE | 0.7                   | 136.0       | SE  | 0.9                   | 114.0       | ESE | 0.3                   | 103.0       | ESE | 1.1                   | 219.0       | SW  | 1.6                   | 129.0       | SE  | 1.1                   | 163.0       | SSE |
| 12:00 AM - 01:00 AM | 1.0                   | 127.0       | SE  | 2.1                   | 114.0       | ESE | 1.4                   | 109.0       | ESE | 0.9                   | 124.0       | SE  | 0.0                   | -           | -   | 0.9                   | 158.0       | SSE | 1.0                   | 132.0       | SE  |
| 01:00 AM - 02:00 AM | 1.1                   | 134.0       | SE  | 0.9                   | 151.0       | SSE | 1.2                   | 137.0       | SE  | 0.0                   | -           | -   | 0.5                   | 98.0        | E   | 1.1                   | 126.0       | SE  | 0.4                   | 97.0        | E   |
| 02:00 AM - 03:00 AM | 0.6                   | 133.0       | SE  | 0.0                   | -           | -   | 1.4                   | 136.0       | SE  | 1.1                   | 130.0       | SE  | 0.8                   | 149.0       | SSE | 1.4                   | 132.0       | SE  | 1.1                   | 137.0       | SE  |
| 03:00 AM - 04:00 AM | 0.5                   | 130.0       | SE  | 0.8                   | 124.0       | SE  | 1.8                   | 137.0       | SE  | 0.2                   | -           | -   | 1.0                   | 135.0       | SE  | 0.8                   | 123.0       | ESE | 0.7                   | 117.0       | ESE |
| 04:00 AM - 05:00 AM | 1.1                   | 122.0       | ESE | 0.4                   | 126.0       | SE  | 1.1                   | 154.0       | SSE | 0.0                   | -           | -   | 0.7                   | 132.0       | SE  | 1.4                   | 110.0       | ESE | 0.7                   | 129.0       | SE  |
| 05:00 AM - 06:00 AM | 0.3                   | 101.0       | E   | 0.6                   | 142.0       | SE  | 1.6                   | 131.0       | SE  | 0.6                   | 129.0       | SE  | 1.3                   | 127.0       | SE  | 0.0                   | -           | -   | 0.9                   | 145.0       | SE  |
| 06:00 AM - 07:00 AM | 0.9                   | 113.0       | ESE | 0.9                   | 126.0       | SE  | 1.4                   | 108.0       | ESE | 0.3                   | 103.0       | ESE | 0.7                   | 129.0       | SE  | 1.0                   | 124.0       | SE  | 0.5                   | 128.0       | SE  |
| 07:00 AM - 08:00 AM | 1.4                   | 149.0       | SSE | 0.5                   | 111.0       | ESE | 1.4                   | 118.0       | ESE | 1.2                   | 112.0       | ESE | 1.9                   | 129.0       | SE  | 2.1                   | 175.0       | S   | 1.8                   | 109.0       | ESE |
| 08:00 AM - 09:00 AM | 2.0                   | 187.0       | S   | 2.3                   | 141.0       | SE  | 2.2                   | 109.0       | ESE | 1.4                   | 79.0        | E   | 1.7                   | 183.0       | S   | 1.6                   | 98.0        | E   | 3.7                   | 127.0       | SE  |
| 09:00 AM - 10:00 AM | 1.9                   | 178.0       | S   | 2.8                   | 201.0       | SSW | 0.0                   | -           | -   | 2.1                   | 159.0       | SSE | 1.5                   | 194.0       | SSW | 4.3                   | 144.0       | SE  | 2.3                   | 135.0       | SE  |
| 10:00 AM - 11:00 AM | 2.3                   | 236.0       | SW  | 1.3                   | 181.0       | S   | 1.5                   | 180.0       | S   | 2.5                   | 149.0       | SSE | 2.2                   | 253.0       | WSW | 1.8                   | 225.0       | SW  | 1.9                   | 110.0       | ESE |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418538

Date Received :Mar 07, 2024

Date Reported :Mar 14, 2024

Report Number :2913255-1

Page 2 of 2

### Wind Rose



Date : Feb 28-29, 2024



Date : Feb 29-Mar 01, 2024



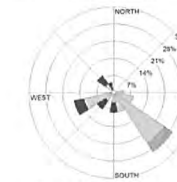
Date : Mar 01-02, 2023



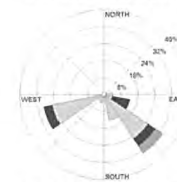
Date : Mar 02-03, 2023



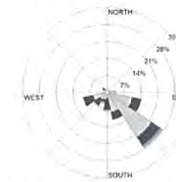
Date : Mar 03-04, 2023



Date : Mar 04-05, 2023



Date : Mar 05-06, 2023



Date : Feb 28-Mar 06, 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  | 25.00 |
| 0.3-1.7  | 66.07 |
| Calms    | 6.55  |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418538  
Date Received :Mar 07, 2024  
Date Reported :Mar 14, 2024  
Report Number :2913255-1

Page 1 of 2

Sample Number : 2418538-22 to 28  
Parameter : Wind Speed / Wind Direction  
Location : สวนอุตสาหกรรมโรจนะ ระยะที่ 1-4 (GPS 47P 0676951, 1583181)  
Sampling Date : Feb 28 - Mar 06, 2024  
Sampling by : Thanit Janjop

| Time                | Feb 28 - Feb 29, 2024 |             |     | Feb 29 - Mar 01, 2024 |             |     | Mar 01 - Mar 02, 2024 |             |     | Mar 02 - Mar 03, 2024 |             |     | Mar 03 - Mar 04, 2024 |             |     | Mar 04 - Mar 05, 2024 |             |     | Mar 05 - Mar 06, 2024 |             |     |
|---------------------|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     |
| 01:00 PM - 02:00 PM | 1.0                   | 90.0        | E   | 0.5                   | 85.0        | E   | 0.3                   | 260.0       | W   | 1.4                   | 227.0       | SW  | 0.7                   | 240.0       | WSW | 0.5                   | 280.0       | W   | 0.0                   | -           | -   |
| 02:00 PM - 03:00 PM | 0.1                   | -           | -   | 1.2                   | 195.0       | SSW | 1.2                   | 320.0       | NW  | 0.2                   | -           | -   | 0.1                   | -           | -   | 5.2                   | 326.0       | NW  | 0.9                   | 307.0       | NW  |
| 03:00 PM - 04:00 PM | 0.0                   | -           | -   | 2.1                   | 213.0       | SSW | 1.1                   | 298.0       | WNW | 0.5                   | 180.0       | S   | 0.5                   | 39.0        | NE  | 0.6                   | 290.0       | WNW | 1.4                   | 197.0       | SSW |
| 04:00 PM - 05:00 PM | 0.2                   | -           | -   | 1.0                   | 245.0       | WSW | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.2                   | -           | -   | 3.5                   | 215.0       | SW  | 0.7                   | 305.0       | NW  |
| 05:00 PM - 06:00 PM | 0.0                   | -           | -   | 1.5                   | 255.0       | WSW | 0.2                   | -           | -   | 1.7                   | 197.0       | SSW | 1.3                   | 242.0       | WSW | 1.1                   | 215.0       | SW  | 0.4                   | 294.0       | WNW |
| 06:00 PM - 07:00 PM | 0.3                   | 320.0       | NW  | 3.4                   | 194.0       | SSW | 0.0                   | -           | -   | 0.4                   | 230.0       | SW  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 07:00 PM - 08:00 PM | 0.1                   | -           | -   | 1.2                   | 189.0       | S   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 1.1                   | 255.0       | WSW | 0.2                   | -           | -   |
| 08:00 PM - 09:00 PM | 0.2                   | -           | -   | 0.9                   | 245.0       | WSW | 0.4                   | 259.0       | W   | 0.1                   | -           | -   | 0.0                   | -           | -   | 2.3                   | 208.0       | SSW | 0.3                   | 221.0       | SW  |
| 09:00 PM - 10:00 PM | 0.0                   | -           | -   | 0.0                   | -           | -   | 2.9                   | 203.0       | SSW | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.7                   | 295.0       | WNW | 0.5                   | 294.0       | WNW |
| 10:00 PM - 11:00 PM | 0.1                   | -           | -   | 0.1                   | -           | -   | 2.3                   | 207.0       | SSW | 0.2                   | -           | -   | 0.1                   | -           | -   | 2.3                   | 215.0       | SW  | 3.3                   | 187.0       | S   |
| 11:00 PM - 12:00 AM | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.5                   | 209.0       | SSW | 0.7                   | 275.0       | W   | 1.4                   | 204.0       | SSW |
| 12:00 AM - 01:00 AM | 0.0                   | -           | -   | 0.6                   | 226.0       | SW  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 1.3                   | 234.0       | SW  | 2.1                   | 210.0       | SSW |
| 01:00 AM - 02:00 AM | 0.1                   | -           | -   | 0.3                   | 99.0        | E   | 0.1                   | -           | -   | 0.2                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   | 1.1                   | 204.0       | SSW |
| 02:00 AM - 03:00 AM | 0.9                   | 209.0       | SSW | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.3                   | 262.0       | W   | 0.0                   | -           | -   |
| 03:00 AM - 04:00 AM | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   |
| 04:00 AM - 05:00 AM | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   |
| 05:00 AM - 06:00 AM | 0.5                   | 75.0        | ENE | 0.3                   | 251.0       | WSW | 0.9                   | 90.0        | E   | 0.2                   | -           | -   | 0.1                   | -           | -   | 0.2                   | -           | -   | 0.1                   | -           | -   |
| 06:00 AM - 07:00 AM | 1.6                   | 92.0        | E   | 0.1                   | -           | -   | 1.1                   | 131.0       | SE  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.3                   | 94.0        | E   |
| 07:00 AM - 08:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.5                   | 62.0        | ENE |
| 08:00 AM - 09:00 AM | 0.8                   | 70.0        | ENE | 0.6                   | 239.0       | WSW | 1.5                   | 104.0       | ESE | 0.1                   | -           | -   | 1.0                   | 151.0       | SSE | 1.0                   | 237.0       | WSW | 0.0                   | -           | -   |
| 09:00 AM - 10:00 AM | 0.6                   | 187.0       | S   | 0.6                   | 34.0        | NE  | 0.2                   | -           | -   | 0.7                   | 140.0       | SE  | 2.1                   | 203.0       | SSW | 1.9                   | 254.0       | WSW | 0.5                   | 181.0       | S   |
| 10:00 AM - 11:00 AM | 0.7                   | 238.0       | WSW | 0.4                   | 123.0       | ESE | 1.2                   | 14.0        | NNE | 0.0                   | -           | -   | 1.2                   | 226.0       | SW  | 1.2                   | 224.0       | SW  | 0.2                   | -           | -   |
| 11:00 AM - 12:00 PM | 0.0                   | -           | -   | 0.3                   | 36.0        | NE  | 0.0                   | -           | -   | 0.6                   | 63.0        | ENE | 0.5                   | 200.0       | SSW | 0.5                   | 238.0       | WSW | 1.0                   | 165.0       | SSE |
| 12:00 PM - 01:00 PM | 0.2                   | -           | -   | 0.9                   | 296.0       | WNW | 1.3                   | 200.0       | SSW | 0.5                   | 277.0       | W   | 2.0                   | 297.0       | WNW | 2.8                   | 190.0       | S   | 1.1                   | 110.0       | ESE |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418538  
Date Received :Mar 07, 2024  
Date Reported :Mar 14, 2024  
Report Number :2913255-1

Page 2 of 2

### Wind Rose



Date : Feb 28-29, 2024



Date : Feb 29-Mar 01, 2024



Date : Mar 01-02, 2023



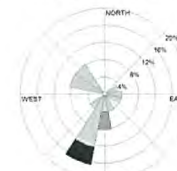
Date : Mar 02-03, 2023



Date : Mar 03-04, 2023



Date : Mar 04-05, 2023



Date : Mar 05-06, 2023



Date : Feb 28-Mar 06, 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  | 6.55  |
| 0.3-1.7  | 40.48 |
| Calms    | 50.60 |



# ภาคผนวก ค-2

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คุณภาพอากาศจากปล่องระบาย



## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418560**  
Date Received : Feb 29, 2024  
Date Reported : Mar 04, 2024  
Report Number : 2913322-1

Page 1 of 1

**Sample Number** 2418560-1  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 11  
**Sampled Date** Feb 28, 2024

|                     |             | Stack Description |        |                |                |  |  |  |  |
|---------------------|-------------|-------------------|--------|----------------|----------------|--|--|--|--|
| Ambient Temperature | 35 °C       | Diameter          | 7.62 m | Oxygen         | 13.37 %        |  |  |  |  |
| Ambient Pressure    | 759 mmHg    | Shape             | Circle | Carbon dioxide | 4.25 %         |  |  |  |  |
| Type of Process     | Combustion  | Stack Temperature | 89 °C  | Gas Velocity   | 15.83 m/s      |  |  |  |  |
| Type of Fuel        | Natural Gas | Moisture          | 8.58 % | Flow Rate      | 1953154 Nm3/hr |  |  |  |  |

| Run No.                                      | Sampling Time       | Oxygen (%) | Carbon Dioxide (%) | Carbon Monoxide (ppm)    |                      | 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> | at Actual O <sub>2</sub> | at 7% O <sub>2</sub> |
| 1  | 10:40 AM - 11:00 AM | 13.38      | 4.24               | 0.65                     | 1.20                 | 23.72                    | 43.87                | 0.21                     | 0.38                 |
| 2  | 11:01 AM - 11:21 AM | 13.36      | 4.26               | 0.58                     | 1.07                 | 23.61                    | 43.52                | 0.20                     | 0.38                 |
| 3  | 11:22 AM - 11:42 AM | 13.36      | 4.26               | 0.63                     | 1.16                 | 23.79                    | 43.85                | 0.23                     | 0.43                 |
| Average (ppm)                                |                     | 13.37      | 4.25               | 0.62                     | 1.15                 | 23.71                    | 43.75                | 0.21                     | 0.40                 |
| Guideline <sup>1/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 70                   | -                        | 10                   |
| Guideline <sup>2/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 120                  | -                        | 20                   |
| Guideline <sup>3/</sup> (ppm)                |                     |            |                    | -                        | 690                  | -                        | -                    | -                        | -                    |
| Result (mg/Nm <sup>3</sup> )                 |                     |            |                    | 0.71                     | 1.31                 | 44.60                    | 82.30                | 0.56                     | 1.04                 |
| Emission Rate at Actual O <sub>2</sub> (g/s) |                     |            |                    | 0.386                    |                      | 24.199                   |                      | 0.305                    |                      |
| Guideline <sup>1/</sup> (g/s)                |                     |            |                    | -                        |                      | 40.80                    |                      | 8.11                     |                      |
| Method                                       |                     |            |                    | US EPA Method 10         |                      | US EPA Method 7E         |                      | US EPA Method 6C         |                      |

**Sampled By :** Worawich Tongpoom

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

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

<sup>3/</sup> 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 Chonharat*  
Wichan Chonharat  
Manager  
ทะเบียนเลขที่ 7-204-ก-6113

Approved by

*Sarayuth Jitranont*  
Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 7-204-ก-4702

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418567**  
Date Received : Feb 29, 2024  
Date Reported : Mar 06, 2024  
Report Number: 2913333-1

Page 1 of 2

**Sample Number** 2418567-1  
**Sampled Date** Feb 28, 2024  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 11  
**Date Analysis Commenced** Mar 01, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic cassette

|                     |             | Stack Description |         |                                    |                |  |  |  |  |
|---------------------|-------------|-------------------|---------|------------------------------------|----------------|--|--|--|--|
| Ambient Pressure    | 759 mmHg    | Diameter          | 7.62 m  | Oxygen                             | 13.4 %         |  |  |  |  |
| Ambient Temperature | 34.5 °C     | Shape             | Circle  | Carbon Dioxide                     | 4.2 %          |  |  |  |  |
| Type of Process     | Combustion  | Stack Temperature | 88.5 °C | Gas Velocity                       | 16.8 m/s       |  |  |  |  |
| Type of Fuel        | Natural Gas | Moisture          | 8.49 %  | Flow Rate (Actual O <sub>2</sub> ) | 2076847 Nm3/hr |  |  |  |  |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 %O <sub>2</sub> at 13.4 % O <sub>2</sub> | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--|---------------|---------------|---|------------------|
| <b>Air Testing</b>          |                     |       |     |           |  |               |               |   |                  |
| Total Suspended Particulate | 10:40 AM - 11:28 AM | mg/m3 | -   | 0.5       | <0.5   | 60            | 20            | United States Environmental Protection Agency, EPA Method 5 | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).  
dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Technical Management

*Orawan R.*  
Orawan Rakhyong  
Scientist (3)  
ทะเบียนเลขที่ 7-204-ก-0027

Approved by

*Kanokorn Anek*  
Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7-204-ก-0004

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11730-21/ EMAIL

S:\Reports\Air\_Stack\_O2\_2GL.rpt ( 5:00PM)





## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418567  
Date Received : Feb 29, 2024  
Date Reported : Mar 06, 2024  
Report Number: 2913333-1

Page 2 of 2

Sample Number 2418567-1  
Sampled Date Feb 28, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 11  
Date Analysis Commenced Mar 01, 2024  
Condition of Sample Extracted into one filter paper placed in plastic cassette

### Stack Description

|                     |             |      |                   |        |    |                       |         |        |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|---------|--------|
| Ambient Pressure    | 759         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.4    | %      |
| Ambient Temperature | 34.5        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2     | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 88.5   | °C | Gas Velocity          | 16.8    | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 8.49   | %  | Flow Rate (Actual O2) | 2076847 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-----------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| Air Testing                 |                     |      |     |           |                      |               |               |            |                  |
| Total Suspended Particulate | 10:40 AM - 11:28 AM | g/s  | -   | -         | <0.29                | -             | 5.71          | Calculated | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547), dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Sampled By : Ussaree Namburee

### Remark :

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

Technical Management

*Orawan R.*  
Orawan Rak Yong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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11730-21/ EMAIL

S:\Reports\Air Stack\_O2\_2GL.rpt ( 5:00PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418561  
Date Received : Mar 08, 2024  
Date Reported : Jul 23, 2024  
Report Number :2913321-1 Rev. No.1

Page 1 of 1

Sample Number 2418561-1  
Sample Description Emission from Stationary Source  
Location HRSG 12  
Sampled Date Mar 08, 2024

### Stack Description

|                     |             |      |                   |        |    |                |         |        |
|---------------------|-------------|------|-------------------|--------|----|----------------|---------|--------|
| Ambient Temperature | 35          | °C   | Diameter          | 7.62   | m  | Oxygen         | 13.30   | %      |
| Ambient Pressure    | 757         | mmHg | Shape             | Circle |    | Carbon dioxide | 4.31    | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 94     | °C | Gas Velocity   | 15.24   | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 9.27   | %  | Flow Rate      | 1836424 | Nm3/hr |

| Run No.                                      | Sampling Time       | Oxygen (%) | Carbon Dioxide (%) | Carbon Monoxide (ppm)    |                      | 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> | at Actual O <sub>2</sub> | at 7% O <sub>2</sub> |
| 1  | 11:25 AM - 11:45 AM | 13.30      | 4.31               | 0.25                     | 0.45                 | 19.14                    | 34.99                | 0.13                     | 0.24                 |
| 2  | 11:46 AM - 12:06 PM | 13.30      | 4.31               | 0.31                     | 0.56                 | 19.32                    | 35.35                | 0.19                     | 0.35                 |
| 3  | 12:07 PM - 12:27 PM | 13.31      | 4.30               | 0.32                     | 0.59                 | 19.70                    | 36.10                | 0.16                     | 0.29                 |
| Average (ppm)                                |                     | 13.30      | 4.31               | 0.29                     | 0.53                 | 19.39                    | 35.48                | 0.16                     | 0.29                 |
| Guideline <sup>1/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 70                   | -                        | 10                   |
| Guideline <sup>2/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 120                  | -                        | 20                   |
| Guideline <sup>3/</sup> (ppm)                |                     |            |                    | -                        | 690                  | -                        | -                    | -                        | -                    |
| Result (mg/Nm <sup>3</sup> )                 |                     |            |                    | 0.33                     | 0.61                 | 36.48                    | 66.75                | 0.42                     | 0.77                 |
| Emission Rate at Actual O <sub>2</sub> (g/s) |                     |            |                    | 0.170                    |                      | 18.609                   |                      | 0.214                    |                      |
| Guideline <sup>4/</sup> (g/s)                |                     |            |                    | -                        |                      | 40.80                    |                      | 8.11                     |                      |
| Method                                       |                     |            |                    | US EPA Method 10         |                      | US EPA Method 7E         |                      | US EPA Method 6C         |                      |

Sampled By : Worawich Tongpoom

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

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

<sup>3/</sup> 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)

Note : This Analysis test report is reissued to supersede report No.2913321-1, Date Reported : Mar 12, 2024 due to revise sample information.

Technical Management

*Wichan Choonharat*  
Wichan Choonharat  
Manager  
ทะเบียนเลขที่ ว-204-ก-0006

Approved by

*Sarayu Jitranont*  
Sarayu Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ ว-204-ก-0003

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418568**  
**Date Received :** Mar 11, 2024  
**Date Reported :** Mar 18, 2024  
**Report Number:** 2913331-1

Page 1 of 2

**Sample Number** 2418568-1  
**Sampled Date** Mar 08, 2024  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 12  
**Date Analysis Commenced** Mar 12, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                       |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|---------|--------|--|
| Ambient Pressure    | 757         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.3    | %      |  |
| Ambient Temperature | 35.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.3     | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 93.5   | °C | Gas Velocity          | 15.3    | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 9.18   | %  | Flow Rate (Actual O2) | 1840604 | Nm3/hr |  |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 % O <sub>2</sub> | Result at 13.3 % O <sub>2</sub> | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|------------------------------|---------------------------------|---------------|---------------|---|------------------|
| <b>Air Testing</b>          |                     |       |     |           |                              |                                 |               |               |   |                  |
| Total Suspended Particulate | 11:00 AM - 11:48 AM | mg/m3 | -   | 0.5       | <0.5                         | <0.5                            | 60            | 20            | United States Environmental Protection Agency, EPA Method 5 | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547), dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Technical Management

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-ว-0011

Approved by

*Kanokorn Anek*  
Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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S:\Reports\Air Stack\_O2\_2GL.rpt ( 2.06PM)



## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418568**  
**Date Received :** Mar 11, 2024  
**Date Reported :** Mar 18, 2024  
**Report Number:** 2913331-1

Page 2 of 2

**Sample Number** 2418568-1  
**Sampled Date** Mar 08, 2024  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 12  
**Date Analysis Commenced** Mar 12, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                       |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|---------|--------|--|
| Ambient Pressure    | 757         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.3    | %      |  |
| Ambient Temperature | 35.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.3     | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 93.5   | °C | Gas Velocity          | 15.3    | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 9.18   | %  | Flow Rate (Actual O2) | 1840604 | 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 | 11:00 AM - 11:48 AM | g/s  | -   | -         | <0.26                | -             | 5.71          | Calculated | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547), dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

**Sampled By :** Khanetson Khamphet

### Remark :

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

Technical Management

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-ว-0011

Approved by

*Kanokorn Anek*  
Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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S:\Reports\Air Stack\_O2\_2GL.rpt ( 2.06PM)





## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418562  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number : 2913318-1

Page 1 of 1

Sample Number 2418562-1  
Sample Description Emission from Stationary Source  
Location HRSG 21  
Sampled Date Feb 19, 2024

| Stack Description   |             |      |                   |        |    |                |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|----------------|---------|--------|--|
| Ambient Temperature | 32          | °C   | Diameter          | 7.62   | m  | Oxygen         | 13.44   | %      |  |
| Ambient Pressure    | 759         | mmHg | Shape             | Circle |    | Carbon dioxide | 4.24    | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 110    | °C | Gas Velocity   | 16.59   | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 8.74   | %  | Flow Rate      | 1929620 | Nm3/hr |  |

| Run No.                                      | Sampling Time       | Oxygen (%) | Carbon Dioxide (%) | Carbon Monoxide (ppm)    |                      | 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> | at Actual O <sub>2</sub> | at 7% O <sub>2</sub> |
| 1  | 10:40 AM - 11:00 AM | 13.35      | 4.29               | 0.07                     | 0.13                 | 22.88                    | 42.09                | 0.21                     | 0.38                 |
| 2  | 11:01 AM - 11:21 AM | 13.37      | 4.28               | 0.09                     | 0.17                 | 22.90                    | 42.29                | 0.27                     | 0.50                 |
| 3  | 11:22 AM - 11:42 AM | 13.60      | 4.15               | 1.96                     | 3.73                 | 21.12                    | 40.21                | 0.46                     | 0.88                 |
| Average (ppm)                                |                     | 13.44      | 4.24               | 0.71                     | 1.34                 | 22.30                    | 41.53                | 0.31                     | 0.59                 |
| Guideline <sup>1/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 70                   | -                        | 10                   |
| Guideline <sup>2/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 120                  | -                        | 20                   |
| Guideline <sup>3/</sup> (ppm)                |                     |            |                    | -                        | 690                  | -                        | -                    | -                        | -                    |
| Result (mg/Nm <sup>3</sup> )                 |                     |            |                    | 0.81                     | 1.54                 | 41.95                    | 78.13                | 0.82                     | 1.53                 |
| Emission Rate at Actual O <sub>2</sub> (g/s) |                     |            |                    | 0.434                    |                      | 22.487                   |                      | 0.439                    |                      |
| Guideline <sup>1/</sup> (g/s)                |                     |            |                    | -                        |                      | 40.80                    |                      | 8.11                     |                      |
| Method                                       |                     |            |                    | US EPA Method 10         |                      | US EPA Method 7E         |                      | US EPA Method 6C         |                      |

Sampled By : Anuvat Mounpair

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

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

<sup>3/</sup> 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 ๖-204-๓-6113

Approved by

Sarayuth Jittranoat  
Assistant General Manager  
ทะเบียนเลขที่ ๖-204-๓-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418569  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number : 2913327-1

Page 1 of 2

Sample Number 2418569-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 21  
Date Analysis Commenced Feb 21, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                                    |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|------------------------------------|---------|--------|--|
| Ambient Pressure    | 759         | mmHg | Diameter          | 7.62   | m  | Oxygen                             | 13.4    | %      |  |
| Ambient Temperature | 32.0        | °C   | Shape             | Circle |    | Carbon Dioxide                     | 4.2     | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 111    | °C | Gas Velocity                       | 16.6    | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 8.76   | %  | Flow Rate (Actual O <sub>2</sub> ) | 1929283 | Nm3/hr |  |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 %O <sub>2</sub> at 13.4 % O <sub>2</sub> | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--|---------------|---------------|---|------------------|
| Air Testing                 |                     |       |     |           |  |               |               |   |                  |
| Total Suspended Particulate | 10:40 AM - 11:28 AM | mg/m3 | -   | 0.5       | <0.5 <0.5  | 60            | 20            | United States Environmental Protection Agency, EPA Method 5 | Bangkok          |

Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547), dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide

Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Technical Management

Saranya C.  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ๖-204-๓-0011

Approved by

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ๖-204-๓-0004

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418569**  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number: 2913327-1

Page 2 of 2

**Sample Number** 2418569-1  
**Sampled Date** Feb 19, 2024  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 21  
**Date Analysis Commenced** Feb 21, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                       |                |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|----------------|
| Ambient Pressure    | 759         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.4 %         |
| Ambient Temperature | 32.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2 %          |
| Type of Process     | Combustion  |      | Stack Temperature | 111    | °C | Gas Velocity          | 16.6 m/s       |
| Type of Fuel        | Natural Gas |      | Moisture          | 8.76   | %  | Flow Rate (Actual O2) | 1929283 Nm3/hr |

| Analyte                     | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-----------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| Total Suspended Particulate | 10:40 AM - 11:28 AM | g/s  | -   | -         | <0.27                | -             | 5.71          | Calculated | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547), dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide

Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

**Sampled By :** Thanong Wiriyasahakij

### Remark :

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

Technical Management

Saranya C.

Saranya Chalerthamrong  
Scientist (4)

ทะเบียนเลขที่ ว-204-ก-0011

Approved by

Kanokkorn Anek

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ก-0004

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418563**  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number : 2913314-1

Page 1 of 1

**Sample Number** 2418563-1  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 22  
**Sampled Date** Feb 19, 2024

| Stack Description   |             |      |                   |        |    |                |                |
|---------------------|-------------|------|-------------------|--------|----|----------------|----------------|
| Ambient Temperature | 32          | °C   | Diameter          | 7.62   | m  | Oxygen         | 13.22 %        |
| Ambient Pressure    | 759         | mmHg | Shape             | Circle |    | Carbon dioxide | 4.22 %         |
| Type of Process     | Combustion  |      | Stack Temperature | 89     | °C | Gas Velocity   | 15.18 m/s      |
| Type of Fuel        | Natural Gas |      | Moisture          | 7.39   | %  | Flow Rate      | 1897961 Nm3/hr |

| Run No.                                      | Sampling Time       | Oxygen (%) | Carbon Dioxide (%) | Carbon Monoxide (ppm)    |                      | 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> | at Actual O <sub>2</sub> | at 7% O <sub>2</sub> |
| 1  | 10:20 AM - 10:40 AM | 13.21      | 4.22               | 0.12                     | 0.21                 | 21.32                    | 38.52                | 0.15                     | 0.28                 |
| 2  | 10:41 AM - 11:01 AM | 13.21      | 4.23               | 0.09                     | 0.16                 | 22.84                    | 41.26                | 0.17                     | 0.30                 |
| 3  | 11:02 AM - 11:22 AM | 13.25      | 4.20               | 0.11                     | 0.19                 | 23.31                    | 42.34                | 0.22                     | 0.39                 |
| Average (ppm)                                |                     | 13.22      | 4.22               | 0.10                     | 0.19                 | 22.49                    | 40.71                | 0.18                     | 0.32                 |
| Guideline <sup>1/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 70                   | -                        | 10                   |
| Guideline <sup>2/</sup> (ppm)                |                     |            |                    | -                        | -                    | -                        | 120                  | -                        | 20                   |
| Guideline <sup>3/</sup> (ppm)                |                     |            |                    | -                        | 690                  | -                        | -                    | -                        | -                    |
| Result (mg/Nm <sup>3</sup> )                 |                     |            |                    | 0.12                     | 0.21                 | 42.31                    | 76.59                | 0.47                     | 0.84                 |
| Emission Rate at Actual O <sub>2</sub> (g/s) |                     |            |                    | 0.062                    |                      | 22.307                   |                      | 0.246                    |                      |
| Guideline <sup>3/</sup> (g/s)                |                     |            |                    | -                        |                      | 40.80                    |                      | 8.11                     |                      |
| Method                                       |                     |            |                    | US EPA Method 10         |                      | US EPA Method 7E         |                      | US EPA Method 6C         |                      |

**Sampled By :** Anuvat Mounpair

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

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

<sup>3/</sup> 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 Chonharat

Wichan Chonharat  
Manager

ทะเบียนเลขที่ ว-204-ก-6113

Approved by

Sarayuth Jittrantont

Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ ว-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418570  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number: 2913325-1

Page 1 of 2

Sample Number 2418570-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRS22  
Date Analysis Commenced Feb 21, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                       |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|---------|--------|--|
| Ambient Pressure    | 759         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.2    | %      |  |
| Ambient Temperature | 32.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2     | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 88.8   | °C | Gas Velocity          | 15.3    | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 7.38   | %  | Flow Rate (Actual O2) | 1906805 | Nm3/hr |  |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 % O <sub>2</sub> at 13.2 % O <sub>2</sub> | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---|---------------|---------------|---|------------------|
| Air Testing                 |                     |       |     |           |   |               |               |   |                  |
| Total Suspended Particulate | 10:20 AM - 11:08 AM | mg/m3 | -   | 0.5       | <0.5  | 60            | 20            | United States Environmental Protection Agency, EPA Method 5 | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547). dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Technical Management

Saranya C.  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418570  
Date Received : Feb 20, 2024  
Date Reported : Feb 28, 2024  
Report Number: 2913325-1

Page 2 of 2

Sample Number 2418570-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRS22  
Date Analysis Commenced Feb 21, 2024  
Condition of Sample Extracted into one filter paper placed in plastic petri dish

| Stack Description   |             |      |                   |        |    |                       |         |        |  |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|---------|--------|--|
| Ambient Pressure    | 759         | mmHg | Diameter          | 7.62   | m  | Oxygen                | 13.2    | %      |  |
| Ambient Temperature | 32.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2     | %      |  |
| Type of Process     | Combustion  |      | Stack Temperature | 88.8   | °C | Gas Velocity          | 15.3    | m/s    |  |
| Type of Fuel        | Natural Gas |      | Moisture          | 7.38   | %  | Flow Rate (Actual O2) | 1906805 | Nm3/hr |  |

| Analyte                     | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-----------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| Air Testing                 |                     |      |     |           |                      |               |               |            |                  |
| Total Suspended Particulate | 10:20 AM - 11:08 AM | g/s  | -   | -         | <0.26                | -             | 5.71          | Calculated | Bangkok          |

### Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547). dated December 4, 2006 (B.E. 2549) \*Guideline for Carbon monoxide  
Guideline (2) Environmental Impact Assessment Report of Gulf JP UT Co., Ltd.

Sampled By : Apisit Singha

Remark :

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

Technical Management

Saranya C.  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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## ภาคผนวก ค-3

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การตรวจสอบความถูกต้องของระบบติดตามตรวจสอบคุณภาพอากาศจาก  
ปล่องระบายอากาศแบบต่อเนื่อง ประจำปี พ.ศ. 2567  
(CEMs RATA Audit)





## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418546  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913272-1

Page 1 of 4

Sample Number : 2418546-1  
Sampled Date : Feb 28, 2024  
Sample Description : Emission from Stationary Source  
Location : 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   | 28 Feb 24 | 10:20 | 10:40 | 25.59                 | 23.98    | 47.36                    | 44.41    | -2.95      |
| 2   | 28 Feb 24 | 10:41 | 11:01 | 25.65                 | 23.69    | 47.26                    | 43.80    | -3.46      |
| 3   | 28 Feb 24 | 11:02 | 11:22 | 25.55                 | 23.63    | 47.09                    | 43.55    | -3.54      |
| 4*  | 28 Feb 24 | 11:23 | 11:43 | 25.77                 | 23.79    | 47.51                    | 43.85    | -3.66      |
| 5   | 28 Feb 24 | 11:44 | 12:04 | 26.01                 | 24.09    | 47.97                    | 44.42    | -3.55      |
| 6   | 28 Feb 24 | 12:05 | 12:25 | 25.79                 | 23.96    | 47.54                    | 44.15    | -3.38      |
| 7   | 28 Feb 24 | 12:26 | 12:46 | 26.16                 | 24.28    | 48.15                    | 44.73    | -3.42      |
| 8   | 28 Feb 24 | 12:47 | 13:07 | 26.28                 | 24.43    | 48.42                    | 44.99    | -3.44      |
| 9   | 28 Feb 24 | 13:08 | 13:28 | 26.49                 | 24.58    | 48.80                    | 45.22    | -3.58      |
| 10*   | 28 Feb 24 | 13:29 | 13:49 | 26.65                 | 24.74    | 49.14                    | 45.55    | -3.60      |
| 11  | 28 Feb 24 | 13:50 | 14:10 | 26.31                 | 24.78    | 49.22                    | 46.23    | -2.99      |
| 12*   | 28 Feb 24 | 14:11 | 14:31 | 23.81                 | 22.12    | 51.60                    | 47.49    | -4.11      |
| Average   |           |       |       |                       |          | 47.98                    | 44.61    | -3.37      |
| Confidence Coefficient (CC)                                 |           |       |       |                       |          |                          |          | 0.18       |
| Relative Accuracy (Compared with RM) (%)                    |           |       |       |                       |          |                          |          | 7.95       |
| 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 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418546  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913272-1

Page 2 of 4

Sample Number : 2418546-1  
Sampled Date : Feb 28, 2024  
Sample Description : Emission from Stationary Source  
Location : 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   | 28 Feb 24 | 10:20 | 10:40 | 0.00                  | 0.20     | 0.00                     | 0.36     | 0.36       |
| 2   | 28 Feb 24 | 10:41 | 11:01 | 0.02                  | 0.20     | 0.03                     | 0.37     | 0.34       |
| 3   | 28 Feb 24 | 11:02 | 11:22 | 0.02                  | 0.21     | 0.04                     | 0.39     | 0.35       |
| 4   | 28 Feb 24 | 11:23 | 11:43 | 0.01                  | 0.23     | 0.03                     | 0.43     | 0.40       |
| 5   | 28 Feb 24 | 11:44 | 12:04 | 0.05                  | 0.24     | 0.10                     | 0.44     | 0.34       |
| 6*  | 28 Feb 24 | 12:05 | 12:25 | 0.00                  | 0.32     | 0.00                     | 0.59     | 0.59       |
| 7   | 28 Feb 24 | 12:26 | 12:46 | 0.00                  | 0.23     | 0.00                     | 0.43     | 0.43       |
| 8   | 28 Feb 24 | 12:47 | 13:07 | 0.00                  | 0.25     | 0.00                     | 0.47     | 0.47       |
| 9*  | 28 Feb 24 | 13:08 | 13:28 | 0.00                  | 0.27     | 0.00                     | 0.51     | 0.51       |
| 10  | 28 Feb 24 | 13:29 | 13:49 | 0.01                  | 0.19     | 0.02                     | 0.34     | 0.33       |
| 11  | 28 Feb 24 | 13:50 | 14:10 | 0.01                  | 0.20     | 0.02                     | 0.38     | 0.36       |
| 12*   | 28 Feb 24 | 14:11 | 14:31 | 0.00                  | 0.22     | 0.00                     | 0.48     | 0.47       |
| Average   |           |       |       |                       |          | 0.03                     | 0.40     | 0.37       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.04       |
| Relative Accuracy (Compared with Emission Standard : 10 ppm) (%)                    |           |       |       |                       |          |                          |          | 4.11       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard : 10 ppm) |           |       |       |                       |          |                          |          | ≤ 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 10 ppm at 7%O2

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418546  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913272-1

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Sample Number 2418546-1  
Sample Date Feb 28, 2024  
Sample Description Emission from Stationary Source  
Location HRSO 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   | 28 Feb 24 | 10:20 | 10:40 | 0.00                  | 0.56     | 0.00                     | 1.05     | 1.05       |
| 2*  | 28 Feb 24 | 10:41 | 11:01 | 0.00                  | 0.64     | 0.00                     | 1.18     | 1.18       |
| 3   | 28 Feb 24 | 11:02 | 11:22 | 0.00                  | 0.59     | 0.00                     | 1.09     | 1.09       |
| 4   | 28 Feb 24 | 11:23 | 11:43 | 0.00                  | 0.62     | 0.00                     | 1.15     | 1.15       |
| 5   | 28 Feb 24 | 11:44 | 12:04 | 0.00                  | 0.57     | 0.00                     | 1.04     | 1.04       |
| 6   | 28 Feb 24 | 12:05 | 12:25 | 0.00                  | 0.62     | 0.00                     | 1.15     | 1.15       |
| 7   | 28 Feb 24 | 12:26 | 12:46 | 0.00                  | 0.57     | 0.00                     | 1.06     | 1.06       |
| 8   | 28 Feb 24 | 12:47 | 13:07 | 0.00                  | 0.58     | 0.00                     | 1.06     | 1.06       |
| 9   | 28 Feb 24 | 13:08 | 13:28 | 0.00                  | 0.58     | 0.00                     | 1.08     | 1.08       |
| 10  | 28 Feb 24 | 13:29 | 13:49 | 0.00                  | 0.59     | 0.00                     | 1.09     | 1.09       |
| 11*   | 28 Feb 24 | 13:50 | 14:10 | 0.04                  | 0.79     | 0.08                     | 1.48     | 1.40       |
| 12*   | 28 Feb 24 | 14:11 | 14:31 | 5.75                  | 7.32     | 12.47                    | 15.71    | 3.25       |
| Average   |           |       |       |                       |          | 0.00                     | 1.08     | 1.08       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.03       |
| Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)                   |           |       |       |                       |          |                          |          | 0.16       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard :690 ppm) |           |       |       |                       |          |                          |          | ≤ 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%O<sub>2</sub>

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418546  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913272-1

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Sample Number 2418546-1  
Sample Date Feb 28, 2024  
Sample Description Emission from Stationary Source  
Location HRSO 11  
Parameter O<sub>2</sub>

### Relative Accuracy Test Audit Report

| Run No.                                    | Date      | Time  |       | Raw Data at Actual |        | Difference |
|--|-----------|-------|-------|--------------------|--------|------------|
|  |           | Start | Stop  | CEMs (%)           | RM (%) |            |
| 1  | 28 Feb 24 | 10:20 | 10:40 | 13.39              | 13.39  | 0.01       |
| 2*   | 28 Feb 24 | 10:41 | 11:01 | 13.36              | 13.38  | 0.03       |
| 3  | 28 Feb 24 | 11:02 | 11:22 | 13.36              | 13.36  | 0.00       |
| 4  | 28 Feb 24 | 11:23 | 11:43 | 13.36              | 13.36  | 0.00       |
| 5  | 28 Feb 24 | 11:44 | 12:04 | 13.36              | 13.36  | 0.00       |
| 6  | 28 Feb 24 | 12:05 | 12:25 | 13.36              | 13.36  | 0.00       |
| 7  | 28 Feb 24 | 12:26 | 12:46 | 13.35              | 13.36  | 0.01       |
| 8  | 28 Feb 24 | 12:47 | 13:07 | 13.36              | 13.35  | -0.01      |
| 9  | 28 Feb 24 | 13:08 | 13:28 | 13.35              | 13.34  | -0.01      |
| 10   | 28 Feb 24 | 13:29 | 13:49 | 13.36              | 13.35  | -0.01      |
| 11*  | 28 Feb 24 | 13:50 | 14:10 | 13.47              | 13.45  | -0.02      |
| 12*  | 28 Feb 24 | 14:11 | 14:31 | 14.49              | 14.43  | -0.06      |
| Average                                    |           |       |       | 13.36              | 13.36  | 0.00       |
| Confidence Coefficient (CC)                |           |       |       |                    |        | -          |
| Relative Accuracy (Compared in Actual) (%) |           |       |       |                    |        | 0.00       |
| Relative Accuracy Criteria (%)             |           |       |       |                    |        | ≤ 1%       |

Reference Method : US EPA Method 3A

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of O<sub>2</sub> is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 3 (PS-3)

RA Result is within Criteria

Sampled By : Worawich Tongpoom

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418556  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2924834-1

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Sample Number : 2418556-1  
Sampled Date : Feb 28, 2024  
Sample Description : Emission from Stationary Source  
Location : 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*   | 28 Feb 24 | 10:40 | 10:54 | 1,703,294     | 2,076,847   | 373,553    |
| 2  | 28 Feb 24 | 11:35 | 11:49 | 1,718,466     | 1,984,092   | 265,626    |
| 3*   | 28 Feb 24 | 11:50 | 12:04 | 1,719,341     | 1,985,997   | 266,656    |
| 4  | 28 Feb 24 | 12:05 | 12:19 | 1,723,372     | 1,973,186   | 249,814    |
| 5*   | 28 Feb 24 | 12:20 | 12:34 | 1,721,620     | 2,005,392   | 283,772    |
| 6  | 28 Feb 24 | 12:35 | 12:49 | 1,739,197     | 1,994,572   | 255,375    |
| 7  | 28 Feb 24 | 12:50 | 13:04 | 1,734,135     | 1,999,150   | 265,015    |
| 8  | 28 Feb 24 | 13:05 | 13:19 | 1,733,586     | 1,974,808   | 241,222    |
| 9  | 28 Feb 24 | 13:20 | 13:34 | 1,723,769     | 1,983,512   | 259,743    |
| 10   | 28 Feb 24 | 13:35 | 13:49 | 1,722,393     | 1,983,775   | 261,382    |
| 11   | 28 Feb 24 | 13:50 | 14:04 | 1,720,091     | 1,861,670   | 141,579    |
| 12   | 28 Feb 24 | 14:05 | 14:19 | 1,383,826     | 1,455,231   | 71,405     |
| Average  |           |       |       | 1,688,760     | 1,912,222   | 223,462    |
| Confidence Coefficient (CC)                            |           |       |       |               |             | 53,055     |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |               |             | 14.46      |
| 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 1-204-ก-6113

Approved by

Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418556  
Date Received : Feb 29, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2924834-1

Page 2 of 2

Sample Number : 2418556-1  
Sampled Date : Feb 28, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 11  
Parameter : Stack Temperature

### Relative Accuracy Test Audit Report

| Run No.  | Date      | Time  |       | Temperature Data |         | Difference |
|--|-----------|-------|-------|------------------|---------|------------|
|  |           | Start | Stop  | CEMs (°C)        | RM (°C) |            |
| 1  | 28 Feb 24 | 10:40 | 10:54 | 90.6             | 88.5    | -2.1       |
| 2  | 28 Feb 24 | 11:35 | 11:49 | 90.0             | 86.1    | -3.9       |
| 3  | 28 Feb 24 | 11:50 | 12:04 | 90.5             | 86.0    | -4.5       |
| 4  | 28 Feb 24 | 12:05 | 12:19 | 90.5             | 86.1    | -4.4       |
| 5*   | 28 Feb 24 | 12:20 | 12:34 | 90.6             | 85.2    | -5.4       |
| 6  | 28 Feb 24 | 12:35 | 12:49 | 90.1             | 85.0    | -5.1       |
| 7  | 28 Feb 24 | 12:50 | 13:04 | 89.8             | 84.9    | -4.9       |
| 8  | 28 Feb 24 | 13:05 | 13:19 | 90.2             | 84.9    | -5.3       |
| 9  | 28 Feb 24 | 13:20 | 13:34 | 90.2             | 85.0    | -5.2       |
| 10*  | 28 Feb 24 | 13:35 | 13:49 | 90.3             | 84.9    | -5.4       |
| 11*  | 28 Feb 24 | 13:50 | 14:04 | 90.4             | 83.8    | -6.7       |
| 12   | 28 Feb 24 | 14:05 | 14:19 | 87.4             | 82.1    | -5.4       |
| Average  |           |       |       | 89.9             | 85.4    | -4.5       |
| Confidence Coefficient (CC)                            |           |       |       |                  |         | 0.8        |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |                  |         | 6.2        |
| 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 : Ussaree Namburee

Technical Management

Wichan Choonharat  
Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418547  
Date Received : Mar 08, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913271-1

Page 1 of 4

Sample Number 2418547-1  
Sampled Date Mar 08, 2024  
Sample Description Emission from Stationary Source  
Location 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   | 08 Mar 24 | 10:35 | 10:55 | 20.12                 | 19.25    | 37.49                    | 34.88    | -2.61      |
| 2   | 08 Mar 24 | 10:56 | 11:16 | 20.23                 | 19.14    | 37.70                    | 34.87    | -2.82      |
| 3   | 08 Mar 24 | 11:17 | 11:37 | 20.32                 | 19.16    | 37.91                    | 35.01    | -2.90      |
| 4   | 08 Mar 24 | 11:38 | 11:58 | 20.37                 | 19.18    | 37.97                    | 35.06    | -2.91      |
| 5   | 08 Mar 24 | 11:59 | 12:19 | 20.95                 | 19.71    | 39.13                    | 36.11    | -3.02      |
| 6   | 08 Mar 24 | 12:20 | 12:40 | 20.63                 | 19.48    | 38.56                    | 35.64    | -2.92      |
| 7   | 08 Mar 24 | 12:41 | 13:01 | 21.24                 | 19.99    | 39.71                    | 36.64    | -3.07      |
| 8*  | 08 Mar 24 | 13:02 | 13:22 | 21.56                 | 20.22    | 40.35                    | 37.04    | -3.32      |
| 9   | 08 Mar 24 | 13:23 | 13:43 | 21.79                 | 20.51    | 40.82                    | 37.70    | -3.13      |
| 10  | 08 Mar 24 | 13:44 | 14:04 | 22.14                 | 20.82    | 41.51                    | 38.32    | -3.19      |
| 11*   | 08 Mar 24 | 14:05 | 14:25 | 22.65                 | 21.31    | 42.55                    | 39.28    | -3.27      |
| 12*   | 08 Mar 24 | 14:26 | 14:46 | 22.78                 | 21.40    | 42.82                    | 39.48    | -3.34      |
| Average   |           |       |       |                       |          | 38.98                    | 36.02    | -2.95      |
| Confidence Coefficient (CC)                                 |           |       |       |                       |          |                          |          | 0.13       |
| Relative Accuracy (Compared with RM) (%)                    |           |       |       |                       |          |                          |          | 8.57       |
| 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*  
Wichan Choonharat  
Manager

ทะเบียนเลขที่ 7-204-ก-6113

Approved by

*Sarayuth Jittrantont*  
Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ 7-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418547  
Date Received : Mar 08, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913271-1

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Sample Number 2418547-1  
Sampled Date Mar 08, 2024  
Sample Description Emission from Stationary Source  
Location 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   | 08 Mar 24 | 10:35 | 10:55 | 0.00                  | 0.21     | 0.00                     | 0.38     | 0.38       |
| 2   | 08 Mar 24 | 10:56 | 11:16 | 0.00                  | 0.15     | 0.00                     | 0.27     | 0.27       |
| 3   | 08 Mar 24 | 11:17 | 11:37 | 0.00                  | 0.12     | 0.00                     | 0.22     | 0.22       |
| 4   | 08 Mar 24 | 11:38 | 11:58 | 0.00                  | 0.20     | 0.00                     | 0.36     | 0.36       |
| 5   | 08 Mar 24 | 11:59 | 12:19 | 0.00                  | 0.16     | 0.00                     | 0.30     | 0.30       |
| 6   | 08 Mar 24 | 12:20 | 12:40 | 0.00                  | 0.21     | 0.00                     | 0.38     | 0.38       |
| 7*  | 08 Mar 24 | 12:41 | 13:01 | 0.00                  | 0.26     | 0.00                     | 0.48     | 0.48       |
| 8*  | 08 Mar 24 | 13:02 | 13:22 | 0.00                  | 0.30     | 0.00                     | 0.54     | 0.54       |
| 9*  | 08 Mar 24 | 13:23 | 13:43 | 0.00                  | 0.27     | 0.00                     | 0.49     | 0.49       |
| 10  | 08 Mar 24 | 13:44 | 14:04 | 0.00                  | 0.22     | 0.00                     | 0.40     | 0.40       |
| 11  | 08 Mar 24 | 14:05 | 14:25 | 0.00                  | 0.22     | 0.00                     | 0.41     | 0.41       |
| 12  | 08 Mar 24 | 14:26 | 14:46 | 0.00                  | 0.20     | 0.00                     | 0.37     | 0.37       |
| Average   |           |       |       |                       |          | 0.00                     | 0.34     | 0.34       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.05       |
| Relative Accuracy (Compared with Emission Standard : 10 ppm) (%)                    |           |       |       |                       |          |                          |          | 3.92       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard : 10 ppm) |           |       |       |                       |          |                          |          | ≤ 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 10 ppm at 7%O2

RA Result is within Criteria

Technical Management

*Wichan Choonharat*  
Wichan Choonharat  
Manager

ทะเบียนเลขที่ 7-204-ก-6113

Approved by

*Sarayuth Jittrantont*  
Sarayuth Jittrantont  
Assistant General Manager

ทะเบียนเลขที่ 7-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418547  
Date Received : Mar 08, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913271-1

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Sample Number : 2418547-1  
Sampled Date : Mar 08, 2024  
Sample Description : Emission from Stationary Source  
Location : 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   | 08 Mar 24 | 10:35 | 10:55 | 0.00                  | 0.32     | 0.00                     | 0.59     | 0.59       |
| 2   | 08 Mar 24 | 10:56 | 11:16 | 0.00                  | 0.26     | 0.00                     | 0.48     | 0.48       |
| 3   | 08 Mar 24 | 11:17 | 11:37 | 0.00                  | 0.24     | 0.00                     | 0.44     | 0.44       |
| 4   | 08 Mar 24 | 11:38 | 11:58 | 0.00                  | 0.31     | 0.00                     | 0.57     | 0.57       |
| 5   | 08 Mar 24 | 11:59 | 12:19 | 0.00                  | 0.28     | 0.00                     | 0.51     | 0.51       |
| 6   | 08 Mar 24 | 12:20 | 12:40 | 0.00                  | 0.40     | 0.00                     | 0.74     | 0.74       |
| 7*  | 08 Mar 24 | 12:41 | 13:01 | 0.00                  | 0.56     | 0.00                     | 1.03     | 1.03       |
| 8   | 08 Mar 24 | 13:02 | 13:22 | 0.00                  | 0.41     | 0.00                     | 0.75     | 0.75       |
| 9   | 08 Mar 24 | 13:23 | 13:43 | 0.00                  | 0.41     | 0.00                     | 0.75     | 0.75       |
| 10*   | 08 Mar 24 | 13:44 | 14:04 | 0.00                  | 0.48     | 0.00                     | 0.88     | 0.88       |
| 11*   | 08 Mar 24 | 14:05 | 14:25 | 0.00                  | 0.44     | 0.00                     | 0.80     | 0.80       |
| 12  | 08 Mar 24 | 14:26 | 14:46 | 0.00                  | 0.37     | 0.00                     | 0.68     | 0.68       |
| Average   |           |       |       |                       |          | 0.00                     | 0.61     | 0.61       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.12       |
| Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)                   |           |       |       |                       |          |                          |          | 0.11       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard :690 ppm) |           |       |       |                       |          |                          |          | ≤ 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%O<sub>2</sub>

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jittrantont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418547  
Date Received : Mar 08, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913271-1

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Sample Number : 2418547-1  
Sampled Date : Mar 08, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 12  
Parameter : O<sub>2</sub>

### Relative Accuracy Test Audit Report

| Run No.                                    | Date      | Time  |       | Raw Data at Actual |        | Difference |
|--|-----------|-------|-------|--------------------|--------|------------|
|  |           | Start | Stop  | CEMs (%)           | RM (%) |            |
| 1*   | 08 Mar 24 | 10:35 | 10:55 | 13.44              | 13.23  | -0.21      |
| 2*   | 08 Mar 24 | 10:56 | 11:16 | 13.44              | 13.27  | -0.17      |
| 3  | 08 Mar 24 | 11:17 | 11:37 | 13.45              | 13.29  | -0.16      |
| 4  | 08 Mar 24 | 11:38 | 11:58 | 13.44              | 13.30  | -0.15      |
| 5  | 08 Mar 24 | 11:59 | 12:19 | 13.46              | 13.31  | -0.15      |
| 6  | 08 Mar 24 | 12:20 | 12:40 | 13.46              | 13.30  | -0.16      |
| 7  | 08 Mar 24 | 12:41 | 13:01 | 13.47              | 13.32  | -0.15      |
| 8*   | 08 Mar 24 | 13:02 | 13:22 | 13.47              | 13.31  | -0.16      |
| 9  | 08 Mar 24 | 13:23 | 13:43 | 13.48              | 13.34  | -0.15      |
| 10   | 08 Mar 24 | 13:44 | 14:04 | 13.49              | 13.35  | -0.14      |
| 11   | 08 Mar 24 | 14:05 | 14:25 | 13.50              | 13.36  | -0.14      |
| 12   | 08 Mar 24 | 14:26 | 14:46 | 13.51              | 13.37  | -0.14      |
| Average                                    |           |       |       | 13.47              | 13.33  | -0.15      |
| Confidence Coefficient (CC)                |           |       |       |                    |        | -          |
| Relative Accuracy (Compared in Actual) (%) |           |       |       |                    |        | 0.15       |
| Relative Accuracy Criteria (%)             |           |       |       |                    |        | ≤ 1%       |

Reference Method : US EPA Method 3A

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of O<sub>2</sub> is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 3 (PS-3)

RA Result is within Criteria

Sampled By : Worawich Tongpool

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jittrantont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418557**  
**Date Received :** Mar 11, 2024  
**Date Reported :** Mar 18, 2024  
**Report Number :** 2933428-1

Page 1 of 2

**Sample Number** 2418557-1  
**Sampled Date** Mar 08, 2024  
**Sample Description** Emission from Stationary Source  
**Location** 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  | 08 Mar 24 | 11:25 | 11:39 | 1,738,777     | 1,843,222   | 104,445    |
| 2  | 08 Mar 24 | 11:40 | 11:54 | 1,744,459     | 1,838,830   | 94,371     |
| 3  | 08 Mar 24 | 11:55 | 12:09 | 1,754,373     | 1,812,155   | 57,782     |
| 4*   | 08 Mar 24 | 12:10 | 12:24 | 1,741,966     | 1,847,675   | 105,709    |
| 5  | 08 Mar 24 | 12:25 | 12:39 | 1,737,656     | 1,818,438   | 80,782     |
| 6  | 08 Mar 24 | 12:40 | 12:54 | 1,751,449     | 1,822,553   | 71,104     |
| 7*   | 08 Mar 24 | 12:55 | 13:09 | 1,739,162     | 1,845,594   | 106,432    |
| 8  | 08 Mar 24 | 13:10 | 13:24 | 1,755,921     | 1,840,648   | 84,727     |
| 9*   | 08 Mar 24 | 13:25 | 13:39 | 1,761,515     | 1,877,833   | 116,318    |
| 10   | 08 Mar 24 | 13:40 | 13:54 | 1,747,011     | 1,842,044   | 95,033     |
| 11   | 08 Mar 24 | 13:55 | 14:09 | 1,772,311     | 1,828,483   | 56,172     |
| 12   | 08 Mar 24 | 14:10 | 14:24 | 1,760,079     | 1,842,309   | 82,230     |
| Average  |           |       |       | 1,751,337     | 1,832,076   | 80,739     |
| Confidence Coefficient (CC)                            |           |       |       |               |             | 12,728     |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |               |             | 5.10       |
| 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*

Wichan Choonharat  
Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

*Sarayuth Jittrant*

Sarayuth Jittrant  
Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

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**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418557**  
**Date Received :** Mar 11, 2024  
**Date Reported :** Mar 18, 2024  
**Report Number :** 2933428-1

Page 2 of 2

**Sample Number** 2418557-1  
**Sampled Date** Mar 08, 2024  
**Sample Description** Emission from Stationary Source  
**Location** HRSG 12  
**Parameter** Stack Temperature

### Relative Accuracy Test Audit Report

| Run No.  | Date      | Time  |       | Temperature Data |         | Difference |
|--|-----------|-------|-------|------------------|---------|------------|
|  |           | Start | Stop  | CEMs (°C)        | RM (°C) |            |
| 1  | 08 Mar 24 | 11:25 | 11:39 | 90.8             | 92.0    | 1.2        |
| 2  | 08 Mar 24 | 11:40 | 11:54 | 91.1             | 90.5    | -0.6       |
| 3  | 08 Mar 24 | 11:55 | 12:09 | 90.9             | 89.0    | -1.9       |
| 4  | 08 Mar 24 | 12:10 | 12:24 | 90.9             | 87.5    | -3.4       |
| 5  | 08 Mar 24 | 12:25 | 12:39 | 90.9             | 87.0    | -3.9       |
| 6*   | 08 Mar 24 | 12:40 | 12:54 | 90.7             | 86.5    | -4.2       |
| 7  | 08 Mar 24 | 12:55 | 13:09 | 90.7             | 86.5    | -4.2       |
| 8*   | 08 Mar 24 | 13:10 | 13:24 | 90.8             | 86.5    | -4.3       |
| 9*   | 08 Mar 24 | 13:25 | 13:39 | 91.0             | 86.0    | -5.0       |
| 10   | 08 Mar 24 | 13:40 | 13:54 | 90.6             | 86.5    | -4.1       |
| 11   | 08 Mar 24 | 13:55 | 14:09 | 90.7             | 86.5    | -4.2       |
| 12   | 08 Mar 24 | 14:10 | 14:24 | 90.6             | 86.5    | -4.1       |
| Average  |           |       |       | 90.8             | 88.0    | -2.8       |
| Confidence Coefficient (CC)                            |           |       |       |                  |         | 1.5        |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |                  |         | 4.9        |
| 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 : Khanetson Khamphet

Technical Management

*Wichan Choonharat*

Wichan Choonharat  
Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

*Sarayuth Jittrant*

Sarayuth Jittrant  
Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418548  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913269-1

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Sample Number : 2418548-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
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*  | 19 Feb 24 | 10:40 | 11:00 | 24.36                 | 22.88    | 46.22                    | 42.09    | -4.13      |
| 2   | 19 Feb 24 | 11:01 | 11:21 | 24.26                 | 22.90    | 46.11                    | 42.29    | -3.83      |
| 3   | 19 Feb 24 | 11:22 | 11:42 | 22.24                 | 21.12    | 44.02                    | 40.21    | -3.81      |
| 4   | 19 Feb 24 | 11:43 | 12:03 | 20.31                 | 19.14    | 41.49                    | 37.77    | -3.73      |
| 5*  | 19 Feb 24 | 12:04 | 12:24 | 21.86                 | 20.37    | 46.47                    | 42.14    | -4.34      |
| 6*  | 19 Feb 24 | 12:25 | 12:45 | 21.60                 | 20.28    | 46.05                    | 41.72    | -4.33      |
| 7   | 19 Feb 24 | 12:46 | 13:06 | 21.52                 | 20.44    | 44.96                    | 41.65    | -3.31      |
| 8   | 19 Feb 24 | 13:07 | 13:27 | 23.67                 | 22.34    | 45.46                    | 41.99    | -3.47      |
| 9   | 19 Feb 24 | 13:28 | 13:48 | 21.43                 | 20.17    | 45.28                    | 41.32    | -3.96      |
| 10  | 19 Feb 24 | 13:49 | 14:09 | 22.32                 | 21.11    | 47.34                    | 43.39    | -3.95      |
| 11  | 19 Feb 24 | 14:10 | 14:30 | 22.73                 | 21.15    | 45.52                    | 41.51    | -4.01      |
| 12  | 19 Feb 24 | 14:31 | 14:51 | 22.99                 | 22.01    | 44.94                    | 42.08    | -2.86      |
| Average   |           |       |       |                       |          | 45.01                    | 41.36    | -3.66      |
| Confidence Coefficient (CC)                                 |           |       |       |                       |          |                          |          | 0.29       |
| Relative Accuracy (Compared with RM) (%)                    |           |       |       |                       |          |                          |          | 9.55       |
| 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 1-204-ก-6113

Approved by

Sarayuth Jittranoont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418548  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913269-1

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Sample Number : 2418548-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
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   | 19 Feb 24 | 10:40 | 11:00 | 0.12                  | 0.21     | 0.23                     | 0.38     | 0.15       |
| 2   | 19 Feb 24 | 11:01 | 11:21 | 0.07                  | 0.27     | 0.14                     | 0.50     | 0.36       |
| 3   | 19 Feb 24 | 11:22 | 11:42 | 0.14                  | 0.46     | 0.28                     | 0.88     | 0.60       |
| 4   | 19 Feb 24 | 11:43 | 12:03 | 0.14                  | 0.41     | 0.29                     | 0.81     | 0.52       |
| 5   | 19 Feb 24 | 12:04 | 12:24 | 0.08                  | 0.32     | 0.17                     | 0.66     | 0.48       |
| 6   | 19 Feb 24 | 12:25 | 12:45 | 0.08                  | 0.42     | 0.17                     | 0.87     | 0.70       |
| 7*  | 19 Feb 24 | 12:46 | 13:06 | 0.04                  | 0.53     | 0.09                     | 1.08     | 0.99       |
| 8   | 19 Feb 24 | 13:07 | 13:27 | 0.02                  | 0.35     | 0.04                     | 0.66     | 0.62       |
| 9*  | 19 Feb 24 | 13:28 | 13:48 | 0.04                  | 0.40     | 0.09                     | 0.82     | 0.73       |
| 10*   | 19 Feb 24 | 13:49 | 14:09 | 0.03                  | 0.49     | 0.07                     | 1.01     | 0.94       |
| 11  | 19 Feb 24 | 14:10 | 14:30 | 0.02                  | 0.28     | 0.05                     | 0.55     | 0.50       |
| 12  | 19 Feb 24 | 14:31 | 14:51 | 0.02                  | 0.33     | 0.04                     | 0.62     | 0.59       |
| Average   |           |       |       |                       |          | 0.16                     | 0.66     | 0.50       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.13       |
| Relative Accuracy (Compared with Emission Standard : 10 ppm) (%)                    |           |       |       |                       |          |                          |          | 6.28       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard : 10 ppm) |           |       |       |                       |          |                          |          | ≤ 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 10 ppm at 7%O2

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jittranoont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418548  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913269-1

Page 3 of 4

Sample Number : 2418548-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
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   | 19 Feb 24 | 10:40 | 11:00 | 1.18                  | 0.07     | 2.24                     | 0.13     | -2.10      |
| 2*  | 19 Feb 24 | 11:01 | 11:21 | 1.48                  | 0.09     | 2.80                     | 0.17     | -2.64      |
| 3   | 19 Feb 24 | 11:22 | 11:42 | 2.50                  | 1.96     | 4.95                     | 3.73     | -1.22      |
| 4   | 19 Feb 24 | 11:43 | 12:03 | 4.64                  | 5.28     | 9.49                     | 10.41    | 0.92       |
| 5*  | 19 Feb 24 | 12:04 | 12:24 | 4.49                  | 6.06     | 9.54                     | 12.54    | 3.00       |
| 6   | 19 Feb 24 | 12:25 | 12:45 | 4.17                  | 5.25     | 8.90                     | 10.80    | 1.90       |
| 7*  | 19 Feb 24 | 12:46 | 13:06 | 3.45                  | 4.83     | 7.21                     | 9.84     | 2.63       |
| 8   | 19 Feb 24 | 13:07 | 13:27 | 0.09                  | 0.61     | 0.18                     | 1.15     | 0.97       |
| 9   | 19 Feb 24 | 13:28 | 13:48 | 4.20                  | 5.05     | 8.87                     | 10.35    | 1.47       |
| 10  | 19 Feb 24 | 13:49 | 14:09 | 2.89                  | 3.84     | 6.13                     | 7.89     | 1.76       |
| 11  | 19 Feb 24 | 14:10 | 14:30 | 1.95                  | 2.64     | 3.90                     | 5.19     | 1.28       |
| 12  | 19 Feb 24 | 14:31 | 14:51 | 0.64                  | 0.96     | 1.24                     | 1.83     | 0.59       |
| Average   |           |       |       |                       |          | 5.10                     | 5.72     | 0.62       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 1.06       |
| Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)                   |           |       |       |                       |          |                          |          | 0.24       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard :690 ppm) |           |       |       |                       |          |                          |          | ≤ 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%O<sub>2</sub>

RA Result is within Criteria

Technical Management

Wichan Choonharat

Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayu Jittrant

Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418548  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913269-1

Page 4 of 4

Sample Number : 2418548-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
Parameter : O2

### Relative Accuracy Test Audit Report

| Run No.                                    | Date      | Time  |       | Raw Data at Actual |        | Difference |
|--|-----------|-------|-------|--------------------|--------|------------|
|  |           | Start | Stop  | CEMs (%)           | RM (%) |            |
| 1  | 19 Feb 24 | 10:40 | 11:00 | 13.57              | 13.35  | -0.23      |
| 2  | 19 Feb 24 | 11:01 | 11:21 | 13.59              | 13.37  | -0.22      |
| 3*   | 19 Feb 24 | 11:22 | 11:42 | 13.88              | 13.60  | -0.28      |
| 4*   | 19 Feb 24 | 11:43 | 12:03 | 14.10              | 13.85  | -0.24      |
| 5  | 19 Feb 24 | 12:04 | 12:24 | 14.36              | 14.18  | -0.18      |
| 6*   | 19 Feb 24 | 12:25 | 12:45 | 14.38              | 14.14  | -0.24      |
| 7  | 19 Feb 24 | 12:46 | 13:06 | 14.25              | 14.08  | -0.17      |
| 8  | 19 Feb 24 | 13:07 | 13:27 | 13.66              | 13.50  | -0.16      |
| 9  | 19 Feb 24 | 13:28 | 13:48 | 14.32              | 14.12  | -0.20      |
| 10   | 19 Feb 24 | 13:49 | 14:09 | 14.35              | 14.14  | -0.21      |
| 11   | 19 Feb 24 | 14:10 | 14:30 | 13.96              | 13.82  | -0.14      |
| 12   | 19 Feb 24 | 14:31 | 14:51 | 13.79              | 13.63  | -0.16      |
| Average                                    |           |       |       | 13.98              | 13.80  | -0.19      |
| Confidence Coefficient (CC)                |           |       |       |                    |        | -          |
| Relative Accuracy (Compared in Actual) (%) |           |       |       |                    |        | 0.19       |
| Relative Accuracy Criteria (%)             |           |       |       |                    |        | ≤ 1%       |

Reference Method : US EPA Method 3A

Remark: \* Sample with \* is a rejected data

<sup>1/</sup> Relative Accuracy Criteria of O<sub>2</sub> is refer to 40 CFR Part 60 Appendix B : Performance Specification Test 3 (PS-3)

RA Result is within Criteria

Sampled By :

Anuvat Mounpair

Technical Management

Wichan Choonharat

Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayu Jittrant

Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418558  
Date Received : Apr 25, 2024  
Date Reported : May 16, 2024  
Report Number : 2975859-1

Page 1 of 2

Sample Number : 2418558-1  
Sampled Date : Apr 25, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
Parameter : Flowrate

### Relative Accuracy Test Audit Report

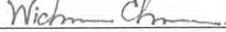
| Run No.  | Date      | Time  |       | Flowrate Data |             | Difference |
|--|-----------|-------|-------|---------------|-------------|------------|
|  |           | Start | Stop  | CEMs (Nm3/Hr) | RM (Nm3/Hr) |            |
| 1*   | 25 Apr 24 | 10:45 | 10:59 | 1,675,579     | 1,408,445   | -267,134   |
| 2*   | 25 Apr 24 | 11:30 | 11:44 | 1,675,477     | 1,404,205   | -271,272   |
| 3  | 25 Apr 24 | 12:15 | 12:29 | 1,477,451     | 1,445,693   | -31,758    |
| 4  | 25 Apr 24 | 13:00 | 13:14 | 1,730,811     | 1,515,088   | -215,723   |
| 5  | 25 Apr 24 | 13:45 | 13:59 | 1,502,777     | 1,540,488   | 37,711     |
| 6  | 25 Apr 24 | 14:30 | 14:44 | 1,749,985     | 1,537,465   | -212,520   |
| 7  | 25 Apr 24 | 14:46 | 15:00 | 1,743,740     | 1,543,003   | -200,737   |
| 8  | 25 Apr 24 | 15:02 | 15:16 | 1,752,503     | 1,575,355   | -177,148   |
| 9  | 25 Apr 24 | 15:18 | 15:32 | 1,750,480     | 1,535,947   | -214,533   |
| 10   | 25 Apr 24 | 15:34 | 15:48 | 1,746,033     | 1,524,227   | -221,806   |
| 11*  | 25 Apr 24 | 15:50 | 16:04 | 1,744,170     | 1,511,324   | -232,846   |
| 12   | 25 Apr 24 | 16:06 | 16:20 | 1,736,210     | 1,523,849   | -212,361   |
| Average  |           |       |       | 1,687,777     | 1,526,791   | -160,986   |
| Confidence Coefficient (CC)                            |           |       |       |               |             | 73,366     |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |               |             | 15.35      |
| 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 1-204-ก-6113

Approved by   
Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418558  
Date Received : Apr 25, 2024  
Date Reported : May 16, 2024  
Report Number : 2975859-1

Page 2 of 2

Sample Number : 2418558-1  
Sampled Date : Apr 25, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 21  
Parameter : Stack Temperature

### Relative Accuracy Test Audit Report

| Run No.  | Date      | Time  |       | Temperature Data |         | Difference |
|--|-----------|-------|-------|------------------|---------|------------|
|  |           | Start | Stop  | CEMs (°C)        | RM (°C) |            |
| 1*   | 25 Apr 24 | 10:45 | 10:59 | 90.5             | 85.6    | -4.9       |
| 2*   | 25 Apr 24 | 11:30 | 11:44 | 90.6             | 85.5    | -5.1       |
| 3*   | 25 Apr 24 | 12:15 | 12:29 | 90.5             | 86.8    | -3.7       |
| 4  | 25 Apr 24 | 13:00 | 13:14 | 91.5             | 88.0    | -3.5       |
| 5  | 25 Apr 24 | 13:45 | 13:59 | 86.7             | 88.2    | 1.5        |
| 6  | 25 Apr 24 | 14:30 | 14:44 | 90.1             | 87.1    | -3.0       |
| 7  | 25 Apr 24 | 14:46 | 15:00 | 90.0             | 86.8    | -3.2       |
| 8  | 25 Apr 24 | 15:02 | 15:16 | 89.9             | 88.0    | -1.9       |
| 9  | 25 Apr 24 | 15:18 | 15:32 | 90.0             | 87.5    | -2.5       |
| 10   | 25 Apr 24 | 15:34 | 15:48 | 89.8             | 88.4    | -1.4       |
| 11   | 25 Apr 24 | 15:50 | 16:04 | 89.8             | 87.1    | -2.7       |
| 12   | 25 Apr 24 | 16:06 | 16:20 | 89.5             | 88.0    | -1.5       |
| Average  |           |       |       | 89.7             | 87.7    | -2.0       |
| Confidence Coefficient (CC)                            |           |       |       |                  |         | 1.2        |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |                  |         | 3.6        |
| Relative Accuracy Criteria (Compared with RM)          |           |       |       |                  |         | ≤ 20 %     |

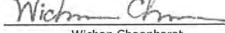
Reference Method : US EPA Method 2


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 : Anuvat Moungpair

Technical Management   
Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by   
Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418549  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913268-1

Page 1 of 4

Sample Number 2418549-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 22  
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*  | 19 Feb 24 | 10:20 | 10:40 | 24.97                 | 21.32    | 46.46                    | 38.52    | -7.94      |
| 2   | 19 Feb 24 | 10:41 | 11:01 | 24.92                 | 22.84    | 46.43                    | 41.26    | -5.16      |
| 3   | 19 Feb 24 | 11:02 | 11:22 | 25.13                 | 23.31    | 47.03                    | 42.34    | -4.69      |
| 4   | 19 Feb 24 | 11:23 | 11:43 | 24.91                 | 23.20    | 48.90                    | 43.76    | -5.14      |
| 5   | 19 Feb 24 | 11:44 | 12:04 | 25.14                 | 23.83    | 51.19                    | 46.70    | -4.49      |
| 6*  | 19 Feb 24 | 12:05 | 12:25 | 23.28                 | 21.34    | 49.74                    | 43.97    | -5.77      |
| 7*  | 19 Feb 24 | 12:26 | 12:46 | 23.64                 | 21.86    | 50.15                    | 44.70    | -5.45      |
| 8   | 19 Feb 24 | 12:47 | 13:07 | 24.85                 | 23.21    | 51.53                    | 46.76    | -4.77      |
| 9   | 19 Feb 24 | 13:08 | 13:28 | 25.84                 | 25.33    | 49.17                    | 46.66    | -2.50      |
| 10  | 19 Feb 24 | 13:29 | 13:49 | 24.55                 | 23.30    | 51.84                    | 47.35    | -4.50      |
| 11  | 19 Feb 24 | 13:50 | 14:10 | 24.65                 | 23.82    | 51.99                    | 48.47    | -3.51      |
| 12  | 19 Feb 24 | 14:11 | 14:31 | 26.53                 | 25.85    | 52.39                    | 50.01    | -2.39      |
| Average   |           |       |       |                       |          | 50.05                    | 45.92    | -4.13      |
| Confidence Coefficient (CC)                                 |           |       |       |                       |          |                          |          | 0.82       |
| Relative Accuracy (Compared with RM) (%)                    |           |       |       |                       |          |                          |          | 10.78      |
| 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 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418549  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913268-1

Page 2 of 4

Sample Number 2418549-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 22  
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   | 19 Feb 24 | 10:20 | 10:40 | 0.01                  | 0.15     | 0.02                     | 0.28     | 0.26       |
| 2   | 19 Feb 24 | 10:41 | 11:01 | 0.01                  | 0.17     | 0.02                     | 0.30     | 0.28       |
| 3   | 19 Feb 24 | 11:02 | 11:22 | 0.01                  | 0.22     | 0.02                     | 0.39     | 0.38       |
| 4   | 19 Feb 24 | 11:23 | 11:43 | 0.01                  | 0.26     | 0.01                     | 0.50     | 0.49       |
| 5   | 19 Feb 24 | 11:44 | 12:04 | 0.01                  | 0.34     | 0.01                     | 0.66     | 0.64       |
| 6   | 19 Feb 24 | 12:05 | 12:25 | 0.01                  | 0.29     | 0.03                     | 0.59     | 0.56       |
| 7   | 19 Feb 24 | 12:26 | 12:46 | 0.01                  | 0.34     | 0.03                     | 0.69     | 0.66       |
| 8*  | 19 Feb 24 | 12:47 | 13:07 | 0.02                  | 0.41     | 0.03                     | 0.83     | 0.79       |
| 9   | 19 Feb 24 | 13:08 | 13:28 | 0.00                  | 0.39     | 0.00                     | 0.72     | 0.72       |
| 10  | 19 Feb 24 | 13:29 | 13:49 | 0.01                  | 0.37     | 0.02                     | 0.76     | 0.73       |
| 11*   | 19 Feb 24 | 13:50 | 14:10 | 0.01                  | 0.42     | 0.03                     | 0.86     | 0.83       |
| 12*   | 19 Feb 24 | 14:11 | 14:31 | 0.00                  | 0.41     | 0.00                     | 0.80     | 0.79       |
| Average   |           |       |       |                       |          | 0.02                     | 0.54     | 0.52       |
| Confidence Coefficient (CC)   |           |       |       |                       |          |                          |          | 0.14       |
| Relative Accuracy (Compared with Emission Standard : 10 ppm) (%)                    |           |       |       |                       |          |                          |          | 6.65       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard : 10 ppm) |           |       |       |                       |          |                          |          | ≤ 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 10 ppm at 7%O2

RA Result is within Criteria

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418549  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913268-1

Page 3 of 4

Sample Number : 2418549-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 22  
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*   | 19 Feb 24 | 10:20 | 10:40 | 4.76                  | 0.06     | 8.85                     | 0.12     | -8.73      |
| 2  | 19 Feb 24 | 10:41 | 11:01 | 3.13                  | 0.04     | 5.84                     | 0.06     | -5.77      |
| 3  | 19 Feb 24 | 11:02 | 11:22 | 0.32                  | 0.05     | 0.59                     | 0.10     | -0.50      |
| 4  | 19 Feb 24 | 11:23 | 11:43 | 7.01                  | 4.08     | 13.76                    | 7.69     | -6.07      |
| 5*   | 19 Feb 24 | 11:44 | 12:04 | 13.21                 | 9.03     | 26.89                    | 17.70    | -9.19      |
| 6  | 19 Feb 24 | 12:05 | 12:25 | 26.02                 | 22.84    | 55.62                    | 47.05    | -8.57      |
| 7  | 19 Feb 24 | 12:26 | 12:46 | 22.92                 | 19.68    | 48.62                    | 40.24    | -8.38      |
| 8  | 19 Feb 24 | 12:47 | 13:07 | 16.49                 | 15.30    | 34.20                    | 30.81    | -3.39      |
| 9  | 19 Feb 24 | 13:08 | 13:28 | 1.74                  | 1.08     | 3.30                     | 1.99     | -1.31      |
| 10*  | 19 Feb 24 | 13:29 | 13:49 | 18.48                 | 14.78    | 39.02                    | 30.04    | -8.99      |
| 11   | 19 Feb 24 | 13:50 | 14:10 | 16.95                 | 13.67    | 35.75                    | 27.81    | -7.93      |
| 12   | 19 Feb 24 | 14:11 | 14:31 | 6.54                  | 6.78     | 12.92                    | 13.12    | 0.20       |
| Average  |           |       |       |                       |          | 23.40                    | 18.76    | -4.63      |
| Confidence Coefficient (CC)  |           |       |       |                       |          |                          |          | 2.67       |
| Relative Accuracy (Compared with Emission Standard : 690 ppm) (%)                    |           |       |       |                       |          |                          |          | 1.06       |
| Relative Accuracy Criteria <sup>1/</sup> (Compared with Emission Standard : 690 ppm) |           |       |       |                       |          |                          |          | ≤ 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 7-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 7-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418549  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913268-1

Page 4 of 4

Sample Number : 2418549-1  
Sampled Date : Feb 19, 2024  
Sample Description : Emission from Stationary Source  
Location : HRSG 22  
Parameter : O2

### Relative Accuracy Test Audit Report

| Run No.                                    | Date      | Time  |       | Raw Data at Actual |        | Difference |
|--|-----------|-------|-------|--------------------|--------|------------|
|  |           | Start | Stop  | CEMs (%)           | RM (%) |            |
| 1  | 19 Feb 24 | 10:20 | 10:40 | 13.43              | 13.21  | -0.22      |
| 2  | 19 Feb 24 | 10:41 | 11:01 | 13.44              | 13.21  | -0.23      |
| 3  | 19 Feb 24 | 11:02 | 11:22 | 13.47              | 13.25  | -0.23      |
| 4*   | 19 Feb 24 | 11:23 | 11:43 | 13.82              | 13.53  | -0.29      |
| 5*   | 19 Feb 24 | 11:44 | 12:04 | 14.07              | 13.81  | -0.27      |
| 6  | 19 Feb 24 | 12:05 | 12:25 | 14.40              | 14.15  | -0.24      |
| 7  | 19 Feb 24 | 12:26 | 12:46 | 14.35              | 14.10  | -0.25      |
| 8  | 19 Feb 24 | 12:47 | 13:07 | 14.20              | 14.00  | -0.20      |
| 9  | 19 Feb 24 | 13:08 | 13:28 | 13.60              | 13.35  | -0.24      |
| 10*  | 19 Feb 24 | 13:29 | 13:49 | 14.32              | 14.06  | -0.26      |
| 11   | 19 Feb 24 | 13:50 | 14:10 | 14.31              | 14.07  | -0.24      |
| 12   | 19 Feb 24 | 14:11 | 14:31 | 13.86              | 13.72  | -0.15      |
| Average                                    |           |       |       | 13.89              | 13.67  | -0.22      |
| Confidence Coefficient (CC)                |           |       |       |                    |        | -          |
| Relative Accuracy (Compared in Actual) (%) |           |       |       |                    |        | 0.22       |
| Relative Accuracy Criteria (%)             |           |       |       |                    |        | ≤ 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 : Anuvat Mounpair

Technical Management

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ 7-204-ก-6113

Approved by

Sarayuth Jitranont  
Assistant General Manager  
ทะเบียนเลขที่ 7-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiayutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418559  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913282-2

Page 1 of 2

Sample Number 2418559-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 22  
Parameter Flowrate

### Relative Accuracy Test Audit Report

| Run No.  | Date      | Time  |       | Flowrate Data |             | Difference |
|--|-----------|-------|-------|---------------|-------------|------------|
|  |           | Start | Stop  | CEMs (Nm3/Hr) | RM (Nm3/Hr) |            |
| 1  | 19 Feb 24 | 10:20 | 10:34 | 1,906,809     | 1,906,805   | 175,996    |
| 2  | 19 Feb 24 | 11:31 | 11:45 | 1,512,288     | 1,810,811   | 298,523    |
| 3  | 19 Feb 24 | 11:46 | 12:00 | 1,475,626     | 1,622,852   | 147,226    |
| 4*   | 19 Feb 24 | 12:01 | 12:15 | 1,231,522     | 1,673,882   | 442,360    |
| 5  | 19 Feb 24 | 12:16 | 12:30 | 1,155,826     | 1,445,340   | 289,514    |
| 6  | 19 Feb 24 | 12:31 | 12:45 | 1,187,705     | 1,490,380   | 302,675    |
| 7*   | 19 Feb 24 | 12:46 | 13:00 | 1,174,988     | 1,482,636   | 307,648    |
| 8  | 19 Feb 24 | 13:01 | 13:15 | 1,497,175     | 1,628,035   | 130,860    |
| 9  | 19 Feb 24 | 13:16 | 13:30 | 1,638,939     | 1,923,166   | 284,227    |
| 10*  | 19 Feb 24 | 13:31 | 13:45 | 1,223,071     | 1,742,480   | 519,409    |
| 11   | 19 Feb 24 | 13:46 | 14:00 | 1,173,156     | 1,443,769   | 270,613    |
| 12   | 19 Feb 24 | 14:01 | 14:15 | 1,172,779     | 1,456,363   | 283,584    |
| Average  |           |       |       | 1,393,811     | 1,636,391   | 242,580    |
| Confidence Coefficient (CC)                            |           |       |       |               |             | 53,774     |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |               |             | 18.11      |
| 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 1-204-ก-6113

Approved by

Sarayuth Jittrant

Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiayutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418559  
Date Received : Feb 20, 2024  
Date Reported : Mar 12, 2024  
Report Number : 2913282-2

Page 2 of 2

Sample Number 2418559-1  
Sampled Date Feb 19, 2024  
Sample Description Emission from Stationary Source  
Location HRSG 22  
Parameter Stack Temperature

### Relative Accuracy Test Audit Report

| Run No.  | Date      | Time  |       | Temperature Data |         | Difference |
|--|-----------|-------|-------|------------------|---------|------------|
|  |           | Start | Stop  | CEMs (°C)        | RM (°C) |            |
| 1  | 19 Feb 24 | 10:20 | 10:34 | 89.4             | 88.8    | -0.6       |
| 2  | 19 Feb 24 | 11:31 | 11:45 | 87.4             | 86.3    | -1.0       |
| 3  | 19 Feb 24 | 11:46 | 12:00 | 86.3             | 83.8    | -2.4       |
| 4  | 19 Feb 24 | 12:01 | 12:15 | 85.8             | 87.9    | 2.1        |
| 5  | 19 Feb 24 | 12:16 | 12:30 | 85.4             | 87.8    | 2.4        |
| 6  | 19 Feb 24 | 12:31 | 12:45 | 85.8             | 88.8    | 3.0        |
| 7*   | 19 Feb 24 | 12:46 | 13:00 | 85.5             | 88.8    | 3.4        |
| 8  | 19 Feb 24 | 13:01 | 13:15 | 90.0             | 92.1    | 2.1        |
| 9*   | 19 Feb 24 | 13:16 | 13:30 | 91.4             | 97.0    | 5.6        |
| 10*  | 19 Feb 24 | 13:31 | 13:45 | 82.8             | 90.5    | 7.7        |
| 11   | 19 Feb 24 | 13:46 | 14:00 | 83.4             | 82.8    | -0.7       |
| 12   | 19 Feb 24 | 14:01 | 14:15 | 84.9             | 85.8    | 0.9        |
| Average  |           |       |       | 86.5             | 87.1    | 0.7        |
| Confidence Coefficient (CC)                            |           |       |       |                  |         | 1.5        |
| Relative Accuracy <sup>1/</sup> (Compared with RM) (%) |           |       |       |                  |         | 2.4        |
| 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 : Apisit Singha

Technical Management

Wichan Choonharat

Manager

ทะเบียนเลขที่ 1-204-ก-6113

Approved by

Sarayuth Jittrant

Assistant General Manager

ทะเบียนเลขที่ 1-204-ก-4702

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# ภาคผนวก ค-4

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ระดับเสียงทั่วไป



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935004-1

Page 1 of 1

Sample Number 2418541-1  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณรั้วโครงการทางด่านพิศโต (GPS 47P 682744, 1584543)  
Measurement Date Feb 28 - Feb 29, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858519

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 11:00 AM - 12:00 PM | 47.8        | 84.7         | 41.6        |
| 12:00 PM - 01:00 PM | 52.3        | 89.4         | 40.9        |
| 01:00 PM - 02:00 PM | 52.4        | 90.4         | 40.7        |
| 02:00 PM - 03:00 PM | 54.1        | 92.0         | 39.7        |
| 03:00 PM - 04:00 PM | 52.9        | 90.8         | 40.0        |
| 04:00 PM - 05:00 PM | 50.5        | 91.5         | 40.8        |
| 05:00 PM - 06:00 PM | 47.3        | 70.2         | 43.3        |
| 06:00 PM - 07:00 PM | 44.9        | 67.0         | 42.9        |
| 07:00 PM - 08:00 PM | 43.8        | 54.3         | 42.7        |
| 08:00 PM - 09:00 PM | 44.8        | 61.5         | 42.9        |
| 09:00 PM - 10:00 PM | 48.0        | 55.2         | 46.4        |
| 10:00 PM - 11:00 PM | 45.2        | 53.8         | 44.1        |
| 11:00 PM - 12:00 AM | 47.4        | 55.5         | 46.0        |
| 12:00 AM - 01:00 AM | 47.6        | 52.3         | 46.8        |
| 01:00 AM - 02:00 AM | 46.6        | 55.9         | 45.3        |
| 02:00 AM - 03:00 AM | 46.8        | 58.3         | 45.5        |
| 03:00 AM - 04:00 AM | 46.4        | 57.2         | 44.5        |
| 04:00 AM - 05:00 AM | 47.1        | 57.3         | 45.4        |
| 05:00 AM - 06:00 AM | 47.9        | 65.1         | 46.2        |
| 06:00 AM - 07:00 AM | 54.2        | 93.4         | 43.9        |
| 07:00 AM - 08:00 AM | 63.5        | 102.1        | 40.9        |
| 08:00 AM - 09:00 AM | 58.7        | 96.9         | 39.3        |
| 09:00 AM - 10:00 AM | 59.7        | 98.4         | 37.8        |
| 10:00 AM - 11:00 AM | 55.3        | 95.5         | 37.5        |

Leq Average 24 hrs. (dB(A))

54.0

Lmax (dB(A))

102.1

L90 (dB(A))

42.9

Ldn (dB(A))

57.0

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

Technical Management

*Orawan R.*

Orawan Rak Yong  
Scientist (3)

Approved by

*Supt S.*

Supot Salamteh  
Section Head

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S:\Reports\_Air Noise.rpt ( 2:02PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935005-1

Page 1 of 1

Sample Number 2418541-2  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณรั้วโครงการทางด่านพิศโต (GPS 47P 682744, 1584543)  
Measurement Date Feb 29 - Mar 01, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858519

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 11:00 AM - 12:00 PM | 54.2        | 95.1         | 36.9        |
| 12:00 PM - 01:00 PM | 56.0        | 93.8         | 37.2        |
| 01:00 PM - 02:00 PM | 56.3        | 93.6         | 37.1        |
| 02:00 PM - 03:00 PM | 54.3        | 92.8         | 38.3        |
| 03:00 PM - 04:00 PM | 56.5        | 95.2         | 38.2        |
| 04:00 PM - 05:00 PM | 61.9        | 99.0         | 38.2        |
| 05:00 PM - 06:00 PM | 50.9        | 88.8         | 39.3        |
| 06:00 PM - 07:00 PM | 44.4        | 71.5         | 39.6        |
| 07:00 PM - 08:00 PM | 43.4        | 53.5         | 39.8        |
| 08:00 PM - 09:00 PM | 40.7        | 55.0         | 38.9        |
| 09:00 PM - 10:00 PM | 40.5        | 50.2         | 38.5        |
| 10:00 PM - 11:00 PM | 43.8        | 69.1         | 38.8        |
| 11:00 PM - 12:00 AM | 39.8        | 51.6         | 37.4        |
| 12:00 AM - 01:00 AM | 43.1        | 69.9         | 39.1        |
| 01:00 AM - 02:00 AM | 43.1        | 55.5         | 41.4        |
| 02:00 AM - 03:00 AM | 46.7        | 67.9         | 43.1        |
| 03:00 AM - 04:00 AM | 48.1        | 69.1         | 39.3        |
| 04:00 AM - 05:00 AM | 49.9        | 69.1         | 38.4        |
| 05:00 AM - 06:00 AM | 51.8        | 72.5         | 39.9        |
| 06:00 AM - 07:00 AM | 53.0        | 95.3         | 39.4        |
| 07:00 AM - 08:00 AM | 55.3        | 94.5         | 36.8        |
| 08:00 AM - 09:00 AM | 51.0        | 94.7         | 35.4        |
| 09:00 AM - 10:00 AM | 54.5        | 97.3         | 35.0        |
| 10:00 AM - 11:00 AM | 40.1        | 57.4         | 34.7        |

Leq Average 24 hrs. (dB(A))

53.1

Lmax (dB(A))

99.0

L90 (dB(A))

38.4

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

Technical Management

*Orawan R.*

Orawan Rak Yong  
Scientist (3)

Approved by

*Supt S.*

Supot Salamteh  
Section Head

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S:\Reports\_Air Noise.rpt ( 2:03PM)





## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935006-1

Page 1 of 1

Sample Number 2418541-3  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณริมรั้วโครงการทางข้ามฟักใต้ (GPS 47P 682744, 1584543)  
Measurement Date Mar 01 - Mar 02, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858519

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 11:00 AM - 12:00 PM | 54.2        | 97.4         | 33.7        |
| 12:00 PM - 01:00 PM | 48.6        | 92.1         | 34.8        |
| 01:00 PM - 02:00 PM | 53.6        | 93.9         | 34.8        |
| 02:00 PM - 03:00 PM | 58.5        | 98.3         | 34.8        |
| 03:00 PM - 04:00 PM | 61.3        | 97.0         | 35.5        |
| 04:00 PM - 05:00 PM | 59.9        | 96.5         | 36.4        |
| 05:00 PM - 06:00 PM | 49.0        | 70.7         | 38.4        |
| 06:00 PM - 07:00 PM | 43.2        | 69.7         | 39.2        |
| 07:00 PM - 08:00 PM | 42.2        | 54.9         | 39.6        |
| 08:00 PM - 09:00 PM | 42.8        | 62.6         | 40.4        |
| 09:00 PM - 10:00 PM | 44.1        | 67.6         | 41.4        |
| 10:00 PM - 11:00 PM | 44.5        | 68.7         | 41.4        |
| 11:00 PM - 12:00 AM | 41.3        | 58.6         | 40.1        |
| 12:00 AM - 01:00 AM | 42.8        | 52.0         | 40.9        |
| 01:00 AM - 02:00 AM | 43.5        | 69.5         | 38.6        |
| 02:00 AM - 03:00 AM | 48.4        | 69.3         | 41.7        |
| 03:00 AM - 04:00 AM | 41.7        | 51.2         | 39.3        |
| 04:00 AM - 05:00 AM | 51.3        | 70.1         | 39.4        |
| 05:00 AM - 06:00 AM | 52.0        | 74.2         | 40.6        |
| 06:00 AM - 07:00 AM | 52.2        | 94.8         | 40.9        |
| 07:00 AM - 08:00 AM | 50.2        | 90.5         | 38.5        |
| 08:00 AM - 09:00 AM | 48.0        | 88.0         | 35.8        |
| 09:00 AM - 10:00 AM | 58.8        | 96.9         | 35.7        |
| 10:00 AM - 11:00 AM | 38.5        | 64.0         | 34.7        |

Leq Average 24 hrs. (dB(A))

53.5

Lmax (dB(A))

98.3

L90 (dB(A))

38.6

Ldn (dB(A))

56.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Technical Management

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S:\Reports\_Air Noise.rpt ( 2:03PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935007-1

Page 1 of 1

Sample Number 2418541-4  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณริมรั้วโครงการทางข้ามฟักใต้ (GPS 47P 682744, 1584543)  
Measurement Date Mar 02 - Mar 03, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858519

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 11:00 AM - 12:00 PM | 40.6        | 73.8         | 34.2        |
| 12:00 PM - 01:00 PM | 42.5        | 81.2         | 34.3        |
| 01:00 PM - 02:00 PM | 52.5        | 93.6         | 34.0        |
| 02:00 PM - 03:00 PM | 59.4        | 98.2         | 37.8        |
| 03:00 PM - 04:00 PM | 60.8        | 99.7         | 38.7        |
| 04:00 PM - 05:00 PM | 42.4        | 65.0         | 37.9        |
| 05:00 PM - 06:00 PM | 49.4        | 90.5         | 37.3        |
| 06:00 PM - 07:00 PM | 45.1        | 66.3         | 40.4        |
| 07:00 PM - 08:00 PM | 45.0        | 54.7         | 42.2        |
| 08:00 PM - 09:00 PM | 44.4        | 61.1         | 42.5        |
| 09:00 PM - 10:00 PM | 42.6        | 53.2         | 41.5        |
| 10:00 PM - 11:00 PM | 43.0        | 51.1         | 41.9        |
| 11:00 PM - 12:00 AM | 43.4        | 57.1         | 40.8        |
| 12:00 AM - 01:00 AM | 42.2        | 57.4         | 39.3        |
| 01:00 AM - 02:00 AM | 40.0        | 55.2         | 37.1        |
| 02:00 AM - 03:00 AM | 40.9        | 52.3         | 38.4        |
| 03:00 AM - 04:00 AM | 42.8        | 61.6         | 40.7        |
| 04:00 AM - 05:00 AM | 45.8        | 66.9         | 41.3        |
| 05:00 AM - 06:00 AM | 45.5        | 63.1         | 42.6        |
| 06:00 AM - 07:00 AM | 46.3        | 63.7         | 40.9        |
| 07:00 AM - 08:00 AM | 54.0        | 95.9         | 39.3        |
| 08:00 AM - 09:00 AM | 57.1        | 97.3         | 38.2        |
| 09:00 AM - 10:00 AM | 44.8        | 70.8         | 35.4        |
| 10:00 AM - 11:00 AM | 40.8        | 78.1         | 34.6        |

Leq Average 24 hrs. (dB(A))

51.7

Lmax (dB(A))

99.7

L90 (dB(A))

38.7

Ldn (dB(A))

53.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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Technical Management

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S:\Reports\_Air Noise.rpt ( 2:03PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418541  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935008-1

Page 1 of 1

Sample Number : 2418541-5  
Parameter : Noise (Leq 24 hrs.)  
Location : บริเวณรั้วโครงการทางด้านทิศใต้ (GPS 47P 682744, 1584543)  
Measurement Date : Mar 03 - Mar 04, 2024  
Measurement by : Thanit Janjop  
Sound Level meter : Serial No. 858519

| Time                        | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|-----------------------------|-------------|--------------|-------------|
| 11:00 AM - 12:00 PM         | 48.8        | 63.2         | 41.0        |
| 12:00 PM - 01:00 PM         | 48.1        | 61.3         | 38.1        |
| 01:00 PM - 02:00 PM         | 46.5        | 68.3         | 34.5        |
| 02:00 PM - 03:00 PM         | 48.8        | 62.7         | 37.9        |
| 03:00 PM - 04:00 PM         | 50.4        | 65.7         | 40.1        |
| 04:00 PM - 05:00 PM         | 43.9        | 67.4         | 34.4        |
| 05:00 PM - 06:00 PM         | 41.3        | 72.8         | 35.4        |
| 06:00 PM - 07:00 PM         | 45.1        | 62.3         | 39.8        |
| 07:00 PM - 08:00 PM         | 42.7        | 55.9         | 40.6        |
| 08:00 PM - 09:00 PM         | 44.1        | 53.6         | 41.5        |
| 09:00 PM - 10:00 PM         | 43.4        | 53.8         | 40.3        |
| 10:00 PM - 11:00 PM         | 42.7        | 65.1         | 40.0        |
| 11:00 PM - 12:00 AM         | 40.0        | 49.6         | 38.2        |
| 12:00 AM - 01:00 AM         | 43.7        | 62.7         | 41.3        |
| 01:00 AM - 02:00 AM         | 41.1        | 60.1         | 38.3        |
| 02:00 AM - 03:00 AM         | 40.8        | 63.7         | 36.9        |
| 03:00 AM - 04:00 AM         | 39.6        | 51.4         | 37.4        |
| 04:00 AM - 05:00 AM         | 42.1        | 62.8         | 38.7        |
| 05:00 AM - 06:00 AM         | 43.5        | 59.0         | 40.0        |
| 06:00 AM - 07:00 AM         | 50.4        | 74.3         | 40.6        |
| 07:00 AM - 08:00 AM         | 42.9        | 67.6         | 38.4        |
| 08:00 AM - 09:00 AM         | 50.2        | 78.0         | 36.5        |
| 09:00 AM - 10:00 AM         | 44.0        | 70.2         | 35.3        |
| 10:00 AM - 11:00 AM         | 39.5        | 60.1         | 35.0        |
| Leq Average 24 hrs. (dB(A)) | 45.7        |              |             |
| Lmax (dB(A))                |             | 78.0         |             |
| L90 (dB(A))                 |             |              | 38.3        |
| Ldn (dB(A))                 | 51.0        |              |             |
| Standard (dB(A))            | 70          | 115          |             |

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
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โรงงาน พ.ศ. 2548

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S:\Reports\_Air Noise.rpt ( 2:03PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418541  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935009-1

Page 1 of 1

Sample Number : 2418541-6  
Parameter : Noise (Leq 24 hrs.)  
Location : วัดหนองน้ำส้ม (GPS 47P 683730, 1584131)  
Measurement Date : Feb 28 - Feb 29, 2024  
Measurement by : Thanit Janjop  
Sound Level meter : Serial No. 858520

| Time                        | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|-----------------------------|-------------|--------------|-------------|
| 10:00 AM - 11:00 AM         | 57.9        | 85.8         | 42.9        |
| 11:00 AM - 12:00 PM         | 51.1        | 78.7         | 43.2        |
| 12:00 PM - 01:00 PM         | 52.0        | 71.9         | 41.3        |
| 01:00 PM - 02:00 PM         | 53.2        | 76.0         | 41.4        |
| 02:00 PM - 03:00 PM         | 50.2        | 74.8         | 42.2        |
| 03:00 PM - 04:00 PM         | 50.1        | 70.3         | 42.6        |
| 04:00 PM - 05:00 PM         | 52.4        | 69.8         | 43.8        |
| 05:00 PM - 06:00 PM         | 48.2        | 65.7         | 41.9        |
| 06:00 PM - 07:00 PM         | 46.0        | 70.1         | 41.2        |
| 07:00 PM - 08:00 PM         | 47.0        | 57.8         | 42.4        |
| 08:00 PM - 09:00 PM         | 49.5        | 64.1         | 48.4        |
| 09:00 PM - 10:00 PM         | 48.8        | 58.4         | 47.5        |
| 10:00 PM - 11:00 PM         | 47.8        | 52.4         | 44.1        |
| 11:00 PM - 12:00 AM         | 50.4        | 55.9         | 49.6        |
| 12:00 AM - 01:00 AM         | 48.2        | 54.6         | 39.6        |
| 01:00 AM - 02:00 AM         | 48.7        | 60.5         | 45.3        |
| 02:00 AM - 03:00 AM         | 50.6        | 60.6         | 49.8        |
| 03:00 AM - 04:00 AM         | 49.1        | 51.9         | 40.0        |
| 04:00 AM - 05:00 AM         | 44.1        | 61.5         | 39.2        |
| 05:00 AM - 06:00 AM         | 50.6        | 73.6         | 42.6        |
| 06:00 AM - 07:00 AM         | 52.0        | 75.3         | 44.8        |
| 07:00 AM - 08:00 AM         | 54.0        | 73.5         | 45.7        |
| 08:00 AM - 09:00 AM         | 53.0        | 73.6         | 45.1        |
| 09:00 AM - 10:00 AM         | 51.9        | 76.7         | 42.9        |
| Leq Average 24 hrs. (dB(A)) | 51.3        |              |             |
| Lmax (dB(A))                |             | 85.8         |             |
| L90 (dB(A))                 |             |              | 42.9        |
| Ldn (dB(A))                 | 56.4        |              |             |
| Standard (dB(A))            | 70          | 115          |             |

Reference Method : ISO1996-1 and 1996-2

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

Technical Management

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935010-1

Page 1 of 1

Sample Number 2418541-7  
Parameter Noise (Leq 24 hrs.)  
Location วัดหนองน้ำส้ม (GPS 47P 683730, 1584131)  
Measurement Date Feb 29 - Mar 01, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858520

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 10:00 AM - 11:00 AM | 47.3        | 68.5         | 42.7        |
| 11:00 AM - 12:00 PM | 53.9        | 74.0         | 42.7        |
| 12:00 PM - 01:00 PM | 49.8        | 72.9         | 40.6        |
| 01:00 PM - 02:00 PM | 52.4        | 75.5         | 41.7        |
| 02:00 PM - 03:00 PM | 49.9        | 71.3         | 41.8        |
| 03:00 PM - 04:00 PM | 53.6        | 82.4         | 44.0        |
| 04:00 PM - 05:00 PM | 51.3        | 74.5         | 43.7        |
| 05:00 PM - 06:00 PM | 49.3        | 71.1         | 40.6        |
| 06:00 PM - 07:00 PM | 45.1        | 69.7         | 39.6        |
| 07:00 PM - 08:00 PM | 45.3        | 58.7         | 43.7        |
| 08:00 PM - 09:00 PM | 47.4        | 69.7         | 46.4        |
| 09:00 PM - 10:00 PM | 47.5        | 60.9         | 46.2        |
| 10:00 PM - 11:00 PM | 42.3        | 57.4         | 40.1        |
| 11:00 PM - 12:00 AM | 42.5        | 60.5         | 40.2        |
| 12:00 AM - 01:00 AM | 41.7        | 63.1         | 38.5        |
| 01:00 AM - 02:00 AM | 41.5        | 51.5         | 38.3        |
| 02:00 AM - 03:00 AM | 44.7        | 60.8         | 42.7        |
| 03:00 AM - 04:00 AM | 42.9        | 62.2         | 39.5        |
| 04:00 AM - 05:00 AM | 43.1        | 59.8         | 41.5        |
| 05:00 AM - 06:00 AM | 53.4        | 75.5         | 42.3        |
| 06:00 AM - 07:00 AM | 53.9        | 86.7         | 45.8        |
| 07:00 AM - 08:00 AM | 55.0        | 78.1         | 44.8        |
| 08:00 AM - 09:00 AM | 52.8        | 76.6         | 43.7        |
| 09:00 AM - 10:00 AM | 48.8        | 69.4         | 42.7        |

Leq Average 24 hrs. (dB(A))

50.1

Lmax (dB(A))

86.7

L90 (dB(A))

42.3

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  
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โรงงาน พ.ศ. 2548

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935011-1

Page 1 of 1

Sample Number 2418541-8  
Parameter Noise (Leq 24 hrs.)  
Location วัดหนองน้ำส้ม (GPS 47P 683730, 1584131)  
Measurement Date Mar 01 - Mar 02, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858520

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 10:00 AM - 11:00 AM | 47.1        | 69.5         | 42.1        |
| 11:00 AM - 12:00 PM | 47.0        | 70.0         | 41.8        |
| 12:00 PM - 01:00 PM | 48.2        | 71.3         | 41.6        |
| 01:00 PM - 02:00 PM | 48.2        | 68.2         | 42.5        |
| 02:00 PM - 03:00 PM | 48.3        | 70.0         | 43.5        |
| 03:00 PM - 04:00 PM | 48.9        | 69.2         | 43.3        |
| 04:00 PM - 05:00 PM | 50.6        | 72.8         | 43.4        |
| 05:00 PM - 06:00 PM | 47.4        | 73.5         | 40.7        |
| 06:00 PM - 07:00 PM | 46.2        | 71.2         | 39.0        |
| 07:00 PM - 08:00 PM | 46.2        | 61.6         | 44.0        |
| 08:00 PM - 09:00 PM | 48.2        | 58.3         | 47.1        |
| 09:00 PM - 10:00 PM | 47.6        | 55.0         | 46.2        |
| 10:00 PM - 11:00 PM | 46.5        | 61.6         | 45.1        |
| 11:00 PM - 12:00 AM | 44.9        | 55.1         | 42.0        |
| 12:00 AM - 01:00 AM | 41.7        | 51.9         | 40.3        |
| 01:00 AM - 02:00 AM | 41.8        | 58.4         | 40.0        |
| 02:00 AM - 03:00 AM | 42.1        | 54.3         | 40.7        |
| 03:00 AM - 04:00 AM | 41.9        | 60.0         | 39.7        |
| 04:00 AM - 05:00 AM | 48.3        | 75.3         | 40.5        |
| 05:00 AM - 06:00 AM | 51.1        | 74.8         | 41.5        |
| 06:00 AM - 07:00 AM | 53.9        | 80.1         | 45.8        |
| 07:00 AM - 08:00 AM | 53.1        | 77.0         | 45.0        |
| 08:00 AM - 09:00 AM | 52.6        | 74.7         | 44.9        |
| 09:00 AM - 10:00 AM | 52.7        | 70.2         | 43.8        |

Leq Average 24 hrs. (dB(A))

49.0

Lmax (dB(A))

80.1

L90 (dB(A))

42.1

Ldn (dB(A))

54.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
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โรงงาน พ.ศ. 2548

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418541  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935012-1

Page 1 of 1

Sample Number : 2418541-9  
Parameter : Noise (Leq 24 hrs.)  
Location : วัดหนองน้ำส้ม (GPS 47P 683730, 1584131)  
Measurement Date : Mar 02 - Mar 03, 2024  
Measurement by : Thanit Janjop  
Sound Level meter : Serial No. 858520

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 10:00 AM - 11:00 AM | 49.6        | 74.2         | 43.3        |
| 11:00 AM - 12:00 PM | 52.0        | 79.5         | 42.7        |
| 12:00 PM - 01:00 PM | 50.3        | 72.1         | 42.2        |
| 01:00 PM - 02:00 PM | 49.3        | 74.3         | 42.1        |
| 02:00 PM - 03:00 PM | 49.9        | 77.8         | 42.0        |
| 03:00 PM - 04:00 PM | 53.0        | 77.1         | 43.1        |
| 04:00 PM - 05:00 PM | 50.7        | 73.9         | 44.5        |
| 05:00 PM - 06:00 PM | 50.5        | 73.9         | 41.3        |
| 06:00 PM - 07:00 PM | 46.0        | 69.3         | 39.7        |
| 07:00 PM - 08:00 PM | 45.1        | 66.8         | 41.9        |
| 08:00 PM - 09:00 PM | 46.0        | 55.4         | 44.1        |
| 09:00 PM - 10:00 PM | 47.3        | 58.9         | 45.9        |
| 10:00 PM - 11:00 PM | 49.2        | 61.6         | 45.2        |
| 11:00 PM - 12:00 AM | 51.1        | 57.5         | 50.3        |
| 12:00 AM - 01:00 AM | 43.9        | 63.0         | 40.1        |
| 01:00 AM - 02:00 AM | 41.2        | 49.5         | 40.0        |
| 02:00 AM - 03:00 AM | 43.6        | 53.3         | 42.1        |
| 03:00 AM - 04:00 AM | 50.0        | 60.2         | 42.7        |
| 04:00 AM - 05:00 AM | 50.6        | 60.2         | 49.9        |
| 05:00 AM - 06:00 AM | 47.5        | 61.7         | 41.4        |
| 06:00 AM - 07:00 AM | 52.5        | 72.6         | 46.4        |
| 07:00 AM - 08:00 AM | 50.9        | 80.2         | 44.4        |
| 08:00 AM - 09:00 AM | 53.2        | 76.1         | 44.3        |
| 09:00 AM - 10:00 AM | 52.2        | 74.6         | 44.8        |

Leq Average 24 hrs. (dB(A)) : 49.9  
Lmax (dB(A)) : 80.2  
L90 (dB(A)) : 42.7  
Ldn (dB(A)) : 55.7  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

Technical Management

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11730-21/ EMAIL

S:\Reports\_Air Noise.rpt ( 2:05PM)



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2418541  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935013-1

Page 1 of 1

Sample Number : 2418541-10  
Parameter : Noise (Leq 24 hrs.)  
Location : วัดหนองน้ำส้ม (GPS 47P 683730, 1584131)  
Measurement Date : Mar 03 - Mar 04, 2024  
Measurement by : Thanit Janjop  
Sound Level meter : Serial No. 858520

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 10:00 AM - 11:00 AM | 49.0        | 67.2         | 42.5        |
| 11:00 AM - 12:00 PM | 49.2        | 73.2         | 43.2        |
| 12:00 PM - 01:00 PM | 52.1        | 75.5         | 41.7        |
| 01:00 PM - 02:00 PM | 49.5        | 67.8         | 42.8        |
| 02:00 PM - 03:00 PM | 49.8        | 74.5         | 42.1        |
| 03:00 PM - 04:00 PM | 50.3        | 73.8         | 42.6        |
| 04:00 PM - 05:00 PM | 48.5        | 68.4         | 41.7        |
| 05:00 PM - 06:00 PM | 51.7        | 73.7         | 43.9        |
| 06:00 PM - 07:00 PM | 48.2        | 76.5         | 39.3        |
| 07:00 PM - 08:00 PM | 45.5        | 58.5         | 40.8        |
| 08:00 PM - 09:00 PM | 47.9        | 54.9         | 43.2        |
| 09:00 PM - 10:00 PM | 50.1        | 63.1         | 49.1        |
| 10:00 PM - 11:00 PM | 43.2        | 59.2         | 41.0        |
| 11:00 PM - 12:00 AM | 45.7        | 53.4         | 38.8        |
| 12:00 AM - 01:00 AM | 49.8        | 58.3         | 49.2        |
| 01:00 AM - 02:00 AM | 49.6        | 52.1         | 44.4        |
| 02:00 AM - 03:00 AM | 43.8        | 58.9         | 41.8        |
| 03:00 AM - 04:00 AM | 45.4        | 59.9         | 42.9        |
| 04:00 AM - 05:00 AM | 46.8        | 60.6         | 42.7        |
| 05:00 AM - 06:00 AM | 48.2        | 61.8         | 46.9        |
| 06:00 AM - 07:00 AM | 55.4        | 79.2         | 45.4        |
| 07:00 AM - 08:00 AM | 51.2        | 77.0         | 45.3        |
| 08:00 AM - 09:00 AM | 51.2        | 72.5         | 44.7        |
| 09:00 AM - 10:00 AM | 53.6        | 79.6         | 43.9        |

Leq Average 24 hrs. (dB(A)) : 49.9  
Lmax (dB(A)) : 79.6  
L90 (dB(A)) : 42.8  
Ldn (dB(A)) : 55.9  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prankhonsiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418541**  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935014-1

Page 1 of 1

**Sample Number** 2418541-11  
**Parameter** Noise (Leq 24 hrs.)  
**Location** โรงเรียนวัดนางขี (GPS 47P 684386, 1587182)  
**Measurement Date** Feb 28 - Feb 29, 2024  
**Measurement by** Thanit Janjop  
**Sound Level meter** Serial No. 858521

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 12:00 PM - 01:00 PM | 56.4        | 83.9         | 48.4        |
| 01:00 PM - 02:00 PM | 53.8        | 80.1         | 48.5        |
| 02:00 PM - 03:00 PM | 53.3        | 77.2         | 49.2        |
| 03:00 PM - 04:00 PM | 53.2        | 76.8         | 49.0        |
| 04:00 PM - 05:00 PM | 57.0        | 85.4         | 48.7        |
| 05:00 PM - 06:00 PM | 63.0        | 88.3         | 49.9        |
| 06:00 PM - 07:00 PM | 62.0        | 96.1         | 49.4        |
| 07:00 PM - 08:00 PM | 51.7        | 74.7         | 49.3        |
| 08:00 PM - 09:00 PM | 52.3        | 75.9         | 49.4        |
| 09:00 PM - 10:00 PM | 54.1        | 77.6         | 48.6        |
| 10:00 PM - 11:00 PM | 61.1        | 82.4         | 48.6        |
| 11:00 PM - 12:00 AM | 49.6        | 62.2         | 48.7        |
| 12:00 AM - 01:00 AM | 50.8        | 80.0         | 47.7        |
| 01:00 AM - 02:00 AM | 55.0        | 84.3         | 48.5        |
| 02:00 AM - 03:00 AM | 50.0        | 75.4         | 47.6        |
| 03:00 AM - 04:00 AM | 55.8        | 82.1         | 47.5        |
| 04:00 AM - 05:00 AM | 49.7        | 67.1         | 48.3        |
| 05:00 AM - 06:00 AM | 64.4        | 93.3         | 48.1        |
| 06:00 AM - 07:00 AM | 60.2        | 91.6         | 50.1        |
| 07:00 AM - 08:00 AM | 56.7        | 85.8         | 51.0        |
| 08:00 AM - 09:00 AM | 59.5        | 89.4         | 50.4        |
| 09:00 AM - 10:00 AM | 54.2        | 75.4         | 49.8        |
| 10:00 AM - 11:00 AM | 54.6        | 82.4         | 50.5        |
| 11:00 AM - 12:00 PM | 56.6        | 82.8         | 49.4        |

Leq Average 24 hrs. (dB(A)) 57.8  
Lmax (dB(A)) 96.1  
L90 (dB(A)) 48.7  
Ldn (dB(A)) 64.7  
Standard (dB(A)) 70 115  
Reference Method : ISO1996-1 and 1996-2

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

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prankhonsiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2418541**  
Date Received : Mar 07, 2024  
Date Reported : Mar 13, 2024  
Report Number: 2935015-1

Page 1 of 1

**Sample Number** 2418541-12  
**Parameter** Noise (Leq 24 hrs.)  
**Location** โรงเรียนวัดนางขี (GPS 47P 684386, 1587182)  
**Measurement Date** Feb 29 - Mar 01, 2024  
**Measurement by** Thanit Janjop  
**Sound Level meter** Serial No. 858521

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 12:00 PM - 01:00 PM | 52.7        | 72.8         | 48.3        |
| 01:00 PM - 02:00 PM | 54.2        | 78.2         | 48.6        |
| 02:00 PM - 03:00 PM | 54.1        | 79.2         | 48.6        |
| 03:00 PM - 04:00 PM | 53.6        | 80.8         | 48.3        |
| 04:00 PM - 05:00 PM | 52.2        | 74.6         | 48.5        |
| 05:00 PM - 06:00 PM | 53.7        | 78.4         | 49.4        |
| 06:00 PM - 07:00 PM | 62.9        | 89.2         | 49.3        |
| 07:00 PM - 08:00 PM | 61.9        | 85.1         | 48.8        |
| 08:00 PM - 09:00 PM | 60.5        | 85.7         | 48.4        |
| 09:00 PM - 10:00 PM | 58.4        | 86.5         | 48.3        |
| 10:00 PM - 11:00 PM | 55.5        | 82.1         | 47.5        |
| 11:00 PM - 12:00 AM | 48.6        | 65.6         | 47.1        |
| 12:00 AM - 01:00 AM | 48.7        | 68.1         | 46.9        |
| 01:00 AM - 02:00 AM | 48.9        | 76.2         | 46.8        |
| 02:00 AM - 03:00 AM | 52.7        | 81.1         | 46.9        |
| 03:00 AM - 04:00 AM | 51.8        | 79.9         | 46.7        |
| 04:00 AM - 05:00 AM | 61.6        | 85.7         | 46.5        |
| 05:00 AM - 06:00 AM | 49.5        | 64.4         | 47.2        |
| 06:00 AM - 07:00 AM | 56.8        | 81.0         | 50.3        |
| 07:00 AM - 08:00 AM | 56.6        | 79.4         | 49.9        |
| 08:00 AM - 09:00 AM | 54.3        | 77.0         | 49.9        |
| 09:00 AM - 10:00 AM | 54.7        | 71.6         | 50.1        |
| 10:00 AM - 11:00 AM | 58.2        | 91.2         | 48.5        |
| 11:00 AM - 12:00 PM | 61.6        | 89.5         | 49.9        |

Leq Average 24 hrs. (dB(A)) 57.2  
Lmax (dB(A)) 91.2  
L90 (dB(A)) 48.4  
Ldn (dB(A)) 62.1  
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

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935016-1

Page 1 of 1

Sample Number 2418541-13  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนวัดนางสี (GPS 47P 684386, 1587182)  
Measurement Date Mar 01 - Mar 02, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858521

| Time                        | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|-----------------------------|-------------|--------------|-------------|
| 12:00 PM - 01:00 PM         | 60.3        | 86.2         | 48.1        |
| 01:00 PM - 02:00 PM         | 61.7        | 93.4         | 48.7        |
| 02:00 PM - 03:00 PM         | 60.0        | 87.8         | 49.1        |
| 03:00 PM - 04:00 PM         | 63.2        | 92.2         | 48.5        |
| 04:00 PM - 05:00 PM         | 57.6        | 87.2         | 48.5        |
| 05:00 PM - 06:00 PM         | 53.4        | 80.3         | 48.2        |
| 06:00 PM - 07:00 PM         | 54.7        | 82.7         | 48.3        |
| 07:00 PM - 08:00 PM         | 51.2        | 71.1         | 48.6        |
| 08:00 PM - 09:00 PM         | 59.9        | 86.6         | 48.8        |
| 09:00 PM - 10:00 PM         | 69.6        | 95.3         | 47.7        |
| 10:00 PM - 11:00 PM         | 63.4        | 84.8         | 47.5        |
| 11:00 PM - 12:00 AM         | 65.5        | 88.4         | 46.7        |
| 12:00 AM - 01:00 AM         | 50.6        | 76.5         | 46.0        |
| 01:00 AM - 02:00 AM         | 48.4        | 65.6         | 46.3        |
| 02:00 AM - 03:00 AM         | 49.0        | 72.1         | 45.8        |
| 03:00 AM - 04:00 AM         | 48.4        | 72.1         | 46.1        |
| 04:00 AM - 05:00 AM         | 55.3        | 82.2         | 46.8        |
| 05:00 AM - 06:00 AM         | 52.6        | 74.7         | 47.3        |
| 06:00 AM - 07:00 AM         | 53.9        | 76.0         | 48.9        |
| 07:00 AM - 08:00 AM         | 56.4        | 87.7         | 49.0        |
| 08:00 AM - 09:00 AM         | 61.2        | 97.6         | 49.4        |
| 09:00 AM - 10:00 AM         | 61.3        | 85.1         | 48.7        |
| 10:00 AM - 11:00 AM         | 60.0        | 86.7         | 48.1        |
| 11:00 AM - 12:00 PM         | 56.2        | 80.5         | 47.3        |
| Leq Average 24 hrs. (dB(A)) | 60.7        |              |             |
| Lmax (dB(A))                |             | 97.6         |             |
| L90 (dB(A))                 |             |              | 48.1        |
| 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

Technical Management

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935017-1

Page 1 of 1

Sample Number 2418541-14  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนวัดนางสี (GPS 47P 684386, 1587182)  
Measurement Date Mar 02 - Mar 03, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858521

| Time                        | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|-----------------------------|-------------|--------------|-------------|
| 12:00 PM - 01:00 PM         | 56.3        | 83.1         | 48.4        |
| 01:00 PM - 02:00 PM         | 52.7        | 77.4         | 47.4        |
| 02:00 PM - 03:00 PM         | 52.8        | 81.6         | 47.7        |
| 03:00 PM - 04:00 PM         | 54.0        | 80.4         | 47.7        |
| 04:00 PM - 05:00 PM         | 57.9        | 89.0         | 46.9        |
| 05:00 PM - 06:00 PM         | 58.8        | 81.8         | 48.2        |
| 06:00 PM - 07:00 PM         | 51.3        | 72.1         | 47.9        |
| 07:00 PM - 08:00 PM         | 49.9        | 69.4         | 47.5        |
| 08:00 PM - 09:00 PM         | 50.6        | 74.6         | 48.7        |
| 09:00 PM - 10:00 PM         | 50.8        | 77.4         | 48.4        |
| 10:00 PM - 11:00 PM         | 57.9        | 85.4         | 47.1        |
| 11:00 PM - 12:00 AM         | 61.4        | 88.5         | 46.7        |
| 12:00 AM - 01:00 AM         | 48.0        | 73.0         | 46.1        |
| 01:00 AM - 02:00 AM         | 48.9        | 66.9         | 47.1        |
| 02:00 AM - 03:00 AM         | 48.5        | 65.5         | 46.9        |
| 03:00 AM - 04:00 AM         | 48.2        | 66.0         | 46.6        |
| 04:00 AM - 05:00 AM         | 48.8        | 71.0         | 46.4        |
| 05:00 AM - 06:00 AM         | 64.1        | 85.3         | 46.9        |
| 06:00 AM - 07:00 AM         | 57.6        | 77.4         | 49.7        |
| 07:00 AM - 08:00 AM         | 63.3        | 86.2         | 49.3        |
| 08:00 AM - 09:00 AM         | 63.7        | 85.8         | 49.7        |
| 09:00 AM - 10:00 AM         | 60.4        | 95.0         | 48.1        |
| 10:00 AM - 11:00 AM         | 57.9        | 89.0         | 46.9        |
| 11:00 AM - 12:00 PM         | 52.8        | 77.7         | 46.9        |
| Leq Average 24 hrs. (dB(A)) | 57.9        |              |             |
| Lmax (dB(A))                |             | 95.0         |             |
| L90 (dB(A))                 |             |              | 47.4        |
| Ldn (dB(A))                 | 64.3        |              |             |
| 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

Technical Management

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004243

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2418541

Date Received : Mar 07, 2024

Date Reported : Mar 13, 2024

Report Number: 2935018-1

Page 1 of 1

Sample Number 2418541-15  
Parameter Noise (Leq 24 hrs.)  
Location โรงเรียนวัดนางพ (GPS 47P 684386, 1587182)  
Measurement Date Mar 03 - Mar 04, 2024  
Measurement by Thanit Janjop  
Sound Level meter Serial No. 858521

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 12:00 PM - 01:00 PM | 51.6        | 72.9         | 45.5        |
| 01:00 PM - 02:00 PM | 50.3        | 75.5         | 45.6        |
| 02:00 PM - 03:00 PM | 49.9        | 75.6         | 45.5        |
| 03:00 PM - 04:00 PM | 54.7        | 79.4         | 45.2        |
| 04:00 PM - 05:00 PM | 57.2        | 87.1         | 46.8        |
| 05:00 PM - 06:00 PM | 52.7        | 74.4         | 47.4        |
| 06:00 PM - 07:00 PM | 54.6        | 81.9         | 47.1        |
| 07:00 PM - 08:00 PM | 49.7        | 71.2         | 46.8        |
| 08:00 PM - 09:00 PM | 60.0        | 90.6         | 46.8        |
| 09:00 PM - 10:00 PM | 49.0        | 65.1         | 47.1        |
| 10:00 PM - 11:00 PM | 50.0        | 80.0         | 47.0        |
| 11:00 PM - 12:00 AM | 64.1        | 85.3         | 46.9        |
| 12:00 AM - 01:00 AM | 52.4        | 83.8         | 46.6        |
| 01:00 AM - 02:00 AM | 67.6        | 94.3         | 46.4        |
| 02:00 AM - 03:00 AM | 47.9        | 62.6         | 46.7        |
| 03:00 AM - 04:00 AM | 49.1        | 75.9         | 46.5        |
| 04:00 AM - 05:00 AM | 47.7        | 61.2         | 46.4        |
| 05:00 AM - 06:00 AM | 55.9        | 80.9         | 46.9        |
| 06:00 AM - 07:00 AM | 58.0        | 81.0         | 49.5        |
| 07:00 AM - 08:00 AM | 58.3        | 83.7         | 49.8        |
| 08:00 AM - 09:00 AM | 55.3        | 78.0         | 48.8        |
| 09:00 AM - 10:00 AM | 57.6        | 77.4         | 49.7        |
| 10:00 AM - 11:00 AM | 56.4        | 79.1         | 48.9        |
| 11:00 AM - 12:00 PM | 51.6        | 72.9         | 45.5        |

Leq Average 24 hrs. (dB(A))

57.9

Lmax (dB(A))

94.3

L90 (dB(A))

46.8

Ldn (dB(A))

66.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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# ภาคผนวก ค-5

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ระดับเสียงภายในสถานประกอบการ





## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991016-1

Page 1 of 1

Sample Number : 2448579-1  
Parameter : Noise (Leq 8 hrs.)  
Location : บัณฑิต Cooling Tower Block 1  
Measurement Date : May 06, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 75.3        | 76.2         | 75.2        |
| 09:00 AM - 10:00 AM | 75.2        | 75.7         | 75.1        |
| 10:00 AM - 11:00 AM | 75.2        | 75.8         | 75.0        |
| 11:00 AM - 12:00 PM | 75.1        | 76.0         | 75.0        |
| 12:00 PM - 01:00 PM | 75.1        | 75.7         | 75.0        |
| 01:00 PM - 02:00 PM | 75.1        | 75.6         | 75.0        |
| 02:00 PM - 03:00 PM | 75.1        | 75.6         | 74.9        |
| 03:00 PM - 04:00 PM | 75.0        | 76.3         | 74.9        |

Leq Average 8 hrs. (dB(A))

75.1

Lmax (dB(A))

76.3

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991017-1

Page 1 of 1

Sample Number : 2448579-2  
Parameter : Noise (Leq 8 hrs.)  
Location : บัณฑิต Cooling Tower Block 1  
Measurement Date : May 07, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 75.6        | 77.6         | 75.3        |
| 09:00 AM - 10:00 AM | 75.3        | 77.4         | 75.2        |
| 10:00 AM - 11:00 AM | 75.5        | 77.2         | 75.4        |
| 11:00 AM - 12:00 PM | 75.8        | 76.9         | 75.4        |
| 12:00 PM - 01:00 PM | 75.1        | 76.9         | 74.1        |
| 01:00 PM - 02:00 PM | 74.1        | 77.3         | 74.0        |
| 02:00 PM - 03:00 PM | 74.0        | 75.3         | 73.9        |
| 03:00 PM - 04:00 PM | 74.0        | 75.8         | 73.9        |

Leq Average 8 hrs. (dB(A))

75.0

Lmax (dB(A))

77.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991018-1

Page 1 of 1

|                  |                              |
|------------------|------------------------------|
| Sample Number    | 2448579-3                    |
| Parameter        | Noise (Leq 8 hrs.)           |
| Location         | บริเวณ Cooling Tower Block 1 |
| Measurement Date | May 08, 2024                 |
| Measurement by   | Manassawin Naiyanate         |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 57.7        | 78.9         | 56.6        |
| 09:00 AM - 10:00 AM | 71.3        | 75.0         | 56.7        |
| 10:00 AM - 11:00 AM | 74.1        | 76.2         | 74.0        |
| 11:00 AM - 12:00 PM | 74.1        | 77.4         | 74.0        |
| 12:00 PM - 01:00 PM | 74.0        | 75.9         | 73.9        |
| 01:00 PM - 02:00 PM | 70.1        | 77.2         | 56.7        |
| 02:00 PM - 03:00 PM | 57.3        | 71.9         | 56.8        |
| 03:00 PM - 04:00 PM | 57.1        | 70.3         | 56.7        |

Leq Average 8 hrs. (dB(A))

71.1

Lmax (dB(A))

78.9

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991025-1

Page 1 of 1

|                  |                                 |
|------------------|---------------------------------|
| Sample Number    | 2448579-10                      |
| Parameter        | Noise (Leq 8 hrs.)              |
| Location         | บริเวณ Boiler Feed Pump Block 1 |
| Measurement Date | May 06, 2024                    |
| Measurement by   | Manassawin Naiyanate            |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 76.1        | 77.7         | 75.7        |
| 09:00 AM - 10:00 AM | 76.0        | 77.0         | 75.6        |
| 10:00 AM - 11:00 AM | 75.7        | 76.8         | 75.3        |
| 11:00 AM - 12:00 PM | 75.4        | 76.9         | 75.0        |
| 12:00 PM - 01:00 PM | 75.1        | 76.3         | 74.6        |
| 01:00 PM - 02:00 PM | 74.7        | 76.2         | 73.8        |
| 02:00 PM - 03:00 PM | 74.3        | 75.9         | 73.5        |
| 03:00 PM - 04:00 PM | 75.1        | 76.6         | 73.7        |

Leq Average 8 hrs. (dB(A))

75.3

Lmax (dB(A))

77.7

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991026-1

Page 1 of 1

Sample Number : 2448579-11  
Parameter : Noise (Leq 8 hrs.)  
Location : บังคับ Boiler Feed Pump Block 1  
Measurement Date : May 07, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 75.9        | 77.9         | 75.5        |
| 09:00 AM - 10:00 AM | 75.8        | 77.1         | 75.5        |
| 10:00 AM - 11:00 AM | 76.1        | 77.2         | 75.8        |
| 11:00 AM - 12:00 PM | 77.1        | 87.3         | 76.3        |
| 12:00 PM - 01:00 PM | 73.8        | 79.0         | 61.5        |
| 01:00 PM - 02:00 PM | 61.6        | 67.2         | 60.6        |
| 02:00 PM - 03:00 PM | 60.7        | 63.5         | 60.2        |
| 03:00 PM - 04:00 PM | 60.6        | 63.9         | 60.2        |

Leq Average 8 hrs. (dB(A)) : 73.9  
Lmax (dB(A)) : 87.3  
Standard (dB(A)) : 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย  
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Technical Management

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991027-1

Page 1 of 1

Sample Number : 2448579-12  
Parameter : Noise (Leq 8 hrs.)  
Location : บังคับ Boiler Feed Pump Block 1  
Measurement Date : May 08, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 56.6        | 66.8         | 55.3        |
| 09:00 AM - 10:00 AM | 64.3        | 77.0         | 58.5        |
| 10:00 AM - 11:00 AM | 61.9        | 72.7         | 59.2        |
| 11:00 AM - 12:00 PM | 63.6        | 67.5         | 62.6        |
| 12:00 PM - 01:00 PM | 62.4        | 74.3         | 59.0        |
| 01:00 PM - 02:00 PM | 57.9        | 60.7         | 57.2        |
| 02:00 PM - 03:00 PM | 58.4        | 66.1         | 57.9        |
| 03:00 PM - 04:00 PM | 58.7        | 75.0         | 57.9        |

Leq Average 8 hrs. (dB(A)) : 61.3  
Lmax (dB(A)) : 77.0  
Standard (dB(A)) : 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 28, 2024  
Report Number: 3006056-1

Page 1 of 1

Sample Number : 2448579-19  
Parameter : Noise (Leq 8 hrs.)  
Location : บริษัท Gas Turbine Accessories System Block 1  
Measurement Date : May 06, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 85.0        | 85.8         | 84.8        |
| 09:00 AM - 10:00 AM | 84.7        | 85.2         | 84.5        |
| 10:00 AM - 11:00 AM | 84.5        | 85.1         | 84.4        |
| 11:00 AM - 12:00 PM | 84.5        | 85.0         | 84.4        |
| 12:00 PM - 01:00 PM | 84.4        | 84.9         | 84.3        |
| 01:00 PM - 02:00 PM | 84.4        | 84.8         | 84.2        |
| 02:00 PM - 03:00 PM | 84.6        | 85.4         | 84.3        |
| 03:00 PM - 04:00 PM | 84.6        | 85.8         | 84.4        |

Leq Average 8 hrs. (dB(A))

84.6

Lmax (dB(A))

85.8

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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Note : This Analysis test report is reissued to supersede report No.2991034-1, Date Reported : May 15, 2024 due to revise analytical information.

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Saranya Chalermthamrong  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 28, 2024  
Report Number: 3006057-1

Page 1 of 1

Sample Number : 2448579-20  
Parameter : Noise (Leq 8 hrs.)  
Location : บริษัท Gas Turbine Accessories System Block 1  
Measurement Date : May 07, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 85.2        | 85.9         | 85.0        |
| 09:00 AM - 10:00 AM | 85.3        | 87.0         | 85.1        |
| 10:00 AM - 11:00 AM | 85.5        | 85.9         | 85.3        |
| 11:00 AM - 12:00 PM | 86.2        | 87.2         | 85.6        |
| 12:00 PM - 01:00 PM | 82.9        | 96.4         | 80.9        |
| 01:00 PM - 02:00 PM | 81.3        | 82.0         | 81.2        |
| 02:00 PM - 03:00 PM | 81.4        | 82.0         | 81.3        |
| 03:00 PM - 04:00 PM | 81.3        | 84.3         | 81.2        |

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

96.4

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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Note : This Analysis test report is reissued to supersede report No.2991035-1, Date Reported : May 15, 2024 due to revise analytical information.

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 28, 2024  
Report Number: 3006058-1

Page 1 of 1

Sample Number 2448579-21  
Parameter Noise (Leq 8 hrs.)  
Location บังเกอร์ Gas Turbine Accessories System Block 1  
Measurement Date May 08, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 81.3        | 81.8         | 81.1        |
| 09:00 AM - 10:00 AM | 81.3        | 81.7         | 81.2        |
| 10:00 AM - 11:00 AM | 81.3        | 81.8         | 81.2        |
| 11:00 AM - 12:00 PM | 81.2        | 81.6         | 81.0        |
| 12:00 PM - 01:00 PM | 81.0        | 81.5         | 80.9        |
| 01:00 PM - 02:00 PM | 80.7        | 81.2         | 80.5        |
| 02:00 PM - 03:00 PM | 80.5        | 80.9         | 80.3        |
| 03:00 PM - 04:00 PM | 80.3        | 80.7         | 80.2        |

Leq Average 8 hrs. (dB(A))

81.0

Lmax (dB(A))

81.8

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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Note : This Analysis test report is reissued to supersede report No.2991036-1, Date Reported : May 15, 2024 due to revise analytical information.

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991043-1

Page 1 of 1

Sample Number 2448579-28  
Parameter Noise (Leq 8 hrs.)  
Location บังเกอร์ Steam Turbine Generator Block 1  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 82.9        | 83.5         | 82.7        |
| 09:00 AM - 10:00 AM | 82.7        | 83.3         | 82.5        |
| 10:00 AM - 11:00 AM | 82.5        | 83.1         | 82.4        |
| 11:00 AM - 12:00 PM | 82.4        | 82.9         | 82.3        |
| 12:00 PM - 01:00 PM | 82.4        | 82.8         | 82.3        |
| 01:00 PM - 02:00 PM | 82.4        | 82.9         | 82.3        |
| 02:00 PM - 03:00 PM | 82.9        | 83.4         | 82.7        |
| 03:00 PM - 04:00 PM | 82.6        | 83.4         | 82.2        |

Leq Average 8 hrs. (dB(A))

82.6

Lmax (dB(A))

83.5

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448579**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2991044-1

Page 1 of 1

**Sample Number** 2448579-29  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Generator Block 1  
**Measurement Date** May 07, 2024  
**Measurement by** Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 82.7        | 83.3         | 82.5        |
| 09:00 AM - 10:00 AM | 82.8        | 83.3         | 82.7        |
| 10:00 AM - 11:00 AM | 82.9        | 83.3         | 82.8        |
| 11:00 AM - 12:00 PM | 87.7        | 91.8         | 83.0        |
| 12:00 PM - 01:00 PM | 81.4        | 86.6         | 79.7        |
| 01:00 PM - 02:00 PM | 79.8        | 80.7         | 79.7        |
| 02:00 PM - 03:00 PM | 79.8        | 80.8         | 79.7        |
| 03:00 PM - 04:00 PM | 79.7        | 80.6         | 79.6        |

Leq Average 8 hrs. (dB(A)) 83.0  
Lmax (dB(A)) 91.8  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448579**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2991045-1

Page 1 of 1

**Sample Number** 2448579-30  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Generator Block 1  
**Measurement Date** May 08, 2024  
**Measurement by** Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 79.6        | 80.1         | 79.5        |
| 09:00 AM - 10:00 AM | 79.6        | 84.5         | 79.4        |
| 10:00 AM - 11:00 AM | 79.4        | 80.0         | 79.3        |
| 11:00 AM - 12:00 PM | 79.3        | 79.9         | 79.2        |
| 12:00 PM - 01:00 PM | 79.8        | 81.7         | 79.1        |
| 01:00 PM - 02:00 PM | 78.9        | 80.9         | 78.7        |
| 02:00 PM - 03:00 PM | 78.8        | 79.5         | 78.7        |
| 03:00 PM - 04:00 PM | 78.8        | 79.3         | 78.7        |

Leq Average 8 hrs. (dB(A)) 79.3  
Lmax (dB(A)) 84.5  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991052-1

Page 1 of 1

Sample Number 2448579-37  
Parameter Noise (Leq 8 hrs.)  
Location บังคับ Steam Turbine Lube Oil Skid Block 1  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 83.1        | 83.8         | 82.9        |
| 09:00 AM - 10:00 AM | 83.2        | 84.1         | 83.0        |
| 10:00 AM - 11:00 AM | 83.4        | 83.9         | 83.3        |
| 11:00 AM - 12:00 PM | 83.4        | 84.0         | 83.3        |
| 12:00 PM - 01:00 PM | 83.5        | 84.4         | 83.3        |
| 01:00 PM - 02:00 PM | 83.7        | 84.8         | 83.5        |
| 02:00 PM - 03:00 PM | 84.9        | 85.9         | 84.6        |
| 03:00 PM - 04:00 PM | 84.1        | 85.6         | 83.5        |

Leq Average 8 hrs. (dB(A))

83.7

Lmax (dB(A))

85.9

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความปลอดกับ

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991053-1

Page 1 of 1

Sample Number 2448579-38  
Parameter Noise (Leq 8 hrs.)  
Location บังคับ Steam Turbine Lube Oil Skid Block 1  
Measurement Date May 07, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 83.5        | 84.4         | 83.2        |
| 09:00 AM - 10:00 AM | 83.4        | 83.9         | 83.2        |
| 10:00 AM - 11:00 AM | 83.4        | 83.9         | 83.2        |
| 11:00 AM - 12:00 PM | 97.0        | 101.8        | 87.2        |
| 12:00 PM - 01:00 PM | 86.7        | 95.6         | 81.6        |
| 01:00 PM - 02:00 PM | 82.1        | 83.5         | 81.7        |
| 02:00 PM - 03:00 PM | 82.1        | 83.5         | 81.9        |
| 03:00 PM - 04:00 PM | 82.0        | 82.9         | 81.8        |

Leq Average 8 hrs. (dB(A))

89.2

Lmax (dB(A))

101.8

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความปลอดกับ

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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991054-1

Page 1 of 1

Sample Number 2448579-39  
Parameter Noise (Leq 8 hrs.)  
Location บังแก Steam Turbine Lube Oil Skid Block 1  
Measurement Date May 08, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 79.6        | 80.5         | 79.5        |
| 09:00 AM - 10:00 AM | 80.7        | 83.3         | 79.5        |
| 10:00 AM - 11:00 AM | 80.6        | 82.5         | 79.9        |
| 11:00 AM - 12:00 PM | 81.7        | 82.8         | 81.3        |
| 12:00 PM - 01:00 PM | 88.0        | 94.0         | 81.4        |
| 01:00 PM - 02:00 PM | 79.4        | 82.1         | 78.9        |
| 02:00 PM - 03:00 PM | 79.2        | 80.0         | 79.1        |
| 03:00 PM - 04:00 PM | 79.2        | 80.3         | 79.0        |

Leq Average 8 hrs. (dB(A))

82.3

Lmax (dB(A))

94.0

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991061-1

Page 1 of 1

Sample Number 2448579-46  
Parameter Noise (Leq 8 hrs.)  
Location บังแก Air Compressor Block 1  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 82.3        | 89.8         | 79.5        |
| 09:00 AM - 10:00 AM | 81.5        | 89.7         | 79.4        |
| 10:00 AM - 11:00 AM | 80.2        | 89.7         | 79.4        |
| 11:00 AM - 12:00 PM | 79.7        | 89.5         | 79.1        |
| 12:00 PM - 01:00 PM | 80.1        | 90.2         | 79.1        |
| 01:00 PM - 02:00 PM | 80.0        | 89.4         | 79.2        |
| 02:00 PM - 03:00 PM | 80.4        | 89.5         | 79.6        |
| 03:00 PM - 04:00 PM | 81.1        | 90.3         | 79.7        |

Leq Average 8 hrs. (dB(A))

80.7

Lmax (dB(A))

90.3

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991062-1

Page 1 of 1

Sample Number 2448579-47  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Air Compressor Block 1  
Measurement Date May 07, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 81.7        | 90.6         | 79.5        |
| 09:00 AM - 10:00 AM | 81.2        | 91.0         | 79.3        |
| 10:00 AM - 11:00 AM | 80.6        | 90.5         | 79.3        |
| 11:00 AM - 12:00 PM | 89.1        | 93.6         | 79.3        |
| 12:00 PM - 01:00 PM | 83.1        | 94.1         | 78.7        |
| 01:00 PM - 02:00 PM | 79.8        | 94.5         | 78.4        |
| 02:00 PM - 03:00 PM | 79.7        | 94.4         | 78.4        |
| 03:00 PM - 04:00 PM | 79.7        | 94.9         | 78.4        |

Leq Average 8 hrs. (dB(A)) 83.3  
Lmax (dB(A)) 94.9  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991063-1

Page 1 of 1

Sample Number 2448579-48  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Air Compressor Block 1  
Measurement Date May 08, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 80.0        | 89.9         | 75.8        |
| 09:00 AM - 10:00 AM | 78.6        | 92.4         | 76.5        |
| 10:00 AM - 11:00 AM | 80.3        | 90.7         | 76.7        |
| 11:00 AM - 12:00 PM | 80.1        | 90.7         | 77.1        |
| 12:00 PM - 01:00 PM | 80.3        | 90.1         | 77.3        |
| 01:00 PM - 02:00 PM | 80.1        | 89.6         | 75.6        |
| 02:00 PM - 03:00 PM | 80.1        | 89.3         | 75.3        |
| 03:00 PM - 04:00 PM | 80.0        | 89.4         | 75.4        |

Leq Average 8 hrs. (dB(A)) 80.0  
Lmax (dB(A)) 92.4  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย  
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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991070-1

Page 1 of 1

Sample Number 2448579-55  
Parameter Noise (Leq 8 hrs.)  
Location บัณฑิต Cooling Tower Block 2  
Measurement Date May 06, 2024  
Measurement by Manassawin Nalyanate

| Time   | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|--|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM  | 75.2        | 75.7         | 75.0        |
| 09:00 AM - 10:00 AM  | 75.1        | 75.6         | 74.9        |
| 10:00 AM - 11:00 AM  | 75.0        | 76.2         | 74.8        |
| 11:00 AM - 12:00 PM  | 74.9        | 75.3         | 74.7        |
| 12:00 PM - 01:00 PM  | 74.8        | 75.2         | 74.7        |
| 01:00 PM - 02:00 PM  | 74.8        | 75.5         | 74.7        |
| 02:00 PM - 03:00 PM  | 74.8        | 75.4         | 74.6        |
| 03:00 PM - 04:00 PM  | 75.0        | 76.7         | 74.9        |
| Leq Average 8 hrs. (dB(A))   | 75.0        |              |             |
| Lmax (dB(A))   |             | 76.7         |             |
| Standard (dB(A))   | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2   |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖ |             |              |             |

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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991071-1

Page 1 of 1

Sample Number 2448579-56  
Parameter Noise (Leq 8 hrs.)  
Location บัณฑิต Cooling Tower Block 2  
Measurement Date May 07, 2024  
Measurement by Manassawin Nalyanate

| Time   | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|--|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM  | 75.8        | 76.8         | 75.6        |
| 09:00 AM - 10:00 AM  | 75.9        | 77.9         | 75.7        |
| 10:00 AM - 11:00 AM  | 75.9        | 77.1         | 75.8        |
| 11:00 AM - 12:00 PM  | 76.1        | 76.8         | 75.9        |
| 12:00 PM - 01:00 PM  | 76.0        | 78.0         | 75.8        |
| 01:00 PM - 02:00 PM  | 75.8        | 76.6         | 75.7        |
| 02:00 PM - 03:00 PM  | 75.8        | 76.3         | 75.6        |
| 03:00 PM - 04:00 PM  | 76.1        | 76.6         | 75.8        |
| Leq Average 8 hrs. (dB(A))   | 75.9        |              |             |
| Lmax (dB(A))   |             | 78.0         |             |
| Standard (dB(A))   | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2   |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖ |             |              |             |

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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991072-1

Page 1 of 1

Sample Number 2448579-57  
Parameter Noise (Leq 8 hrs.)  
Location บลิเวณ Cooling Tower Block 2  
Measurement Date May 08, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 74.3        | 74.9         | 74.2        |
| 09:00 AM - 10:00 AM | 74.1        | 77.7         | 74.0        |
| 10:00 AM - 11:00 AM | 74.0        | 74.4         | 73.9        |
| 11:00 AM - 12:00 PM | 73.9        | 74.4         | 73.7        |
| 12:00 PM - 01:00 PM | 73.8        | 74.3         | 73.7        |
| 01:00 PM - 02:00 PM | 73.8        | 74.2         | 73.7        |
| 02:00 PM - 03:00 PM | 73.8        | 74.2         | 73.6        |
| 03:00 PM - 04:00 PM | 73.9        | 74.6         | 73.8        |

Leq Average 8 hrs. (dB(A)) 74.0  
Lmax (dB(A)) 77.7  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภั  
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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991079-1

Page 1 of 1

Sample Number 2448579-64  
Parameter Noise (Leq 8 hrs.)  
Location บลิเวณ Boiler Feed Pump Block 2  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 77.0        | 78.4         | 76.6        |
| 09:00 AM - 10:00 AM | 77.0        | 78.3         | 76.6        |
| 10:00 AM - 11:00 AM | 77.1        | 78.5         | 76.7        |
| 11:00 AM - 12:00 PM | 76.3        | 77.5         | 75.8        |
| 12:00 PM - 01:00 PM | 76.0        | 77.2         | 75.7        |
| 01:00 PM - 02:00 PM | 76.8        | 78.3         | 76.1        |
| 02:00 PM - 03:00 PM | 76.7        | 78.1         | 76.1        |
| 03:00 PM - 04:00 PM | 76.7        | 78.2         | 76.0        |

Leq Average 8 hrs. (dB(A)) 76.7  
Lmax (dB(A)) 78.5  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภั  
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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991080-1

Page 1 of 1

Sample Number : 2448579-65  
Parameter : Noise (Leq 8 hrs.)  
Location : บริเวณ Boiler Feed Pump Block 2  
Measurement Date : May 07, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 77.3        | 79.0         | 76.8        |
| 09:00 AM - 10:00 AM | 77.3        | 82.1         | 76.9        |
| 10:00 AM - 11:00 AM | 77.5        | 78.8         | 77.1        |
| 11:00 AM - 12:00 PM | 77.2        | 78.5         | 76.9        |
| 12:00 PM - 01:00 PM | 77.1        | 78.6         | 76.7        |
| 01:00 PM - 02:00 PM | 77.1        | 81.9         | 76.6        |
| 02:00 PM - 03:00 PM | 77.1        | 78.4         | 76.7        |
| 03:00 PM - 04:00 PM | 77.2        | 79.4         | 76.3        |

Leq Average 8 hrs. (dB(A)) : 77.2  
Lmax (dB(A)) : 82.1  
Standard (dB(A)) : 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดกับ  
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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991081-1

Page 1 of 1

Sample Number : 2448579-66  
Parameter : Noise (Leq 8 hrs.)  
Location : บริเวณ Boiler Feed Pump Block 2  
Measurement Date : May 08, 2024  
Measurement by : Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 60.2        | 80.1         | 57.9        |
| 09:00 AM - 10:00 AM | 59.3        | 66.4         | 58.8        |
| 10:00 AM - 11:00 AM | 59.1        | 63.6         | 58.5        |
| 11:00 AM - 12:00 PM | 59.2        | 63.8         | 58.4        |
| 12:00 PM - 01:00 PM | 58.9        | 71.5         | 57.7        |
| 01:00 PM - 02:00 PM | 71.8        | 78.9         | 57.7        |
| 02:00 PM - 03:00 PM | 76.8        | 79.5         | 76.3        |
| 03:00 PM - 04:00 PM | 58.3        | 65.8         | 57.2        |

Leq Average 8 hrs. (dB(A)) : 69.3  
Lmax (dB(A)) : 80.1  
Standard (dB(A)) : 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดกับ  
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Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991088-1

Page 1 of 1

Sample Number 2448579-73  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Gas Turbine Accessories System Block 2  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 84.9        | 85.4         | 84.8        |
| 09:00 AM - 10:00 AM | 85.3        | 85.8         | 85.1        |
| 10:00 AM - 11:00 AM | 85.6        | 86.0         | 85.5        |
| 11:00 AM - 12:00 PM | 85.6        | 86.0         | 85.4        |
| 12:00 PM - 01:00 PM | 85.6        | 86.0         | 85.4        |
| 01:00 PM - 02:00 PM | 85.5        | 86.1         | 85.3        |
| 02:00 PM - 03:00 PM | 85.7        | 86.4         | 85.5        |
| 03:00 PM - 04:00 PM | 85.9        | 86.3         | 85.8        |

Leq Average 8 hrs. (dB(A)) 85.5  
Lmax (dB(A)) 86.4  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448579  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2991089-1

Page 1 of 1

Sample Number 2448579-74  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Gas Turbine Accessories System Block 2  
Measurement Date May 07, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 85.0        | 85.9         | 84.7        |
| 09:00 AM - 10:00 AM | 85.3        | 85.8         | 85.2        |
| 10:00 AM - 11:00 AM | 85.3        | 85.9         | 85.2        |
| 11:00 AM - 12:00 PM | 85.0        | 85.7         | 84.8        |
| 12:00 PM - 01:00 PM | 84.8        | 85.3         | 84.7        |
| 01:00 PM - 02:00 PM | 85.0        | 85.4         | 84.8        |
| 02:00 PM - 03:00 PM | 85.1        | 85.6         | 84.9        |
| 03:00 PM - 04:00 PM | 85.8        | 87.0         | 85.0        |

Leq Average 8 hrs. (dB(A)) 85.2  
Lmax (dB(A)) 87.0  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448579**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2991090-1

Page 1 of 1

**Sample Number** 2448579-75  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Gas Turbine Accessories System Block 2  
**Measurement Date** May 08, 2024  
**Measurement by** Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 82.1        | 82.9         | 82.0        |
| 09:00 AM - 10:00 AM   | 82.1        | 83.0         | 81.9        |
| 10:00 AM - 11:00 AM   | 82.2        | 83.2         | 82.0        |
| 11:00 AM - 12:00 PM   | 82.2        | 83.1         | 82.1        |
| 12:00 PM - 01:00 PM   | 82.2        | 83.3         | 82.1        |
| 01:00 PM - 02:00 PM   | 82.3        | 83.2         | 82.1        |
| 02:00 PM - 03:00 PM   | 82.3        | 83.3         | 82.1        |
| 03:00 PM - 04:00 PM   | 82.3        | 83.3         | 82.1        |
| Leq Average 8 hrs. (dB(A))  | 82.2        |              |             |
| Lmax (dB(A))  |             | 83.3         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖ |             |              |             |

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448579**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2991097-1

Page 1 of 1

**Sample Number** 2448579-82  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Generator Block 2  
**Measurement Date** May 06, 2024  
**Measurement by** Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 83.3        | 83.8         | 83.2        |
| 09:00 AM - 10:00 AM   | 83.2        | 83.6         | 83.1        |
| 10:00 AM - 11:00 AM   | 83.0        | 83.5         | 82.9        |
| 11:00 AM - 12:00 PM   | 82.9        | 83.3         | 82.7        |
| 12:00 PM - 01:00 PM   | 82.7        | 83.2         | 82.6        |
| 01:00 PM - 02:00 PM   | 82.7        | 83.2         | 82.6        |
| 02:00 PM - 03:00 PM   | 82.7        | 83.2         | 82.5        |
| 03:00 PM - 04:00 PM   | 82.9        | 83.3         | 82.8        |
| Leq Average 8 hrs. (dB(A))  | 82.9        |              |             |
| Lmax (dB(A))  |             | 83.8         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖ |             |              |             |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyayutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991098-1

Page 1 of 1

Sample Number 2448579-83  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Steam Turbine Generator Block 2  
Measurement Date May 07, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 83.3        | 83.7         | 83.1        |
| 09:00 AM - 10:00 AM | 83.3        | 83.8         | 83.2        |
| 10:00 AM - 11:00 AM | 83.5        | 83.9         | 83.4        |
| 11:00 AM - 12:00 PM | 83.5        | 84.0         | 83.4        |
| 12:00 PM - 01:00 PM | 83.4        | 83.9         | 83.3        |
| 01:00 PM - 02:00 PM | 83.5        | 83.9         | 83.3        |
| 02:00 PM - 03:00 PM | 83.5        | 83.9         | 83.3        |
| 03:00 PM - 04:00 PM | 88.0        | 92.3         | 83.4        |

Leq Average 8 hrs. (dB(A))

84.3

Lmax (dB(A))

92.3

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyayutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448579

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2991099-1

Page 1 of 1

Sample Number 2448579-84  
Parameter Noise (Leq 8 hrs.)  
Location บริเวณ Steam Turbine Generator Block 2  
Measurement Date May 08, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 80.5        | 83.6         | 80.2        |
| 09:00 AM - 10:00 AM | 80.1        | 81.1         | 80.0        |
| 10:00 AM - 11:00 AM | 79.9        | 80.5         | 79.8        |
| 11:00 AM - 12:00 PM | 79.8        | 80.3         | 79.7        |
| 12:00 PM - 01:00 PM | 79.8        | 84.1         | 79.7        |
| 01:00 PM - 02:00 PM | 79.9        | 80.5         | 79.8        |
| 02:00 PM - 03:00 PM | 79.9        | 80.4         | 79.8        |
| 03:00 PM - 04:00 PM | 80.3        | 82.2         | 79.6        |

Leq Average 8 hrs. (dB(A))

80.0

Lmax (dB(A))

84.1

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448617**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2992323-1

Page 1 of 1

**Sample Number** 2448617-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Lube Oil Skid Block 2  
**Measurement Date** May 06, 2024  
**Measurement by** Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 83.9        | 89.9         | 83.7        |
| 09:00 AM - 10:00 AM | 83.7        | 88.0         | 83.2        |
| 10:00 AM - 11:00 AM | 84.1        | 87.3         | 83.9        |
| 11:00 AM - 12:00 PM | 84.3        | 87.5         | 84.1        |
| 12:00 PM - 01:00 PM | 83.6        | 87.1         | 83.3        |
| 01:00 PM - 02:00 PM | 83.7        | 84.8         | 83.1        |
| 02:00 PM - 03:00 PM | 83.1        | 83.8         | 82.9        |
| 03:00 PM - 04:00 PM | 83.2        | 84.1         | 82.9        |

Leq Average 8 hrs. (dB(A)) 83.7  
Lmax (dB(A)) 89.9  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448617**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2992324-1

Page 1 of 1

**Sample Number** 2448617-2  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บริเวณ Steam Turbine Lube Oil Skid Block 2  
**Measurement Date** May 07, 2024  
**Measurement by** Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 82.5        | 83.4         | 82.3        |
| 09:00 AM - 10:00 AM | 82.5        | 83.3         | 82.3        |
| 10:00 AM - 11:00 AM | 82.5        | 83.6         | 82.3        |
| 11:00 AM - 12:00 PM | 82.4        | 84.2         | 81.9        |
| 12:00 PM - 01:00 PM | 82.4        | 83.5         | 81.9        |
| 01:00 PM - 02:00 PM | 82.6        | 83.5         | 82.4        |
| 02:00 PM - 03:00 PM | 82.5        | 83.4         | 82.3        |
| 03:00 PM - 04:00 PM | 81.5        | 89.2         | 80.5        |

Leq Average 8 hrs. (dB(A)) 82.4  
Lmax (dB(A)) 89.2  
Standard (dB(A)) 90  
Reference Method : Based on ISO1996-1 and 1996-2  
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448617  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2992325-1

Page 1 of 1

Sample Number : 2448617-3  
Parameter : Noise (Leq 8 hrs.)  
Location : บริเวณ Steam Turbine Lube Oil Skid Block 2  
Measurement Date : Aug 08, 2024  
Measurement by : Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 83.7        | 84.9         | 83.2        |
| 09:00 AM - 10:00 AM   | 83.5        | 84.4         | 83.1        |
| 10:00 AM - 11:00 AM   | 79.0        | 79.5         | 78.9        |
| 11:00 AM - 12:00 PM   | 79.1        | 79.7         | 78.9        |
| 12:00 PM - 01:00 PM   | 80.9        | 82.5         | 79.0        |
| 01:00 PM - 02:00 PM   | 81.2        | 83.1         | 80.4        |
| 02:00 PM - 03:00 PM   | 81.6        | 83.5         | 79.4        |
| 03:00 PM - 04:00 PM   | 82.9        | 83.6         | 82.7        |
| Leq Average 8 hrs. (dB(A))  | 81.8        |              |             |
| Lmax (dB(A))  |             | 84.9         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความปลอดกับ<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖ |             |              |             |

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT

Lot ID: 2448617  
Date Received : May 09, 2024  
Date Reported : May 15, 2024  
Report Number: 2992332-1

Page 1 of 1

Sample Number : 2448617-10  
Parameter : Noise (Leq 8 hrs.)  
Location : บริเวณ Air Compressor Block 2  
Measurement Date : May 06, 2024  
Measurement by : Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 79.9        | 88.9         | 79.1        |
| 09:00 AM - 10:00 AM   | 79.9        | 88.8         | 79.3        |
| 10:00 AM - 11:00 AM   | 80.1        | 88.8         | 78.7        |
| 11:00 AM - 12:00 PM   | 80.0        | 88.7         | 79.1        |
| 12:00 PM - 01:00 PM   | 79.4        | 88.7         | 78.3        |
| 01:00 PM - 02:00 PM   | 79.0        | 88.2         | 78.1        |
| 02:00 PM - 03:00 PM   | 79.5        | 88.7         | 78.4        |
| 03:00 PM - 04:00 PM   | 80.4        | 89.0         | 79.6        |
| Leq Average 8 hrs. (dB(A))  | 79.8        |              |             |
| Lmax (dB(A))  |             | 89.0         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการวัดความปลอดกับ<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖ |             |              |             |

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448617**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2992333-1

Page 1 of 1

**Sample Number** 2448617-11  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บังคับ Air Compressor Block 2  
**Measurement Date** May 07, 2024  
**Measurement by** Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 80.1        | 89.0         | 79.1        |
| 09:00 AM - 10:00 AM   | 79.6        | 89.1         | 78.9        |
| 10:00 AM - 11:00 AM   | 79.8        | 88.7         | 79.1        |
| 11:00 AM - 12:00 PM   | 79.8        | 88.5         | 78.9        |
| 12:00 PM - 01:00 PM   | 79.4        | 89.0         | 78.7        |
| 01:00 PM - 02:00 PM   | 79.6        | 88.7         | 78.9        |
| 02:00 PM - 03:00 PM   | 80.4        | 88.8         | 79.1        |
| 03:00 PM - 04:00 PM   | 88.9        | 93.5         | 80.0        |
| Leq Average 8 hrs. (dB(A))  | 82.6        |              |             |
| Lmax (dB(A))  |             | 93.5         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖ |             |              |             |

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210  
**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT

**Lot ID: 2448617**  
**Date Received :** May 09, 2024  
**Date Reported :** May 15, 2024  
**Report Number:** 2992334-1

Page 1 of 1

**Sample Number** 2448617-12  
**Parameter** Noise (Leq 8 hrs.)  
**Location** บังคับ Air Compressor Block 2  
**Measurement Date** May 08, 2024  
**Measurement by** Manassawin Naiyanate

| Time  | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM   | 76.4        | 88.4         | 74.8        |
| 09:00 AM - 10:00 AM   | 76.3        | 88.3         | 74.7        |
| 10:00 AM - 11:00 AM   | 76.6        | 89.3         | 74.8        |
| 11:00 AM - 12:00 PM   | 79.9        | 88.3         | 75.0        |
| 12:00 PM - 01:00 PM   | 80.8        | 91.3         | 79.9        |
| 01:00 PM - 02:00 PM   | 80.1        | 88.0         | 76.1        |
| 02:00 PM - 03:00 PM   | 79.6        | 88.1         | 76.3        |
| 03:00 PM - 04:00 PM   | 79.1        | 88.1         | 76.1        |
| Leq Average 8 hrs. (dB(A))  | 78.9        |              |             |
| Lmax (dB(A))  |             | 91.3         |             |
| Standard (dB(A))  | 90          | 140          |             |
| Reference Method : Based on ISO1996-1 and 1996-2  |             |              |             |
| Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย<br>ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖ |             |              |             |

Technical Management

*Tanyatorm*  
Tanyatorm Mongkonjirawut  
Supervisor

Approved by

*Supot S*  
Supot Salamteh  
Section Head

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448617

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2992341-1

Page 1 of 1

Sample Number 2448617-19  
Parameter Noise (Leq 8 hrs.)  
Location บังแก Gas Compressor (ด้านหัว)  
Measurement Date May 06, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 82.1        | 83.9         | 81.5        |
| 09:00 AM - 10:00 AM | 81.6        | 83.4         | 81.1        |
| 10:00 AM - 11:00 AM | 81.5        | 83.1         | 81.0        |
| 11:00 AM - 12:00 PM | 81.4        | 82.9         | 80.9        |
| 12:00 PM - 01:00 PM | 81.4        | 83.1         | 80.7        |
| 01:00 PM - 02:00 PM | 80.9        | 82.7         | 80.3        |
| 02:00 PM - 03:00 PM | 81.0        | 83.6         | 80.4        |
| 03:00 PM - 04:00 PM | 81.4        | 82.9         | 80.9        |

Leq Average 8 hrs. (dB(A))

81.4

Lmax (dB(A))

83.9

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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Technical Management

Tanyatorn Mongkonjirawut  
Supervisor

Approved by

Supot Salamteh  
Section Head

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448617

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2992342-1

Page 1 of 1

Sample Number 2448617-20  
Parameter Noise (Leq 8 hrs.)  
Location บังแก Gas Compressor (ด้านหัว)  
Measurement Date May 07, 2024  
Measurement by Manassawin Naiyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 83.2        | 86.0         | 82.1        |
| 09:00 AM - 10:00 AM | 83.3        | 85.6         | 82.4        |
| 10:00 AM - 11:00 AM | 83.3        | 85.5         | 82.3        |
| 11:00 AM - 12:00 PM | 84.1        | 87.1         | 82.5        |
| 12:00 PM - 01:00 PM | 75.9        | 77.4         | 75.6        |
| 01:00 PM - 02:00 PM | 75.7        | 76.4         | 75.6        |
| 02:00 PM - 03:00 PM | 75.7        | 76.4         | 75.5        |
| 03:00 PM - 04:00 PM | 75.6        | 76.5         | 75.4        |

Leq Average 8 hrs. (dB(A))

81.2

Lmax (dB(A))

87.1

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย  
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Technical Management

Tanyatorn Mongkonjirawut  
Supervisor

Approved by

Supot Salamteh  
Section Head

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.

999 Moo 1, Ban Chang, Uthai, Prakhonsiyutthaya Thailand 13210

P/O : 4102004523

Project Name : Monitoring EIA

Project Location : GUT

Lot ID: 2448617

Date Received : May 09, 2024

Date Reported : May 15, 2024

Report Number: 2992343-1

Page 1 of 1

Sample Number 2448617-21  
Parameter Noise (Leq 8 hrs.)  
Location บังคับ Gas Compressor (ด้านหัว)  
Measurement Date May 08, 2024  
Measurement by Manassawin Nalyanate

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.3        | 67.9         | 64.1        |
| 09:00 AM - 10:00 AM | 64.5        | 70.4         | 64.0        |
| 10:00 AM - 11:00 AM | 64.4        | 70.9         | 63.8        |
| 11:00 AM - 12:00 PM | 63.9        | 66.9         | 63.5        |
| 12:00 PM - 01:00 PM | 64.3        | 67.9         | 63.7        |
| 01:00 PM - 02:00 PM | 64.3        | 71.6         | 63.7        |
| 02:00 PM - 03:00 PM | 64.0        | 68.3         | 63.5        |
| 03:00 PM - 04:00 PM | 64.2        | 69.8         | 63.5        |

Leq Average 8 hrs. (dB(A))

64.2

Lmax (dB(A))

71.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย  
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖

Technical Management

Tanyatorn Mongkonjirawut  
Supervisor

Approved by

Supot Salamteh  
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# ภาคผนวก ค-6

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คุณภาพน้ำผิวดิน



## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 23144439  
Date Received : Jan 08, 2024  
Date Reported : Jan 12, 2024  
Report Number : 2865726-1

Page 1 of 2

Sample Number 23144439-1  
Sampled Date Jan 08, 2024 9:15 AM  
Sample Description Wastewater  
Location บ่อพักน้ำพลั่วเย็น  
Date Analysis Commenced Jan 09, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.0008 | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.01   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          | -        | -      | -         | 7.3    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 25.7   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 1616   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ 7-204-จ-7108

### Remark :

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

Technical Management

*Savitree N.*

Savitree Noisangiam  
Manager  
ทะเบียนเลขที่ 7-204-จ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7-204-ก-6111

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

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 23144439  
Date Received : Jan 08, 2024  
Date Reported : Jan 12, 2024  
Report Number : 2865726-1

Page 2 of 2

- 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 7-204-จ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7-204-ก-6111

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 23144440  
Date Received : Jan 08, 2024  
Date Reported : Jan 12, 2024  
Report Number : 2865727-1

Page 1 of 2

Sample Number 23144440-1  
Sampled Date Jan 08, 2024 9:25 AM  
Sample Description Wastewater  
Location โรงพักน้ำทิ้ง  
Date Analysis Commenced Jan 09, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.01   | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.05   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| Oil & Grease *                               | mg/L     | -      | 3         | 4      | ≤5                        | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.9    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 31.5   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 344    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

**Sampling By :** Aittipon Yaso ทะเบียนเลขที่ ร-204-จ-7108

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

Technical Management

*Sawitree N.*  
Sawitree Noisangiam  
Manager  
ทะเบียนเลขที่ ร-204-จ-4709

Approved by

*Kanokorn Anek*  
Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ร-204-ก-6111

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 23144440  
Date Received : Jan 08, 2024  
Date Reported : Jan 12, 2024  
Report Number : 2865727-1

Page 2 of 2

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

Technical Management

*Sawitree N.*  
Sawitree Noisangiam  
Manager  
ทะเบียนเลขที่ ร-204-จ-4709

Approved by

*Kanokorn Anek*  
Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ร-204-ก-6111

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

TESTING  
No.0009  
Lot ID: 242230  
Date Received : Feb 05, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2880008-1

Page 1 of 2

Sample Number 242230-1  
Sampled Date Feb 05, 2024 9:34 AM  
Sample Description Wastewater  
Location บ่อพักน้ำพลูเอ็น  
Date Analysis Commenced Feb 06, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.002  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.02   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.6    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 29.7   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 904    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ฏ-204-ฏ-7108

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

Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager

ทะเบียนเลขที่ ฏ-204-ฏ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ฏ-204-ฏ-6111

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT

TESTING  
No.0009  
Lot ID: 242230  
Date Received : Feb 05, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2880008-1

Page 2 of 2

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Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager

ทะเบียนเลขที่ ฏ-204-ฏ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ฏ-204-ฏ-6111

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT



TESTING  
No.0009

**Lot ID: 242231**  
Date Received : Feb 05, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2880009-1

Page 1 of 2

**Sample Number** 242231-1  
**Sampled Date** Feb 05, 2024 9:45 AM  
**Sample Description** Wastewater  
**Location** มอพันน้ำพอง  
**Date Analysis Commenced** Feb 06, 2024  
**Condition of Sample** Contained in two plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.02   | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.06   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 8.2    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 31.8   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 348    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

**Sampling By :** Aittipon Yaso ทะเบียนเลขที่ 7-204-จ-7108

Remark :

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

Technical Management

*Savitree N.*

Savitree Noisangiam  
Manager

ทะเบียนเลขที่ 7-204-จ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ 7-204-ก-6111

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhsaiyutthaya Thailand 13210  
**P/O :** 4102004243  
**Project Name :** Monitoring EIA  
**Project Location :** GUT



TESTING  
No.0009

**Lot ID: 242231**  
Date Received : Feb 05, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2880009-1

Page 2 of 2

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

Technical Management

*Savitree N.*

Savitree Noisangiam  
Manager

ทะเบียนเลขที่ 7-204-จ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ 7-204-ก-6111

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location: GUT



TESTING  
No.0009  
Lot ID: 2421618  
Date Received : Mar 12, 2024  
Date Reported : Mar 15, 2024  
Report Number: 2918900-1

Page 1 of 2

Sample Number 2421618-1  
Sampled Date Mar 12, 2024 9:10 AM  
Sample Description Wastewater  
Location บ่อพักน้ำพลอต  
Date Analysis Commenced Mar 13, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <strong>Metals Testing</strong>              |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.007  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.04   | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <strong>Water Testing</strong>               |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.7    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 31.9   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 1120   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ๖-204-๖-0059

#### Remark :

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

Technical Management

*Chanatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ๖-204-๖-0008

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ๖-204-๖-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location: GUT



TESTING  
No.0009  
Lot ID: 2421618  
Date Received : Mar 12, 2024  
Date Reported : Mar 15, 2024  
Report Number: 2918900-1

Page 2 of 2

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

Technical Management

*Chanatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ๖-204-๖-0008

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ๖-204-๖-0004

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## Analysis / Test Report

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P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2421624  
Date Received : Mar 12, 2024  
Date Reported : Mar 15, 2024  
Report Number : 2918905-1

Page 1 of 2

Sample Number 2421624-1  
Sampled Date Mar 12, 2024 9:20 AM  
Sample Description Wastewater  
Location ปล่อยน้ำทิ้ง  
Date Analysis Commenced Mar 13, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.03   | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.29   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 6.8    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 36.4   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 372    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ร-204-จ-0059

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

Technical Management

*Chanatt L.*

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

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ร-204-ก-0004

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## Analysis / Test Report

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P/O : 4102004243  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2421624  
Date Received : Mar 12, 2024  
Date Reported : Mar 15, 2024  
Report Number : 2918905-1

Page 2 of 2

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Technical Management

*Chanatt L.*

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

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ร-204-ก-0004

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## Analysis / Test Report

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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 2432170  
Date Received : Apr 09, 2024  
Date Reported : Apr 13, 2024  
Report Number : 2943403-1

Page 1 of 2

Sample Number 2432170-1  
Sampled Date Apr 09, 2024 9:10 AM  
Sample Description Wastewater  
Location ป่าต้นน้ำชลประทาน  
Date Analysis Commenced Apr 10, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.006  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, 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, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.4    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 33.5   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 1112   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ว-204-จ-0059

### Remark :

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

Technical Management

*Chanatt L.*

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

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 2432170  
Date Received : Apr 09, 2024  
Date Reported : Apr 13, 2024  
Report Number : 2943403-1

Page 2 of 2

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Technical Management

*Chanatt L.*

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

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 2432172  
Date Received : Apr 09, 2024  
Date Reported : Apr 13, 2024  
Report Number : 2943407-1

Page 1 of 2

Sample Number 2432172-1  
Sampled Date Apr 09, 2024 9:20 AM  
Sample Description Wastewater  
Location บ่อพักน้ำทิ้ง  
Date Analysis Commenced Apr 10, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.004  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.04   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.6    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 35.4   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 988    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ว-204-ก-0059

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

Technical Management

*Chanatt L.*

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

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009  
Lot ID: 2432172  
Date Received : Apr 09, 2024  
Date Reported : Apr 13, 2024  
Report Number : 2943407-1

Page 2 of 2

- 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

*Chanatt L.*

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

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-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.  
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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2443347  
Date Received : May 06, 2024  
Date Reported : May 10, 2024  
Report Number : 2969045-1

Page 1 of 2

Sample Number 2443347-1  
Sampled Date May 06, 2024 9:00 AM  
Sample Description Wastewater  
Location ปลัดน้ำลั่น  
Date Analysis Commenced May 07, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.006  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, 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, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          | -        | -      | -         | 7.6    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | 0.1    | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 33.2   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 1264   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Altipon Yaso ทะเบียนเลขที่ ว-204-จ-0059

Remark :

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

Technical Management

*Savitree N.*

Savitree Noisangiam  
Manager  
ทะเบียนเลขที่ ว-204-จ-0007

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2443347  
Date Received : May 06, 2024  
Date Reported : May 10, 2024  
Report Number : 2969045-1

Page 2 of 2

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- 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  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
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**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT



TESTING  
No.0009

**Lot ID: 2443348**  
Date Received : May 06, 2024  
Date Reported : May 10, 2024  
Report Number : 2969049-1

Page 1 of 2

**Sample Number** 2443348-1  
**Sampled Date** May 06, 2024 9:10 AM  
**Sample Description** Wastewater  
**Location** บ่อพักน้ำทิ้ง  
**Date Analysis Commenced** May 07, 2024  
**Condition of Sample** Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.01   | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.17   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.8    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 36.5   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 736    | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

**Sampling By :** Aittipon Yaso ทะเบียนเลขที่ ว-204-จ-0059

Remark :

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

Technical Management

*Savitree N.*

Savitree Noisangiam  
Manager  
ทะเบียนเลขที่ ว-204-จ-0007

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

**Client :** Gulf JP UT Co., Ltd.  
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**P/O :** 4102004523  
**Project Name :** Monitoring EIA  
**Project Location :** GUT



TESTING  
No.0009

**Lot ID: 2443348**  
Date Received : May 06, 2024  
Date Reported : May 10, 2024  
Report Number : 2969049-1

Page 2 of 2

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- 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

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2457196  
Date Received : Jun 10, 2024  
Date Reported : Jun 14, 2024  
Report Number : 2996959-1

Page 1 of 2

Sample Number 2457196-1  
Sampled Date Jun 10, 2024 9:15 AM  
Sample Description Wastewater  
Location ปล่อยน้ำหล่อเย็น  
Date Analysis Commenced Jun 11, 2024  
Condition of Sample Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|----------|--------|-----------|--------|---------------------------|---|------------------|
| <b>Metals Testing</b>                        |          |        |           |        |                           |   |                  |
| Copper                                       | mg/L     | 0.0003 | 0.0005    | 0.007  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc   | mg/L     | 0.003  | 0.005     | 0.04   | ≤5.0                      | 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>                         |          |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |          | -      | -         | 7.6    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L     | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C | -      | -         | 31.2   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L     | -      | 5         | 1420   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aittipon Yaso ทะเบียนเลขที่ ว-204-จ-0059

Remark :

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

Technical Management

Siriluk P.

Siriluk Bunnak  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0013

Approved by

Kanokkorn Anek

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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## Analysis / Test Report

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999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2457196  
Date Received : Jun 10, 2024  
Date Reported : Jun 14, 2024  
Report Number : 2996959-1

Page 2 of 2

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Technical Management

Siriluk P.

Siriluk Bunnak  
Section Head  
ทะเบียนเลขที่ ว-204-จ-0013

Approved by

Kanokkorn Anek

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ก-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
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P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2457199  
Date Received : Jun 10, 2024  
Date Reported : Jun 14, 2024  
Report Number : 2996962-1

Page 1 of 2

| Sample Number                                | 2457199-1  |        |           |        |                           |   |                  |
|--|--|--------|-----------|--------|---------------------------|---|------------------|
| Sampled Date                                 | Jun 10, 2024 9:25 AM   |        |           |        |                           |   |                  |
| Sample Description                           | Wastewater   |        |           |        |                           |   |                  |
| Location                                     | น้ำทิ้ง  |        |           |        |                           |   |                  |
| Date Analysis Commenced                      | Jun 11, 2024   |        |           |        |                           |   |                  |
| Condition of Sample                          | Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |        |           |        |                           |   |                  |
| Analyte                                      | Unit   | LOD    | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
| <b>Metals Testing</b>                        |  |        |           |        |                           |   |                  |
| Copper                                       | mg/L   | 0.0003 | 0.0005    | 0.008  | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, 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, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>                         |  |        |           |        |                           |   |                  |
| 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         | Bangkok          |
| pH at 25 degree C *                          |  | -      | -         | 8.1    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)   | Bangkok          |
| Residual Free Chlorine *                     | mg/L   | -      | 0.1       | <0.1   | ≤1.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)    | Bangkok          |
| Temperature *                                | Degree C   | -      | -         | 33.5   | ≤40                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B         | Bangkok          |
| Total Dissolved solids Dried at 180 degree C | mg/L   | -      | 5         | 1212   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C         | Bangkok          |

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

Sampling By : Aitipon Yaso ทะเบียนเลขที่ 7-204-ก-0059

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

Technical Management

*Suwimon C.*

Suwimon Chairuangwut  
Scientist (3)  
ทะเบียนเลขที่ 7-204-ก-0018

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7-204-ก-0004

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## Analysis / Test Report

Client : Gulf JP UT Co., Ltd.  
999 Moo 1, Ban Chang, Uthai, Pranakhonsiyutthaya Thailand 13210  
P/O : 4102004523  
Project Name : Monitoring EIA  
Project Location : GUT



TESTING  
No.0009

Lot ID: 2457199  
Date Received : Jun 10, 2024  
Date Reported : Jun 14, 2024  
Report Number : 2996962-1

Page 2 of 2

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

Technical Management

*Suwimon C.*

Suwimon Chairuangwut  
Scientist (3)  
ทะเบียนเลขที่ 7-204-ก-0018

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7-204-ก-0004

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# ภาคผนวก ค-7

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บันทึกปริมาณการจราจร



รายงาน 1. คำนวณปริมาณการเข้ามามีปฏิสัมพันธ์น้ำ / 2. รอยต่อประเภทต่างๆ ที่เข้ามาในโรงไฟฟ้า

ประจำเดือน มกราคม 2567

| วันที่ | ผู้รับเหมา<br>ที่เข้ามามีปฏิสัมพันธ์งาน<br>(จำนวนคน) | จำนวนรอยต่อ (เข้า - ออก) ประเภทต่างๆ แบ่งตาม รัศมี รอยต่อ ปี 2522 |                      |                      |                      |                      |                       |                       |                       | หมายเหตุ                                      |
|--------|--|---|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|---|
|        |  | รอยต่อขนาด<br>2 นิ้ว  | รอยต่อขนาด<br>3 นิ้ว | รอยต่อขนาด<br>4 นิ้ว | รอยต่อขนาด<br>6 นิ้ว | รอยต่อขนาด<br>8 นิ้ว | รอยต่อขนาด<br>10 นิ้ว | รอยต่อขนาด<br>12 นิ้ว | รอยต่อขนาด<br>14 นิ้ว |   |
| 1      | 0  | 3   | 1                    | 0                    | 0                    | 0                    | -                     | -                     | -                     | -   |
| 2      | 0  | 0   | 0                    | 0                    | 0                    | 1                    | -                     | -                     | -                     | เก็บขยะ                                       |
| 3      | 18   | 23  | 7                    | 3                    | 1                    | -                    | -                     | -                     | -                     | -   |
| 4      | 14   | 24  | 10                   | 9                    | 0                    | 2                    | -                     | -                     | -                     | เก็บขยะ, น้ำดื่ม                              |
| 5      | 7  | 21  | 8                    | 8                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 6      | 3  | 14  | 1                    | 1                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 7      | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 8      | 11   | 22  | 5                    | 9                    | 0                    | 1                    | -                     | -                     | -                     | ขยะ   |
| 9      | 3  | 25  | 12                   | 7                    | 1                    | 1                    | -                     | -                     | -                     | น้ำดื่ม                                       |
| 10     | 18   | 24  | 8                    | 8                    | 2                    | -                    | -                     | -                     | 1                     | -   |
| 11     | 17   | 24  | 12                   | 8                    | 4                    | 2                    | 1                     | -                     | 1                     | เก็บขยะ, น้ำดื่ม, ชิ้นหักของ                  |
| 12     | 13   | 28  | 11                   | 8                    | 3                    | -                    | 1                     | -                     | 1                     | โคลน 99 %                                     |
| 13     | 3  | 11  | 1                    | 2                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 14     | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 15     | 26   | 24  | 7                    | 7                    | 3                    | 1                    | 2                     | -                     | -                     | เพื่อกักตุนน้ำ 46 %, ไซเคิลไฮโดรเจน 100%, ขยะ |
| 16     | 19   | 23  | 9                    | 9                    | 3                    | 1                    | -                     | -                     | 1                     | น้ำดื่ม                                       |
| 17     | 28   | 23  | 14                   | 7                    | 1                    | -                    | -                     | -                     | 1                     | -   |
| 18     | 20   | 23  | 10                   | 5                    | 0                    | 2                    | -                     | -                     | -                     | เก็บขยะ, น้ำดื่ม                              |
| 19     | 38   | 22  | 12                   | 8                    | 3                    | -                    | -                     | -                     | 3                     | -   |
| 20     | 3  | 12  | 2                    | 2                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 21     | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 22     | 41   | 23  | 12                   | 12                   | 2                    | 1                    | -                     | -                     | 2                     | เก็บขยะ                                       |
| 23     | 21   | 23  | 11                   | 6                    | 1                    | 1                    | -                     | -                     | -                     | น้ำดื่ม                                       |
| 24     | 39   | 18  | 14                   | 14                   | 2                    | -                    | -                     | -                     | 1                     | -   |
| 25     | 5  | 20  | 10                   | 4                    | 3                    | 2                    | 1                     | 1                     | 1                     | เก็บขยะ, น้ำดื่ม                              |
| 26     | 3  | 21  | 7                    | 4                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 27     | 0  | 12  | 1                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 28     | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 29     | 4  | 20  | 8                    | 7                    | 0                    | 1                    | -                     | -                     | -                     | ขยะ   |
| 30     | 12   | 23  | 8                    | 6                    | 1                    | 1                    | -                     | -                     | -                     | น้ำดื่ม                                       |
| 31     | 16   | 23  | 14                   | 9                    | 0                    | -                    | -                     | -                     | -                     | -   |
| รวม    | 382  | 529   | 215                  | 163                  | 30                   | 17                   | 5                     | 1                     | 12                    | -   |

รายงานโดย..... รปภ.

รับทราบโดย..... EHS. Division

รายงาน 1. คำนวณปริมาณการเข้ามามีปฏิสัมพันธ์น้ำ / 2. รอยต่อประเภทต่างๆ ที่เข้ามาในโรงไฟฟ้า

ประจำเดือน กุมภาพันธ์ 2567

| วันที่ | ผู้รับเหมา<br>ที่เข้ามามีปฏิสัมพันธ์งาน<br>(จำนวนคน) | จำนวนรอยต่อ (เข้า - ออก) ประเภทต่างๆ แบ่งตาม รัศมี รอยต่อ ปี 2522 |                      |                      |                      |                      |                       |                       |                       | หมายเหตุ                                  |
|--------|--|---|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|---|
|        |  | รอยต่อขนาด<br>2 นิ้ว  | รอยต่อขนาด<br>3 นิ้ว | รอยต่อขนาด<br>4 นิ้ว | รอยต่อขนาด<br>6 นิ้ว | รอยต่อขนาด<br>8 นิ้ว | รอยต่อขนาด<br>10 นิ้ว | รอยต่อขนาด<br>12 นิ้ว | รอยต่อขนาด<br>14 นิ้ว |   |
| 1      | 15   | 23  | 10                   | 7                    | 1                    | 1                    | -                     | -                     | -                     | น้ำดื่ม                                   |
| 2      | 17   | 22  | 7                    | 4                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 3      | 0  | 10  | 1                    | 0                    | 0                    | -                    | -                     | -                     | 1                     | -   |
| 4      | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 5      | 15   | 21  | 10                   | 5                    | 2                    | 1                    | -                     | -                     | -                     | ขยะ                                       |
| 6      | 12   | 22  | 13                   | 8                    | 1                    | 1                    | -                     | -                     | 1                     | น้ำดื่ม                                   |
| 7      | 4  | 19  | 11                   | 7                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 8      | 14   | 21  | 9                    | 6                    | 2                    | 2                    | 2                     | -                     | -                     | ไซเคิลไฮโดรเจน 10 %, ขยะ, น้ำดื่ม, คลอรีน |
| 9      | 9  | 22  | 12                   | 6                    | 3                    | -                    | -                     | -                     | 3                     | -   |
| 10     | 0  | 12  | 1                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 11     | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 12     | 8  | 22  | 8                    | 4                    | 0                    | 1                    | -                     | -                     | -                     | ขยะ                                       |
| 13     | 21   | 23  | 14                   | 10                   | 1                    | 1                    | -                     | -                     | 1                     | น้ำดื่ม                                   |
| 14     | 11   | 21  | 9                    | 8                    | 2                    | -                    | -                     | -                     | -                     | -   |
| 15     | 20   | 21  | 14                   | 9                    | 1                    | 2                    | -                     | -                     | 1                     | น้ำดื่ม, ขยะ                              |
| 16     | 14   | 23  | 9                    | 9                    | 1                    | -                    | -                     | -                     | 1                     | -   |
| 17     | 2  | 13  | 1                    | 1                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 18     | 0  | 0   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 19     | 25   | 23  | 11                   | 7                    | 5                    | 1                    | 1                     | -                     | 1                     | ขยะ, ไซเคิลไฮโดรเจน 10 %                  |
| 20     | 9  | 23  | 8                    | 8                    | 1                    | 1                    | 1                     | -                     | -                     | ไซเคิลไฮโดรเจน 10 %                       |
| 21     | 14   | 24  | 11                   | 13                   | 0                    | -                    | -                     | -                     | -                     | -   |
| 22     | 10   | 25  | 10                   | 9                    | 1                    | 2                    | -                     | -                     | -                     | ขยะ, น้ำดื่ม                              |
| 23     | 9  | 25  | 8                    | 8                    | 2                    | -                    | -                     | -                     | -                     | -   |
| 24     | 2  | 2   | 0                    | 2                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 25     | 0  | 1   | 0                    | 0                    | 0                    | -                    | -                     | -                     | -                     | -   |
| 26     | 0  | 14  | 1                    | 0                    | 1                    | -                    | -                     | -                     | 1                     | -   |
| 27     | 14   | 22  | 11                   | 8                    | 1                    | 2                    | 1                     | -                     | -                     | ขยะ, น้ำดื่ม, สารเคมี                     |
| 28     | 19   | 24  | 9                    | 5                    | 5                    | -                    | 1                     | -                     | -                     | การฉีดพ่น 8 %                             |
| 29     | 7  | 27  | 9                    | 2                    | 3                    | 2                    | 1                     | -                     | -                     | ขยะ, น้ำดื่ม, การฉีดพ่น 8 %               |
| รวม    | 271  | 505   | 207                  | 146                  | 33                   | 17                   | 7                     | 0                     | 10                    | -   |

รายงานโดย..... รปภ.

รับทราบโดย..... EHS. Division

รายงาน 1. ตารางปฏิบัติงานที่ดำเนินการปฏิบัติงานที่ 2. ตารางเปรียบเทียบค่าต่างๆ ที่ดำเนินการในโรงไฟฟ้า

ประจำเดือน มีนาคม 2567

| วัน | พนักงานประจำที่<br>ผู้ปฏิบัติงาน<br>(จำนวนคน) | พื้นที่<br>ที่ดำเนินการปฏิบัติงาน<br>(จำนวนคน) | จำนวนรถยนต์ (เข้า - ออก) ประเภทต่างๆ แบ่งตาม พรบ.รถยนต์ ปี 2562 |                          |                          |                          |                          |                          |                          |                          | หมายเหตุ                                     |
|-----|---|--|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
|     |   |  | รถจักรยานยนต์<br>1 คัน  | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ |  |
| 1   | 46  | 8  | 29  | 38                       | 10                       | 3                        | -                        | -                        | -                        | -                        | -  |
| 2   | 20  | 1  | 16  | 11                       | 5                        | 4                        | -                        | -                        | -                        | -                        | -  |
| 3   | 19  | 1  | 2   | 10                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 4   | 49  | 5  | 26  | 55                       | 14                       | 5                        | -                        | 1                        | -                        | -                        | ชนะ  |
| 5   | 49  | 10   | 30  | 55                       | 11                       | 8                        | -                        | 1                        | -                        | 1                        | น้ำดื่ม                                      |
| 6   | 50  | 4  | 29  | 39                       | 8                        | 5                        | 2                        | -                        | -                        | -                        | -  |
| 7   | 41  | 16   | 33  | 37                       | 14                       | 6                        | -                        | 2                        | -                        | -                        | ชนะน้ำดื่ม                                   |
| 8   | 39  | 9  | 35  | 26                       | 12                       | 7                        | -                        | -                        | -                        | -                        | -  |
| 9   | 18  | 0  | 16  | 13                       | 2                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 10  | 22  | 0  | 3   | 13                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 11  | 51  | 0  | 31  | 46                       | 8                        | 7                        | 3                        | 1                        | -                        | -                        | ชนะ  |
| 12  | 49  | 5  | 33  | 43                       | 11                       | 2                        | 0                        | 1                        | -                        | 1                        | น้ำดื่ม                                      |
| 13  | 47  | 4  | 31  | 39                       | 6                        | 4                        | 2                        | -                        | -                        | -                        | -  |
| 14  | 47  | 14   | 31  | 46                       | 10                       | 3                        | -                        | 1                        | -                        | -                        | ชนะ  |
| 15  | 47  | 6  | 32  | 48                       | 20                       | 6                        | -                        | 1                        | -                        | 1                        | เพื่อความปลอดภัย 45 %                        |
| 16  | 19  | 0  | 17  | 11                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 17  | 19  | 0  | 3   | 9                        | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 18  | 50  | 0  | 32  | 57                       | 12                       | 8                        | -                        | 1                        | -                        | -                        | ชนะ  |
| 19  | 50  | 8  | 36  | 60                       | 17                       | 6                        | -                        | 1                        | -                        | -                        | น้ำดื่ม                                      |
| 20  | 50  | 7  | 36  | 55                       | 16                       | 4                        | -                        | -                        | -                        | -                        | -  |
| 21  | 49  | 11   | 36  | 61                       | 16                       | 8                        | -                        | 2                        | -                        | -                        | ชนะน้ำดื่ม                                   |
| 22  | 50  | 10   | 33  | 55                       | 13                       | 8                        | -                        | 2                        | -                        | -                        | รถยนต์ใหม่ปลอดภัย 10 % SPECTRUM NX 1100      |
| 23  | 20  | 0  | 14  | 13                       | 4                        | 3                        | -                        | -                        | -                        | 1                        | -  |
| 24  | 19  | 0  | 2   | 10                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 25  | 45  | 10   | 35  | 58                       | 11                       | 5                        | -                        | 1                        | -                        | 1                        | ชนะ  |
| 26  | 50  | 6  | 36  | 53                       | 13                       | 5                        | -                        | 1                        | -                        | -                        | น้ำดื่ม                                      |
| 27  | 44  | 15   | 32  | 53                       | 18                       | 8                        | -                        | 1                        | -                        | -                        | รถยนต์ใหม่ปลอดภัย 10 %                       |
| 28  | 47  | 9  | 31  | 48                       | 13                       | 7                        | -                        | 2                        | 2                        | -                        | ชนะ 98 %, รถยนต์ใหม่ปลอดภัย 10 %, ชนะน้ำดื่ม |
| 29  | 48  | 19   | 34  | 49                       | 15                       | 7                        | -                        | -                        | -                        | -                        | -  |
| 30  | 16  | 5  | 16  | 15                       | 3                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 31  | 17  | 0  | 2   | 9                        | 2                        | 2                        | -                        | -                        | -                        | -                        | -  |
| รวม |   | 181  | 774   | 1140                     | 304                      | 145                      |                          | 15                       | 6                        | 5                        |  |

รายงานโดย: ส.วิเศษ, น.ค.

รับทราบโดย: พินิตา สารวิทย์, EHS. Division

รายงาน 1. ตารางปฏิบัติงานที่ดำเนินการปฏิบัติงานที่ 2. ตารางเปรียบเทียบค่าต่างๆ ที่ดำเนินการในโรงไฟฟ้า

ประจำเดือน เมษายน 2567

| วัน | พนักงานประจำที่<br>ผู้ปฏิบัติงาน<br>(จำนวนคน) | พื้นที่<br>ที่ดำเนินการปฏิบัติงาน<br>(จำนวนคน) | จำนวนรถยนต์ (เข้า - ออก) ประเภทต่างๆ แบ่งตาม พรบ.รถยนต์ ปี 2562 |                          |                          |                          |                          |                          |                          |                          | หมายเหตุ   |
|-----|---|--|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
|     |   |  | รถจักรยานยนต์<br>2 คัน  | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ | รถจักรยานยนต์<br>รถกระบะ |  |
| 1   | 51  | 3  | 24  | 43                       | 8                        | 3                        | -                        | 1                        | -                        | -                        | ชนะ  |
| 2   | 52  | 6  | 34  | 62                       | 6                        | 3                        | -                        | 1                        | -                        | 1                        | น้ำดื่ม  |
| 3   | 46  | 9  | 34  | 44                       | 11                       | 3                        | 1                        | -                        | -                        | -                        | -  |
| 4   | 45  | 9  | 36  | 37                       | 12                       | 2                        | -                        | 2                        | -                        | -                        | น้ำดื่ม, ชนะ   |
| 5   | 48  | 2  | 34  | 39                       | 6                        | 3                        | -                        | -                        | -                        | 1                        | -  |
| 6   | 21  | 0  | 13  | 16                       | 3                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 7   | 17  | 0  | 1   | 12                       | 2                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 8   | 16  | 0  | 16  | 12                       | 3                        | 1                        | -                        | -                        | -                        | -                        | -  |
| 9   | 43  | 4  | 34  | 37                       | 8                        | 3                        | -                        | 2                        | 1                        | -                        | รถยนต์ใหม่ปลอดภัย 10 %, น้ำดื่ม, ชนะ                             |
| 10  | 47  | 0  | 30  | 42                       | 11                       | 3                        | -                        | -                        | -                        | -                        | -  |
| 11  | 42  | 4  | 29  | 38                       | 6                        | 4                        | -                        | 2                        | 1                        | -                        | น้ำดื่ม, ชนะ, รถจักรยานยนต์ใหม่ 98 %                             |
| 12  | 17  | 0  | 2   | 10                       | 3                        | 1                        | -                        | -                        | -                        | 1                        | -  |
| 13  | 18  | 0  | 3   | 10                       | 3                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 14  | 16  | 0  | 2   | 9                        | 2                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 15  | 17  | 0  | 2   | 9                        | 3                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 16  | 18  | 0  | 4   | 13                       | 3                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 17  | 40  | 0  | 33  | 30                       | 3                        | 3                        | -                        | 1                        | -                        | -                        | ชนะ  |
| 18  | 41  | 7  | 33  | 37                       | 10                       | 4                        | -                        | 1                        | -                        | 1                        | น้ำดื่ม  |
| 19  | 42  | 1  | 32  | 35                       | 8                        | 5                        | -                        | 2                        | -                        | 1                        | รถจักรยานยนต์ใหม่, รถยนต์ใหม่ BETZ AP 1715 AP BAX BAG            |
| 20  | 19  | 0  | 15  | 12                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 21  | 21  | 0  | 2   | 11                       | 4                        | 2                        | -                        | -                        | -                        | -                        | -  |
| 22  | 49  | 2  | 32  | 53                       | 9                        | 8                        | -                        | 2                        | -                        | -                        | รถยนต์ใหม่ปลอดภัย 10 %, เพื่อความปลอดภัย 45 %                    |
| 23  | 51  | 2  | 35  | 61                       | 15                       | 10                       | -                        | 1                        | -                        | -                        | น้ำดื่ม  |
| 24  | 49  | 1  | 33  | 52                       | 17                       | 7                        | -                        | -                        | -                        | -                        | -  |
| 25  | 46  | 15   | 33  | 66                       | 19                       | 12                       | -                        | 2                        | 1                        | 1                        | ชนะ, น้ำดื่ม, รถยนต์ใหม่ปลอดภัย 98 %                             |
| 26  | 48  | 17   | 32  | 63                       | 27                       | 12                       | -                        | -                        | -                        | -                        | -  |
| 27  | 33  | 3  | 22  | 28                       | 4                        | 1                        | -                        | -                        | -                        | -                        | -  |
| 28  | 25  | 0  | 16  | 20                       | 3                        | 1                        | -                        | -                        | -                        | -                        | -  |
| 29  | 44  | 20   | 32  | 43                       | 17                       | 10                       | -                        | 1                        | 3                        | -                        | รถจักรยานยนต์ใหม่, เพื่อความปลอดภัย 45 %, รถจักรยานยนต์ใหม่, ชนะ |
| 30  | 49  | 5  | 34  | 52                       | 8                        | 7                        | -                        | 1                        | -                        | -                        | น้ำดื่ม  |
| รวม |   | 111  | 692   | 996                      | 243                      | 122                      |                          | 13                       | 10                       | 6                        |  |

รายงานโดย: ส.วิเศษ, น.ค.

รับทราบโดย: พินิตา สารวิทย์, EHS. Division



ตาราง 1. ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า / 2. ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า

ปีงบประมาณ 2567

| ร.ร. | ชนิดสินค้า/ประเภทสินค้า | ปริมาณนำเข้า/ส่งออก (ตัน) | ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า |        |        |        |        |        |        |        |        |        | หมายเหตุ                        |
|------|-------------------------|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------|
|      |                         |                           | นำเข้า                             | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก |                                 |
| 1    | 32                      | 4                         | 23                                 | 4      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 2    | 48                      | 10                        | 36                                 | 44     | 7      | 4      | 0      | 2      | 0      | 1      | 0      | 1      | ขอใบเปลี่ยนใบแจ้งการนำเข้า 10 % |
| 3    | 51                      | 8                         | 34                                 | 57     | 15     | 8      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 4    | 19                      | 0                         | 13                                 | 2      | 3      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 5    | 18                      | 0                         | 1                                  | 12     | 3      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 6    | 17                      | 0                         | 5                                  | 12     | 4      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 7    | 46                      | 15                        | 33                                 | 45     | 12     | 3      | 0      | 2      | 0      | 3      | 0      | 1      | ขอใบเปลี่ยนใบแจ้งการนำเข้า 10 % |
| 8    | 50                      | 8                         | 35                                 | 53     | 13     | 10     | 0      | 0      | 0      | 0      | 0      | 0      | ขอใบเปลี่ยนใบแจ้งการนำเข้า 10 % |
| 9    | 51                      | 1                         | 32                                 | 42     | 9      | 3      | 0      | 2      | 0      | 3      | 0      | 0      | -                               |
| 10   | 47                      | 3                         | 34                                 | 42     | 11     | 3      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 11   | 18                      | 0                         | 17                                 | 14     | 1      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 12   | 19                      | 0                         | 4                                  | 12     | 1      | 3      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 13   | 51                      | 0                         | 33                                 | 45     | 11     | 3      | 0      | 2      | 0      | 0      | 0      | 0      | -                               |
| 14   | 52                      | 4                         | 54                                 | 28     | 8      | 9      | 0      | 1      | 0      | 1      | 0      | 1      | ใบเปลี่ยนใบแจ้งการนำเข้า 10 %   |
| 15   | 51                      | 9                         | 36                                 | 49     | 9      | 7      | 0      | 0      | 0      | 1      | 0      | 0      | ใบเปลี่ยนใบแจ้งการนำเข้า 10 %   |
| 16   | 50                      | 17                        | 37                                 | 48     | 14     | 5      | 0      | 2      | 0      | 0      | 0      | 0      | -                               |
| 17   | 49                      | 9                         | 34                                 | 51     | 9      | 7      | 0      | 0      | 0      | 0      | 0      | 3      | -                               |
| 18   | 21                      | 3                         | 17                                 | 16     | 6      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 19   | 17                      | 0                         | 0                                  | 10     | 4      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 20   | 51                      | 24                        | 36                                 | 55     | 13     | 11     | 0      | 3      | 0      | 0      | 0      | 1      | -                               |
| 21   | 53                      | 10                        | 38                                 | 59     | 15     | 7      | 0      | 3      | 0      | 0      | 0      | 0      | -                               |
| 22   | 19                      | 1                         | 4                                  | 11     | 2      | 3      | 0      | 0      | 0      | 1      | 0      | 0      | -                               |
| 23   | 52                      | 15                        | 32                                 | 52     | 12     | 9      | 0      | 2      | 0      | 0      | 1      | 1      | -                               |
| 24   | 50                      | 11                        | 36                                 | 50     | 17     | 4      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 25   | 25                      | 18                        | 21                                 | 18     | 12     | 4      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 26   | 22                      | 10                        | 4                                  | 17     | 6      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| 27   | 49                      | 29                        | 35                                 | 55     | 15     | 6      | 0      | 1      | 0      | 0      | 0      | 0      | -                               |
| 28   | 51                      | 10                        | 34                                 | 53     | 21     | 4      | 0      | 1      | 0      | 0      | 0      | 0      | -                               |
| 29   | 53                      | 40                        | 35                                 | 50     | 18     | 6      | 0      | 1      | 0      | 0      | 0      | 2      | -                               |
| 30   | 53                      | 14                        | 36                                 | 63     | 17     | 10     | 0      | 1      | 1      | 0      | 0      | 0      | -                               |
| 31   | 45                      | 1                         | 8                                  | 29     | 4      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -                               |
| รวม  |                         |                           | 783                                | 1117   | 296    | 159    | 0      | 18     | 1      | 7      | 1      | 8      | -                               |

รายงานโดย: ศิริกมล ใจดี ผอ.

บริหารโดย: พริดา สารวิทย์ EHS Division

ตาราง 1. ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า / 2. ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า

ปีงบประมาณ 2567

| ร.ร. | ชนิดสินค้า/ประเภทสินค้า | ปริมาณนำเข้า/ส่งออก (ตัน) | ข้อมูลปริมาณการนำเข้า/ส่งออกสินค้า |        |        |        |        |        |        |        |        |        | หมายเหตุ |
|------|-------------------------|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
|      |                         |                           | นำเข้า                             | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก | นำเข้า | ส่งออก |          |
| 1    | 38                      | 0                         | 4                                  | 11     | 1      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 2    | 35                      | 0                         | 0                                  | 12     | 2      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 3    | 29                      | 0                         | 14                                 | 14     | 1      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 4    | 48                      | 22                        | 36                                 | 46     | 8      | 5      | 0      | 2      | 0      | 1      | 0      | 0      | -        |
| 5    | 50                      | 15                        | 34                                 | 46     | 18     | 14     | 0      | 0      | 1      | 0      | 4      | 1      | -        |
| 6    | 47                      | 14                        | 32                                 | 46     | 15     | 15     | 0      | 2      | 1      | 0      | 5      | 1      | -        |
| 7    | 46                      | 10                        | 35                                 | 35     | 13     | 7      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 8    | 34                      | 0                         | 17                                 | 12     | 1      | 8      | 0      | 0      | 0      | 0      | 1      | 0      | -        |
| 9    | 34                      | 0                         | 2                                  | 10     | 1      | 3      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 10   | 50                      | 30                        | 32                                 | 49     | 15     | 7      | 0      | 1      | 0      | 2      | 3      | 0      | -        |
| 11   | 51                      | 20                        | 32                                 | 49     | 15     | 4      | 0      | 1      | 0      | 0      | 0      | 0      | -        |
| 12   | 48                      | 18                        | 35                                 | 46     | 17     | 7      | 0      | 0      | 1      | 0      | 0      | 1      | -        |
| 13   | 49                      | 34                        | 33                                 | 50     | 15     | 6      | 0      | 3      | 0      | 0      | 0      | 2      | -        |
| 14   | 49                      | 32                        | 34                                 | 50     | 18     | 12     | 0      | 0      | 0      | 2      | 0      | 1      | -        |
| 15   | 17                      | 0                         | 15                                 | 13     | 2      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 16   | 17                      | 0                         | 0                                  | 11     | 3      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 17   | 49                      | 26                        | 35                                 | 57     | 21     | 6      | 0      | 1      | 0      | 1      | 0      | 0      | -        |
| 18   | 49                      | 37                        | 36                                 | 54     | 24     | 6      | 0      | 1      | 0      | 1      | 0      | 0      | -        |
| 19   | 51                      | 34                        | 34                                 | 60     | 23     | 11     | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 20   | 48                      | 30                        | 34                                 | 49     | 22     | 11     | 0      | 3      | 0      | 1      | 0      | 0      | -        |
| 21   | 50                      | 31                        | 36                                 | 58     | 17     | 13     | 0      | 0      | 0      | 1      | 0      | 0      | -        |
| 22   | 34                      | 0                         | 17                                 | 10     | 1      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 23   | 38                      | 0                         | 3                                  | 9      | 2      | 3      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 24   | 43                      | 25                        | 36                                 | 34     | 16     | 6      | 0      | 1      | 0      | 0      | 0      | 1      | -        |
| 25   | 50                      | 26                        | 35                                 | 54     | 15     | 10     | 0      | 1      | 0      | 1      | 0      | 1      | -        |
| 26   | 50                      | 24                        | 38                                 | 45     | 11     | 8      | 0      | 0      | 0      | 0      | 0      | 1      | -        |
| 27   | 47                      | 23                        | 33                                 | 52     | 16     | 6      | 0      | 2      | 0      | 0      | 0      | 0      | -        |
| 28   | 48                      | 24                        | 33                                 | 62     | 18     | 7      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 29   | 16                      | 3                         | 15                                 | 11     | 2      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| 30   | 16                      | 0                         | 8                                  | 11     | 2      | 2      | 0      | 0      | 0      | 0      | 0      | 0      | -        |
| รวม  |                         |                           | 464                                | 745    | 188    | 187    | 0      | 18     | 2      | 11     | 1      | 10     | -        |

รายงานโดย: ศิริกมล ใจดี ผอ.

บริหารโดย: พริดา สารวิทย์ EHS Division