

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์คุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125265
Date Received : Dec 04, 2023
Date Reported : Dec 08, 2023
Report Number: 2817988-1

TESTING
No.0042

Sample Description Location	Air Quality สิ่งแวดล้อมอากาศ				
Date Analysis Commenced	Dec 04, 2023				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23125265-1	Nov 23 - Nov 24, 2023	0.083	0.039	756	30
23125265-2	Nov 24 - Nov 25, 2023	0.066	0.021	756	29
23125265-3	Nov 25 - Nov 26, 2023	0.108	0.046	756	29
23125265-4	Nov 26 - Nov 27, 2023	0.086	0.033	756	29
23125265-5	Nov 27 - Nov 28, 2023	0.105	0.038	756	29
23125265-6	Nov 28 - Nov 29, 2023	0.095	0.043	756	29
23125265-7	Nov 29 - Nov 30, 2023	0.135	0.071	756	29
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 : Anurak Tongkhajonsakda					
Remark :	- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.				

Thanka Kulnirong
Scientist (+)

Approved by

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125265
Date Received : Dec 04, 2023
Date Reported : Dec 08, 2023
Report Number: 2817988-2

TESTING
No.0042

Sample Description	Air Quality
Location	1๙1๙๙๙

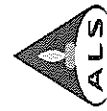
Thanka Kulnirong
Scientist (+)

Approved by

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Analysis / Test Report



Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23125265
Date Received : Dec 04, 2023
Date Reported : Dec 08, 2023
Report Number: 2817988-3

Page 1 of 1

Sample Description	Air Quality	Location	Date Analysis Commenced	Condition of Sample	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag					23125265-15	Nov 23 - Nov 24, 2023	0.065	0.027	756	30
					23125265-16	Nov 24 - Nov 25, 2023	0.052	0.029	756	29
					23125265-17	Nov 25 - Nov 26, 2023	0.078	0.021	756	29
					23125265-18	Nov 26 - Nov 27, 2023	0.041	0.030	756	29
					23125265-19	Nov 27 - Nov 28, 2023	0.047	0.024	756	29
					23125265-20	Nov 28 - Nov 29, 2023	0.063	0.036	756	29
					23125265-21	Nov 29 - Nov 30, 2023	0.076	0.042	756	29
					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 : Anurak Tongkhajonsakda
Remark :
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Tharitat.

Approved by

Thanika Kulsurivong
Scientist (4)

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1319041 / EMAIL

S:\Reports_Air Ambient\Days rpt (12 SSPM)



Analysis / Test Report



Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23125265
Date Received : Dec 04, 2023
Date Reported : Dec 08, 2023
Report Number: 2817988-4

Page 1 of 1

Sample Description	Air Quality	Location	Date Analysis Commenced	Condition of Sample	Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag					23125265-22	Nov 23 - Nov 24, 2023	0.065	0.030	756	28
					23125265-23	Nov 24 - Nov 25, 2023	0.057	0.023	756	28
					23125265-24	Nov 25 - Nov 26, 2023	0.093	0.038	756	28
					23125265-25	Nov 26 - Nov 27, 2023	0.045	0.017	756	29
					23125265-26	Nov 27 - Nov 28, 2023	0.050	0.025	756	29
					23125265-27	Nov 28 - Nov 29, 2023	0.063	0.031	756	29
					23125265-28	Nov 29 - Nov 30, 2023	0.075	0.037	756	29
					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 : Anurak Tongkhajonsakda
Remark :
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Tharitat.

Approved by

Thanika Kulsurivong
Scientist (4)

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S:\Reports_Air Ambient\Days rpt (12 SSPM)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23125262
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number: 2817984-1

Page 1 of 1

Sample Description		Air Quality									
Location	Parameter	Sulfur Dioxide (ppm)									
Measurement Date	Measurement by	Nov 23, 2023 - Nov 30, 2023									
		Anurak Tongphajonsakda									
Time		23125262-1	23125262-2	23125262-3	23125262-4	23125262-5	23125262-6	23125262-7			
		Nov 23, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023	Nov 30, 2023		
11:00 AM - 12:00 PM		0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
12:00 PM - 01:00 PM		0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
01:00 PM - 02:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
02:00 PM - 03:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
03:00 PM - 04:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
04:00 PM - 05:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
05:00 PM - 06:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
06:00 PM - 07:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
07:00 PM - 08:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
08:00 PM - 09:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
09:00 PM - 10:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
10:00 PM - 11:00 PM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
11:00 PM - 12:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
12:00 AM - 01:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
01:00 AM - 02:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
02:00 AM - 03:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
03:00 AM - 04:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
04:00 AM - 05:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
05:00 AM - 06:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
06:00 AM - 07:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
07:00 AM - 08:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
08:00 AM - 09:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
09:00 AM - 10:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
10:00 AM - 11:00 AM		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
Average		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
1hr - Maximum		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
Standard 1hr - Average		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Standard 24 hrs - Average		0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
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

Orawan R.

Orawan Rakying
Scientist (3)

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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S_Veporn_Air_SONORip (2.44PM)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23125262
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number: 2860329-1

Page 1 of 1

Sample Description		Air Quality									
Location	Parameter	Tostiongungunthwinnasatuaan									
Measurement Date	Measurement by	Sulfur Dioxide (ppm)									
		Nov 23, 2023 - Nov 30, 2023									
		Anurak Tongkijornsakda									
Time		23125262-8	23125262-9	23125262-10	23125262-11	23125262-12	23125262-13	23125262-14			
		Nov 23, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023			
10:00 AM - 11:00 AM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
11:00 AM - 12:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
12:00 PM - 01:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002		
01:00 PM - 02:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003		
02:00 PM - 03:00 PM		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
03:00 PM - 04:00 PM		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
04:00 PM - 05:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
05:00 PM - 06:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
06:00 PM - 07:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002		
07:00 PM - 08:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
08:00 PM - 09:00 PM		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002		
09:00 PM - 10:00 PM		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002		
10:00 PM - 11:00 PM		0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.002		
11:00 PM - 12:00 AM		0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
12:00 AM - 01:00 AM		0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003		
01:00 AM - 02:00 AM		0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
02:00 AM - 03:00 AM		0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.003		
03:00 AM - 04:00 AM		0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.003		
04:00 AM - 05:00 AM		0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.003		
05:00 AM - 06:00 AM		0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.003		
06:00 AM - 07:00 AM		0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003		
07:00 AM - 08:00 AM		0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003		
08:00 AM - 09:00 AM		0.003	0.002	0.003	0.003	0.003	0.002	0.002	0.003		
09:00 AM - 10:00 AM		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
Average		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003		
1hr - Maximum		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003		
Standard 1hr - Average		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Standard 24 hrs - Average		0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12		
Standard		: 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

Orawan R.

Orawan Rakying
Scientist (3)

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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S_Veporn_Air_SONORip (2.44PM)



Analysis / Test Report

Client: Gulf TS3 Co., Ltd.

Client: Gulf T3 Co., Ltd.
274 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Pluak Daeng, Rayong

Thailand 21140
P/O : 4210607493

P/O : 4210402483
Project Name : Monitoring EIA

Project Name : Monko
Project Location : GTS3

Date Received : Dec 04, 2023

Date Reported : Dec 11, 2023

Report Number: 2860331-1

Page 1 of 2

Sample Description		Air Quality						
Location	Parameter	หน่วยมาตรฐาน(ตามข้อกำหนด)						
Measurement Date	Measurement by	Sulfur Dioxide (ppm)						
		Nov 23, 2023	Nov 30, 2023					
Anurak Tongthongskulda		Anurak Tongthongskulda						
Time		23125262-15	23125262-16	23125262-17	23125262-18	23125262-19	23125262-20	23125262-21
12:00 PM - 01:00 PM		Nov 23, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023
01:00 PM - 02:00 PM		0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM		0.002	0.002	0.001	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM		0.002	0.002	0.001	0.001	0.002	0.002	0.002
04:00 PM - 05:00 PM		0.002	0.002	0.001	0.001	0.002	0.002	0.002
05:00 PM - 06:00 PM		0.002	0.002	0.001	0.001	0.001	0.002	0.002
06:00 PM - 07:00 PM		0.002	0.002	0.001	0.001	0.001	0.001	0.002
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	0.002
11:00 PM - 12:00 AM		0.001	0.001	0.001	0.001	0.001	0.001	0.004
12:00 AM - 01:00 AM		0.001	0.001	0.001	0.001	0.001	0.001	0.003
01:00 AM - 02:00 AM		0.001	0.001	0.001	0.001	0.001	0.001	0.003
02:00 AM - 03:00 AM		0.001	0.001	0.001	0.001	0.001	0.002	0.002
03:00 AM - 04:00 AM		0.001	0.001	0.001	0.001	0.001	0.002	0.002
04:00 AM - 05:00 AM		0.001	0.001	0.001	0.001	0.001	0.003	0.002
05:00 AM - 06:00 AM		0.001	0.001	0.001	0.001	0.001	0.003	0.002
06:00 AM - 07:00 AM		0.002	0.002	0.002	0.002	0.001	0.004	0.002
07:00 AM - 08:00 AM		0.002	0.002	0.002	0.002	0.002	0.003	0.003
08:00 AM - 09:00 AM		0.002	0.002	0.002	0.002	0.002	0.002	0.003
09:00 AM - 10:00 AM		0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM		0.002	0.002	0.002	0.002	0.003	0.002	0.002
11:00 AM - 12:00 PM		0.002	0.002	0.002	0.002	0.002	0.002	0.001
Average		0.002	0.001	0.001	0.002	0.002	0.002	0.002
1hr - Maximum		0.002	0.002	0.002	0.002	0.003	0.004	0.004
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								

Reference Method : US EPA Method Part 53 and 58

: 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).

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Approved by

Dr. W. B.

Orawan Rakyong

Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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מחלקת המחקר והפיתוח

S. Uppenberg Air 50x120x101 (2.44PM)

5. Reports\ Air SOxNOx.rpt (2:44PM)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23125259
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number: 2817980-1

Page 1 of 1

Sample Description		Air Quality													
Location	Parameter	Nitrogen dioxide (ppm)													
Measurement Date		Nov 23, 2023 - Nov 30, 2023													
Measurement by		Anurak Tongthajonsakdi													
Time		23125259-1		23125259-2		23125259-3		23125259-4		23125259-5		23125259-6		23125259-7	
		Nov 23, 2023	Nov 24, 2023	Nov 24, 2023	Nov 25, 2023	Nov 25, 2023	Nov 26, 2023	Nov 26, 2023	Nov 27, 2023	Nov 27, 2023	Nov 28, 2023	Nov 28, 2023	Nov 29, 2023	Nov 29, 2023	Nov 30, 2023
11:00 AM - 12:00 PM		0.001	0.002	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.004	0.004	0.001	0.001	0.001
12:00 PM - 01:00 PM		0.002	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	<0.001	<0.001	0.001
01:00 PM - 02:00 PM		0.005	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	<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	0.001	0.001	0.002	0.002	<0.001	<0.001	0.001
03:00 PM - 04:00 PM		0.003	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001
04:00 PM - 05:00 PM		0.001	0.001	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001
05:00 PM - 06:00 PM		<0.001	0.003	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
06:00 PM - 07:00 PM		0.001	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
07:00 PM - 08:00 PM		0.001	0.003	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
08:00 PM - 09:00 PM		<0.001	0.003	0.002	0.002	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
09:00 PM - 10:00 PM		0.002	0.002	0.004	0.004	0.002	0.002	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001
10:00 PM - 11:00 PM		0.002	0.002	0.006	0.006	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
11:00 PM - 12:00 AM		0.003	0.002	0.006	0.006	0.003	0.004	0.004	0.001	0.001	<0.001	<0.001	0.003	0.003	0.003
12:00 AM - 01:00 AM		0.005	0.009	0.007	0.007	0.009	0.004	0.005	0.007	0.002	0.001	0.001	0.003	0.003	0.003
01:00 AM - 02:00 AM		0.008	0.002	0.009	0.009	0.009	0.005	0.009	0.005	0.001	0.001	0.001	0.002	0.002	0.002
02:00 AM - 03:00 AM		0.002	0.007	0.007	0.009	0.009	0.007	0.007	0.003	0.003	<0.001	<0.001	0.002	0.002	0.002
03:00 AM - 04:00 AM		0.006	0.007	0.010	0.010	0.006	0.006	0.006	0.004	0.004	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM		0.003	0.004	0.004	0.005	0.005	0.007	0.007	0.002	0.002	0.003	0.003	0.002	0.002	0.002
05:00 AM - 06:00 AM		0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002
06:00 AM - 07:00 AM		0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
07:00 AM - 08:00 AM		0.002	0.001	0.001	0.003	0.003	0.002	0.002	<0.001	<0.001	0.002	0.002	0.002	0.001	0.001
08:00 AM - 09:00 AM		0.001	0.001	0.002	0.002	0.002	0.003	0.002	<0.001	<0.001	0.002	0.002	0.002	<0.001	0.001
09:00 AM - 10:00 AM		0.002	0.002	<0.001	0.002	0.002	0.003	0.003	0.001	0.001	0.002	0.002	0.002	<0.001	0.001
10:00 AM - 11:00 AM		0.002	0.002	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002
Average		0.003	0.003	0.004	0.004	0.004	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
1hr - Maximum		0.008	0.009	0.010	0.010	0.007	0.007	0.007	0.004	0.004	0.004	0.004	0.003	0.003	0.003
Standard 1hr - Average		0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard															
Reference Method		: Notification of the National Environment Board No. 33, 2009 (B.E. 2552). US EPA Method Part 50 App. F (Chromluminescence)													

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) Ltd. does not warrant or recommend that this report is not reproduced except in full.

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand. PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. AN ALS LIMITED COMPANY



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23125259
Date Received : Dec 04, 2023
Date Reported : Dec 11, 2023
Report Number: 2860324-1

Page 1 of 1

Sample Description Location	Air Quality ไนโตรเจนไดออกไซด์ในอากาศ (ppm)	23125259-8									
		Nov 23, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023	Nov 30, 2023	Nov 29, 2023	Nov 30, 2023
Measurement by Anurak Tongthajonsakdi											
Time		Nov 23, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023	Nov 30, 2023	Nov 29, 2023	Nov 30, 2023
10:00 AM - 11:00 AM	<0.001	0.009	0.005	0.010	0.024	0.007	0.009	0.005	0.011	0.005	0.016
11:00 AM - 12:00 PM	0.001	0.001	0.002	0.003	0.007	0.002	0.005	0.008	0.005	0.002	0.002
12:00 PM - 01:00 PM	<0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.001
01:00 PM - 02:00 PM	0.002	0.002	0.003	0.002	0.001	0.001	0.002	0.002	0.002	0.001	0.001
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.001
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.001
05:00 PM - 06:00 PM	0.002	0.001	0.001	0.002	0.005	0.003	0.003	0.003	0.001	0.001	0.001
06:00 PM - 07:00 PM	0.011	0.001	0.001	0.001	0.003	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	0.001	0.001	0.001	0.001
08:00 PM - 09:00 PM	0.001	0.001	0.003	0.001	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	0.003	0.001	0.001	0.002	0.002	0.001	0.001	0.001
10:00 PM - 11:00 PM	<0.001	<0.001	<0.001	0.002	0.003	0.003	<0.001	<0.001	<0.001	0.002	0.002
11:00 PM - 12:00 AM	<0.001	0.008	0.008	0.001	0.009	0.009	<0.001	<0.001	<0.001	0.002	0.002
12:00 AM - 01:00 AM	<0.001	0.004	0.006	0.005	0.012	0.006	0.003	0.003	0.002	0.003	0.003
01:00 AM - 02:00 AM	<0.001	0.006	0.006	0.003	0.006	0.006	0.003	0.003	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.001	0.008	0.008	0.003	0.006	0.006	0.003	0.003	0.007	0.007	0.007
03:00 AM - 04:00 AM	0.004	0.008	0.008	0.006	0.003	0.003	0.003	0.003	0.010	0.007	0.007
04:00 AM - 05:00 AM	0.002	0.009	0.009	0.002	0.006	0.006	0.002	0.002	0.009	0.007	0.007
05:00 AM - 06:00 AM	0.002	0.006	0.006	0.003	0.003	0.003	0.003	0.003	0.008	0.008	0.008
06:00 AM - 07:00 AM	0.003	0.007	0.007	0.004	0.004	0.004	0.004	0.004	0.007	0.007	0.007
07:00 AM - 08:00 AM	0.010	0.009	0.009	0.006	0.003	0.003	0.005	0.005	0.005	0.010	0.010
08:00 AM - 09:00 AM	0.008	0.012	0.012	0.015	0.020	0.020	0.009	0.009	0.007	0.018	0.018
09:00 AM - 10:00 AM	0.007	0.013	0.013	0.014	0.014	0.014	0.009	0.009	0.009	0.005	0.005
Average	0.003	0.005	0.005	0.004	0.006	0.006	0.003	0.003	0.004	0.004	0.004
1hr - Maximum	0.011	0.013	0.013	0.015	0.024	0.024	0.010	0.010	0.011	0.018	0.018
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard											
Reference Method											

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) Ltd. does not warrant or recommend that this report is not reproduced except in full.

Approved by

Orawan R.

Orawan Rakyong
Scientist (3)

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand. PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. AN ALS LIMITED COMPANY



Analysis / Test Report

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong
Thailand 21140
Lot ID: 23125259
Date Received: Dec 04, 2023
Date Reported: Dec 11, 2023
Report Number: 2860326-1
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Description		Air Quality	Air Quality													
Location	Parameter	Measurement Date	Measurement by													
			Anurak Tongkhajonsakda													
			23125259-22		23125259-23		23125259-24		23125259-25		23125259-26		23125259-27		23125259-28	
		Time	Nov 23, 2023	Nov 24, 2023	Nov 24, 2023	Nov 25, 2023	Nov 26, 2023	Nov 27, 2023	Nov 28, 2023	Nov 29, 2023	Nov 30, 2023	Nov 30, 2023	Nov 30, 2023	Nov 30, 2023	Nov 30, 2023	Nov 30, 2023
	Nitrogen dioxide (ppm)	09:00 AM - 10:00 AM	0.006	0.002	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001
		10:00 AM - 11:00 AM	0.003	0.002	0.004	0.004	0.001	0.004	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
		11:00 AM - 12:00 PM	0.008	0.001	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001
		12:00 PM - 01:00 PM	0.008	<0.001	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001
		01:00 PM - 02:00 PM	0.010	<0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001
		02:00 PM - 03:00 PM	0.008	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
		03:00 PM - 04:00 PM	0.010	0.002	0.010	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001
		04:00 PM - 05:00 PM	0.005	0.002	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001
		05:00 PM - 06:00 PM	0.010	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002
		06:00 PM - 07:00 PM	0.020	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002
		07:00 PM - 08:00 PM	0.022	0.009	0.020	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.002
		08:00 PM - 09:00 PM	0.019	0.013	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002
		09:00 PM - 10:00 PM	0.015	0.008	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.002
		10:00 PM - 11:00 PM	0.008	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.001
		11:00 PM - 12:00 AM	0.009	0.007	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.002
		12:00 AM - 01:00 AM	0.011	0.004	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.001
		01:00 AM - 02:00 AM	0.014	0.002	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.001
		02:00 AM - 03:00 AM	0.016	<0.001	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001
		03:00 AM - 04:00 AM	0.009	0.001	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001
		04:00 AM - 05:00 AM	0.007	0.002	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001
		05:00 AM - 06:00 AM	0.008	0.003	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.001
		06:00 AM - 07:00 AM	0.010	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001
		07:00 AM - 08:00 AM	0.012	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002
		08:00 AM - 09:00 AM	0.007	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002
	Average		0.011	0.004	0.006	0.006	0.001	0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001
	1hr - Maximum		0.022	0.013	0.016	0.016	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002
	Standard 1hr - Average		0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).															
Reference Method	: US EPA Method Part 50 App. F (Chemiluminescence)															

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

Orauan R.

awan Rakyat
Scientist (3)

ADDRESS: 304 Phatthanakan 40, Khweng Phatthanakan, Vhet Suan Luang, Bangkok 10250 Thailand. PHONE: 466 0 2760 3000 FAX: 466 0 2760 3197
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13430-617 EMAIL

S:\Reports\Air SoxNox.rpt (2:33PM)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125264

Date Received : Dec 04, 2023

Date Reported : Dec 12, 2023

Report Number : 2817985-1

Sample Number 23125264-1 to 7

Parameter Wind Speed / Wind Direction

Location ตำบลบ้านใหม่

Sampling Date Nov 23 - Nov 30, 2023

Sampling by Anurak Tongkhajonsakda

Time	Nov 23 - Nov 24, 2023		Nov 24 - Nov 25, 2023		Nov 25 - Nov 26, 2023		Nov 26 - Nov 27, 2023		Nov 27 - Nov 28, 2023		Nov 28 - Nov 29, 2023		Nov 29 - Nov 30, 2023								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
11:00 AM - 12:00 PM	1.1	190.0	S	0.8	34.0	ENE	2.7	72.0	ENE	2.0	46.0	NE	0.7	35.0	NE	0.7	182.0	S	3.3	59.0	ENE
12:00 PM - 01:00 PM	2.1	247.0	WSW	0.0	-	1.6	66.0	ENE	0.3	23.0	NNE	1.1	186.0	S	1.2	194.0	SSW	0.9	344.0	NNW	
01:00 PM - 02:00 PM	1.6	187.0	S	0.5	236.0	SW	0.7	143.0	SE	1.1	49.0	NE	0.4	139.0	SE	0.9	189.0	S	1.2	2.0	N
02:00 PM - 03:00 PM	2.8	250.0	WSW	2.4	212.0	SSW	0.0	-	-	0.7	69.0	ENE	1.8	248.0	WSW	1.8	252.0	WSW	1.0	62.0	ENE
03:00 PM - 04:00 PM	0.8	278.0	W	0.4	226.0	SW	0.0	-	-	1.1	183.0	S	1.2	253.0	WSW	0.4	220.0	SW	2.5	11.0	N
04:00 PM - 05:00 PM	0.3	280.0	W	2.6	86.0	E	0.3	224.0	SW	0.8	101.0	E	0.0	-	0.6	210.0	SSW	0.0	-	-	-
05:00 PM - 06:00 PM	0.3	39.0	NE	0.4	292.0	WNW	0.3	161.0	SSE	0.4	98.0	E	0.9	28.0	NNE	0.3	212.0	SSW	0.3	75.0	ENE
06:00 PM - 07:00 PM	0.4	40.0	NE	0.0	-	0.6	63.0	ENE	0.3	99.0	E	0.7	29.0	NNE	0.5	210.0	SSW	1.5	73.0	ENE	
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	0.5	63.0	ENE	0.3	101.0	E	0.5	16.0	NNE	1.2	210.0	SSW	0.6	75.0	ENE	
08:00 PM - 09:00 PM	0.3	39.0	NE	0.0	-	1.1	38.0	NE	0.0	-	0.3	13.0	NNE	0.3	210.0	SSW	0.7	73.0	ENE		
09:00 PM - 10:00 PM	0.3	2.0	N	0.5	39.0	NE	0.3	37.0	NE	0.7	46.0	NE	0.2	-	0.3	210.0	SSW	0.3	73.0	ENE	
10:00 PM - 11:00 PM	0.3	28.0	NNE	0.0	-	0.3	38.0	NE	0.0	-	0.0	-	0.0	-	1.3	208.0	SSW	0.3	73.0	ENE	
11:00 PM - 12:00 AM	0.5	49.0	NE	0.5	21.0	NNE	0.9	37.0	NE	0.5	35.0	NE	0.4	33.0	NNE	0.6	210.0	SSW	0.6	45.0	NE
12:00 AM - 01:00 AM	0.3	45.0	NE	0.5	100.0	E	1.3	38.0	NE	0.8	35.0	NE	0.2	-	0.5	210.0	SSW	0.4	32.0	NNE	
01:00 AM - 02:00 AM	0.6	42.0	NE	1.1	37.0	NE	0.4	38.0	NE	1.5	18.0	NNE	0.0	-	0.0	-	0.3	34.0	NE	-	-
02:00 AM - 03:00 AM	1.0	18.0	NNE	0.0	-	0.3	38.0	NE	0.1	-	0.8	36.0	NE	0.4	1.0	N	0.3	36.0	NE	-	-
03:00 AM - 04:00 AM	0.4	11.0	N	0.0	-	0.0	-	0.0	-	0.8	27.0	NNE	0.5	36.0	NE	0.5	30.0	NNE	0.0	-	-
04:00 AM - 05:00 AM	0.8	30.0	NNE	0.1	-	0.0	-	0.0	-	1.6	71.0	ENE	0.7	43.0	NE	0.3	36.0	NE	0.6	40.0	NE
05:00 AM - 06:00 AM	0.3	20.0	NNE	0.0	-	1.1	24.0	NNE	0.4	29.0	NNE	0.6	16.0	NNE	0.8	15.0	NNE	0.3	21.0	NNE	
06:00 AM - 07:00 AM	2.2	26.0	NNE	1.6	38.0	NE	3.6	27.0	NNE	0.2	-	0.7	11.0	N	0.6	30.0	NNE	1.1	27.0	NNE	
07:00 AM - 08:00 AM	0.5	105.0	ESE	1.0	93.0	E	1.1	47.0	NE	0.9	79.0	E	1.4	93.0	E	0.9	68.0	ENE	0.8	34.0	NE
08:00 AM - 09:00 AM	0.4	50.0	NE	0.3	53.0	NE	0.5	39.0	NE	0.3	4.0	N	1.9	45.0	NE	1.4	359.0	N	0.4	36.0	NE
09:00 AM - 10:00 AM	1.3	43.0	NE	0.6	26.0	NNE	0.9	46.0	NE	2.1	42.0	NE	1.9	52.0	NE	2.3	23.0	NNE	0.3	37.0	NE
10:00 AM - 11:00 AM	0.0	-	-	0.7	29.0	NNE	2.6	11.0	N	0.5	74.0	ENE	1.9	226.0	SW	2.6	40.0	NE	0.6	40.0	NE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed (tested samples) as not stated in this report. No part of this report or certificate may be reproduced in any form without the prior written permission of ALS Laboratory Group (Thailand) Co., Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont

Assistant General Manager

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Approved by

Sarayuth Jitranont

Assistant General Manager



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

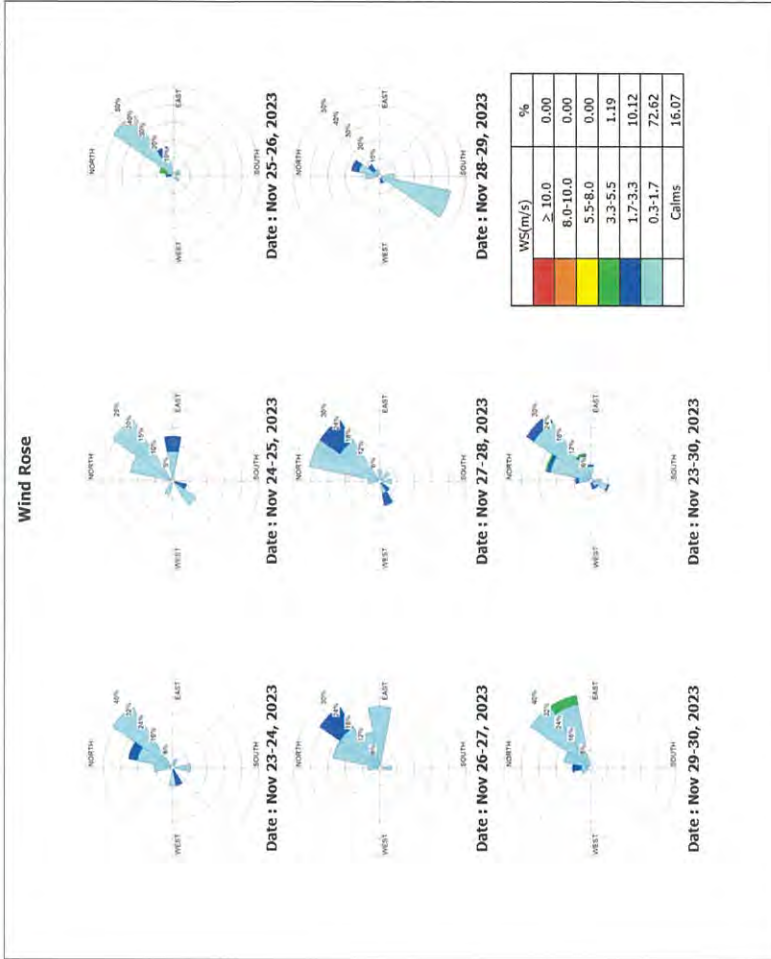
Project Location : GTS3

Lot ID: 23125264

Date Received : Dec 04, 2023

Date Reported : Dec 12, 2023

Report Number : 2817985-1





Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Sample Number 23125264-8 to 14

Parameter Wind Speed / Wind Direction

Location ตำบลบ้านใหม่ อำเภอจันทบุรี

Sampling Date Nov 23 - Nov 30, 2023

Sampling by Anurak Tongkhajonsakda

Time	Nov 23 - Nov 24, 2023		Nov 24 - Nov 25, 2023		Nov 25 - Nov 26, 2023		Nov 26 - Nov 27, 2023		Nov 27 - Nov 28, 2023		Nov 28 - Nov 29, 2023		Nov 29 - Nov 30, 2023											
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)										
10:00 AM - 11:00 AM	0.5	22.0	NNE	1.3	339.0	NNW	0.2	-	0.6	341.0	NNW	0.3	317.0	NW	0.2	-	2.1	253.0	WSW					
11:00 AM - 12:00 PM	0.2	-	-	0.2	-	0.6	352.0	N	0.5	344.0	NNW	1.1	319.0	NW	0.6	347.0	NNW	3.1	213.0	SSW				
12:00 PM - 01:00 PM	0.1	-	-	0.1	-	0.5	352.0	N	1.1	333.0	NNW	0.5	234.0	SW	0.4	139.0	SE	2.6	253.0	WSW				
01:00 PM - 02:00 PM	0.2	-	-	0.2	-	0.5	345.0	NNW	1.1	338.0	NNW	0.6	304.0	NW	0.4	165.0	SSE	2.3	116.0	ESE				
02:00 PM - 03:00 PM	0.3	310.0	NW	0.9	331.0	NNW	0.2	-	0.2	-	0.7	221.0	SW	1.7	182.0	S	0.2	-	-	-				
03:00 PM - 04:00 PM	0.6	311.0	NW	0.1	-	0.3	336.0	NNW	0.9	322.0	NW	0.9	328.0	NNW	1.4	272.0	W	1.4	184.0	S				
04:00 PM - 05:00 PM	0.7	338.0	NNW	0.3	321.0	NW	0.1	-	0.8	305.0	NW	0.4	323.0	NW	0.9	285.0	WNW	1.0	298.0	WNW				
05:00 PM - 06:00 PM	0.3	324.0	NW	0.5	314.0	NW	0.6	327.0	NNW	0.5	357.0	N	0.5	329.0	NNW	1.6	352.0	N	1.7	308.0	NW			
06:00 PM - 07:00 PM	1.0	324.0	NW	0.7	324.0	NW	0.1	-	0.4	344.0	NNW	0.8	330.0	NNW	1.7	354.0	N	0.5	178.0	S				
07:00 PM - 08:00 PM	0.6	328.0	NNW	0.9	306.0	NW	0.2	-	0.6	332.0	NNW	0.6	324.0	NW	2.4	352.0	N	0.4	154.0	SSE				
08:00 PM - 09:00 PM	0.9	290.0	WNW	0.3	323.0	NW	0.7	320.0	NW	0.7	319.0	NW	0.5	320.0	NW	1.1	332.0	NNW	0.5	351.0	N			
09:00 PM - 10:00 PM	0.0	-	-	0.6	201.0	SSW	1.0	309.0	NW	0.2	-	0.4	313.0	NW	1.0	345.0	NNW	0.9	358.0	N				
10:00 PM - 11:00 PM	0.0	-	-	0.7	306.0	NW	0.3	343.0	NNW	0.3	334.0	NNW	0.5	355.0	N	1.3	324.0	NW	0.4	358.0	N			
11:00 PM - 12:00 AM	0.8	341.0	NNW	0.0	-	0.4	272.0	W	0.7	326.0	NW	0.5	357.0	N	1.7	318.0	NW	0.7	297.0	WNW				
12:00 AM - 01:00 AM	0.3	355.0	N	0.9	298.0	WNW	0.1	-	0.6	323.0	NW	0.6	352.0	N	0.5	244.0	WSW	1.3	343.0	NNW				
01:00 AM - 02:00 AM	0.6	164.0	SSE	0.2	-	0.2	-	0.5	319.0	NW	0.3	350.0	N	0.9	227.0	SW	1.3	32.0	NNE	-	-	-		
02:00 AM - 03:00 AM	0.1	-	-	0.8	299.0	WNW	0.2	-	0.7	322.0	NW	0.5	350.0	N	0.0	-	-	0.3	79.0	E	-	-	-	
03:00 AM - 04:00 AM	0.6	155.0	SSE	0.7	306.0	NW	0.6	262.0	W	0.5	316.0	NW	0.3	331.0	NNW	0.5	263.0	W	1.2	87.0	E	-	-	-
04:00 AM - 05:00 AM	0.2	-	-	1.1	350.0	N	0.5	304.0	NW	0.2	-	0.5	190.0	S	0.2	-	-	0.8	70.0	ENE	-	-	-	
05:00 AM - 06:00 AM	0.0	-	-	0.5	354.0	N	1.1	342.0	NNW	0.4	221.0	SW	1.8	256.0	WSW	2.2	313.0	NW	0.6	355.0	N	-	-	-
06:00 AM - 07:00 AM	0.0	-	-	1.2	356.0	N	0.6	328.0	NNW	0.5	347.0	NNW	0.5	286.0	WNW	0.5	263.0	W	2.3	147.0	SSE	-	-	-
07:00 AM - 08:00 AM	0.3	207.0	SSW	1.5	284.0	WNW	0.8	353.0	N	0.7	349.0	N	0.4	322.0	NW	1.5	188.0	S	1.4	296.0	WNW	-	-	-
08:00 AM - 09:00 AM	0.8	119.0	ESE	1.8	345.0	NNW	0.3	267.0	W	0.6	331.0	NNW	0.1	-	2.3	126.0	SE	0.2	-	-	-	-	-	-
09:00 AM - 10:00 AM	0.3	354.0	N	0.6	355.0	N	0.4	150.0	SSE	0.4	330.0	NNW	0.2	-	3.1	260.0	W	0.8	247.0	WSW	-	-	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont
Assistant General Manager

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Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Sample Number 23125264-8 to 14

Parameter Wind Speed / Wind Direction

Location ตำบลบ้านใหม่ อำเภอจันทบุรี

Sampling Date Nov 23 - Nov 30, 2023

Sampling by Anurak Tongkhajonsakda

Wind Rose



Date : Nov 23-24, 2023



Date : Nov 25-26, 2023

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	8.93
0.3-1.7	71.43
Calms	19.64

Date : Nov 27-28, 2023



Date : Nov 27-28, 2023



Date : Nov 29-30, 2023



Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Analysis / Test Report

Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

Sample Number 23125264-15 to 21

Parameter Wind Speed / Wind Direction

Location ตำบลบ้านใหม่ (บ้านใหม่ราษฎร์)

Sampling Date Nov 23 - Nov 30, 2023

Sampling by Anurak Tongkhajonsakda

Time	Nov 23 - Nov 24, 2023		Nov 24 - Nov 25, 2023		Nov 25 - Nov 26, 2023		Nov 26 - Nov 27, 2023		Nov 27 - Nov 28, 2023		Nov 28 - Nov 29, 2023		Nov 29 - Nov 30, 2023								
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)							
12:00 PM - 01:00 PM	1.5	5.0	N	1.7	39.0	NE	0.8	45.0	NE	2.4	122.0	ESE	2.9	77.0	ENE	1.1	217.0	SW	1.2	98.0	E
01:00 PM - 02:00 PM	2.7	10.0	N	1.0	14.0	NNE	1.1	34.0	NE	2.7	87.0	E	3.3	13.0	NNE	0.5	225.0	SW	0.6	175.0	S
02:00 PM - 03:00 PM	2.5	22.0	NNE	1.1	2.0	N	3.1	354.0	N	1.2	126.0	SE	1.5	9.0	N	0.5	254.0	WSW	0.4	187.0	S
03:00 PM - 04:00 PM	2.7	323.0	NW	1.0	34.0	NE	0.8	163.0	SSE	3.7	60.0	ENE	1.5	92.0	E	1.2	136.0	SE	0.8	255.0	WSW
04:00 PM - 05:00 PM	1.0	359.0	N	0.1	-	-	2.0	166.0	SSE	0.2	-	-	1.6	2.0	N	0.9	235.0	SW	0.7	229.0	SW
05:00 PM - 06:00 PM	0.3	338.0	NNW	1.2	251.0	WSW	0.8	137.0	SE	0.8	230.0	SW	1.0	22.0	NNE	0.5	264.0	W	0.8	289.0	WNW
06:00 PM - 07:00 PM	1.0	199.0	SSW	0.3	234.0	SW	0.7	253.0	WSW	0.7	272.0	W	1.6	33.0	NNE	1.6	185.0	S	1.1	267.0	W
07:00 PM - 08:00 PM	0.1	-	-	1.5	224.0	SW	1.3	271.0	W	0.5	1.0	N	0.5	35.0	NE	0.4	337.0	NNW	0.4	241.0	WSW
08:00 PM - 09:00 PM	1.6	226.0	SW	1.2	239.0	WSW	1.2	221.0	SW	1.4	48.0	NE	1.6	273.0	W	0.1	-	-	1.6	220.0	SW
09:00 PM - 10:00 PM	1.1	62.0	ENE	1.6	15.0	NNE	1.6	249.0	WSW	0.6	15.0	NNE	1.4	53.0	NE	3.3	173.0	S	0.5	265.0	W
10:00 PM - 11:00 PM	1.5	359.0	N	0.4	13.0	NNE	1.4	297.0	WNW	1.6	341.0	NNW	1.5	18.0	NNE	1.5	119.0	ESE	0.6	225.0	SW
11:00 PM - 12:00 AM	2.4	352.0	N	1.3	49.0	NE	0.5	359.0	N	1.5	83.0	E	0.5	14.0	NNE	1.5	6.0	N	0.4	226.0	SW
12:00 AM - 01:00 AM	0.5	359.0	N	1.2	359.0	N	0.9	46.0	NE	1.6	297.0	WNW	1.6	39.0	NE	1.6	34.0	NE	1.6	359.0	N
01:00 AM - 02:00 AM	1.1	7.0	N	1.2	194.0	SSW	1.2	359.0	N	0.5	55.0	NE	1.5	93.0	E	0.5	359.0	N	1.5	356.0	N
02:00 AM - 03:00 AM	0.2	-	-	2.1	359.0	N	0.6	359.0	N	1.6	359.0	N	0.6	69.0	ENE	1.6	71.0	ENE	1.3	5.0	N
03:00 AM - 04:00 AM	2.2	359.0	N	1.2	324.0	NW	0.9	56.0	NE	0.5	139.0	SE	1.5	7.0	N	1.4	25.0	NNE	1.0	67.0	ENE
04:00 AM - 05:00 AM	2.4	357.0	N	1.0	31.0	NNE	0.8	40.0	NE	1.4	9.0	N	1.4	343.0	NNW	1.3	359.0	N	0.2	-	-
05:00 AM - 06:00 AM	1.3	359.0	N	1.2	1.0	N	0.5	20.0	NNE	0.6	17.0	NNE	1.6	50.0	NE	0.2	-	-	1.6	326.0	NW
06:00 AM - 07:00 AM	1.0	34.0	NE	0.4	56.0	NE	0.6	44.0	NE	2.7	29.0	NNE	0.7	340.0	NNW	1.6	23.0	NNE	0.4	4.0	N
07:00 AM - 08:00 AM	0.7	2.0	N	1.2	75.0	ENE	0.9	42.0	NE	1.5	359.0	N	0.4	2.0	N	0.5	13.0	NNE	2.6	42.0	NE
08:00 AM - 09:00 AM	1.9	8.0	N	0.1	-	-	0.6	22.0	NNE	0.6	20.0	NNE	0.2	-	-	1.3	50.0	NE	0.7	17.0	NNE
09:00 AM - 10:00 AM	2.8	357.0	N	1.1	42.0	NE	1.1	39.0	NE	0.3	298.0	WNW	1.1	3.0	N	1.1	359.0	N	1.5	26.0	NNE
10:00 AM - 11:00 AM	2.6	348.0	NNW	2.0	26.0	NNE	1.8	359.0	N	0.7	21.0	NNE	1.3	41.0	NE	1.2	11.0	N	0.8	35.0	NE
11:00 AM - 12:00 PM	2.3	26.0	NNE	2.6	73.0	ENE	1.6	5.0	N	0.7	9.0	N	1.4	33.0	NNE	2.2	6.0	N	2.3	7.0	N

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analytical method specified as indicated in the report. The results are not valid for any other method or for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jitraront

Assistant General Manager

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Approved by

Sarayuth Jitraront

Assistant General Manager

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Analysis / Test Report

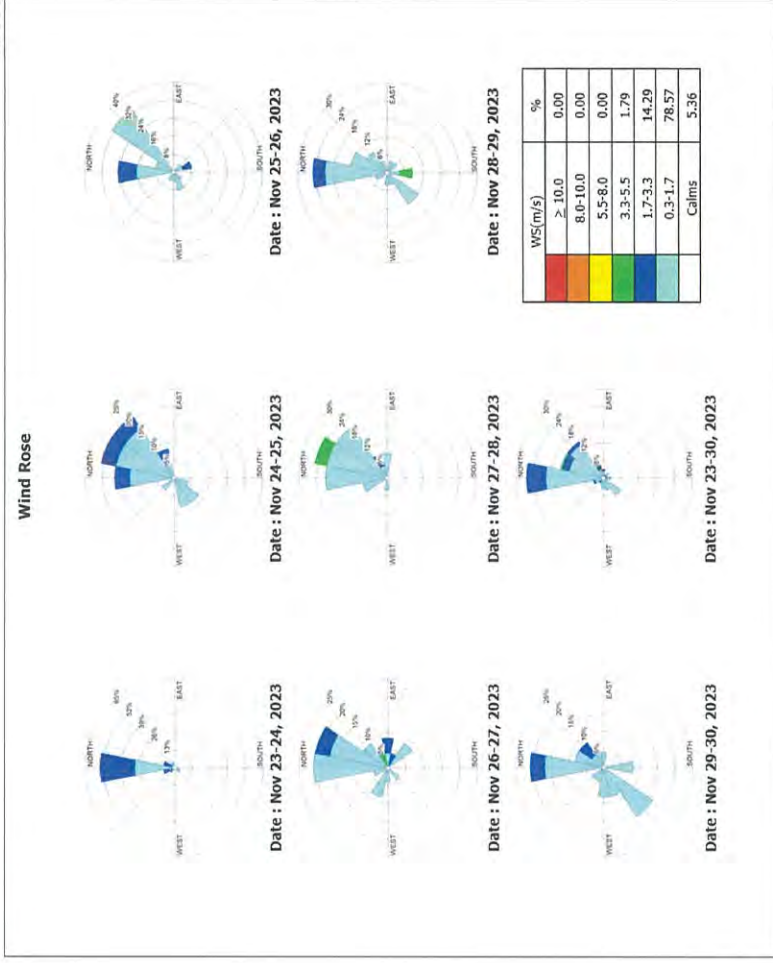
Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

Page 2 of 2





Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasik, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

Sample Number : 23125264-22 to 28
Parameter : Wind Speed / Wind Direction
Location : อ่าวแม่พิมพ์
Sampling Date : Nov 23 - Nov 30, 2023
Sampling by : Anurak Tongkhajonsakda

Page 1 of 2

Time	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
09:00 AM - 10:00 AM	3.7	53.0	NE	1.0	21.0	NNE	2.1	8.0	N	0.5	107.0	ESE	3.3	357.0
10:00 AM - 11:00 AM	1.2	39.0	NE	1.0	348.0	NNW	2.0	22.0	NNE	0.0	-	-	1.6	15.0
11:00 AM - 12:00 PM	1.2	72.0	ENE	0.6	58.0	ENE	1.6	41.0	NE	0.6	124.0	SE	2.5	11.0
12:00 PM - 01:00 PM	0.6	63.0	ENE	0.8	35.0	NE	1.3	21.0	NNE	0.0	-	-	1.8	37.0
01:00 PM - 02:00 PM	1.4	65.0	ENE	1.9	54.0	NE	0.8	13.0	NNE	0.6	5.0	N	1.6	30.0
02:00 PM - 03:00 PM	3.3	58.0	ENE	0.5	52.0	NE	1.3	355.0	N	1.4	23.0	NNE	1.2	0.0
03:00 PM - 04:00 PM	3.1	76.0	ENE	1.3	31.0	NNE	1.5	359.0	N	1.6	9.0	N	2.2	79.0
04:00 PM - 05:00 PM	1.2	76.0	ENE	1.2	75.0	ENE	2.2	352.0	N	1.1	24.0	NNE	3.5	0.0
05:00 PM - 06:00 PM	1.0	76.0	ENE	0.2	-	-	1.4	0.0	N	1.5	21.0	NNE	2.7	19.0
06:00 PM - 07:00 PM	1.0	77.0	ENE	0.1	-	-	2.0	29.0	NNE	2.1	17.0	NNE	3.9	359.0
07:00 PM - 08:00 PM	0.8	77.0	ENE	0.0	-	-	2.1	356.0	N	0.0	-	-	1.7	349.0
08:00 PM - 09:00 PM	0.8	78.0	ENE	0.2	-	-	2.0	350.0	N	0.0	-	-	1.6	17.0
09:00 PM - 10:00 PM	1.0	78.0	ENE	0.7	28.0	NNE	2.2	10.0	N	2.0	26.0	NNE	3.3	357.0
10:00 PM - 11:00 PM	0.5	76.0	ENE	0.0	-	-	4.0	9.0	N	0.5	347.0	NNW	2.6	3.0
11:00 PM - 12:00 AM	0.4	75.0	ENE	0.5	2.0	N	1.0	2.0	N	3.2	61.0	ENE	2.4	41.0
12:00 AM - 01:00 AM	0.6	76.0	ENE	0.8	55.0	NE	1.2	0.0	N	2.8	5.0	N	6.1	348.0
01:00 AM - 02:00 AM	1.2	77.0	ENE	0.6	54.0	NE	2.1	355.0	N	3.4	46.0	NE	4.5	359.0
02:00 AM - 03:00 AM	0.5	28.0	NNE	0.0	-	-	2.3	0.0	N	1.0	15.0	NNE	4.7	345.0
03:00 AM - 04:00 AM	0.6	35.0	N	0.4	27.0	NNE	2.9	339.0	NNW	2.6	18.0	NNE	3.4	18.0
04:00 AM - 05:00 AM	0.4	52.0	NE	1.2	53.0	NE	0.2	-	-	2.8	25.0	NNE	3.5	342.0
05:00 AM - 06:00 AM	0.7	349.0	N	0.8	34.0	NE	2.2	26.0	NNE	3.5	8.0	N	2.6	357.0
06:00 AM - 07:00 AM	0.7	30.0	NNE	1.3	17.0	NNE	1.6	9.0	N	4.3	29.0	NNE	2.8	359.0
07:00 AM - 08:00 AM	2.5	51.0	NE	1.0	52.0	NE	1.1	24.0	NNE	2.4	0.0	N	1.5	21.0
08:00 AM - 09:00 AM	0.6	5.0	N	1.7	44.0	NE	1.5	21.0	NNE	2.3	37.0	NE	2.5	347.0

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sareyuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasik, Pluak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

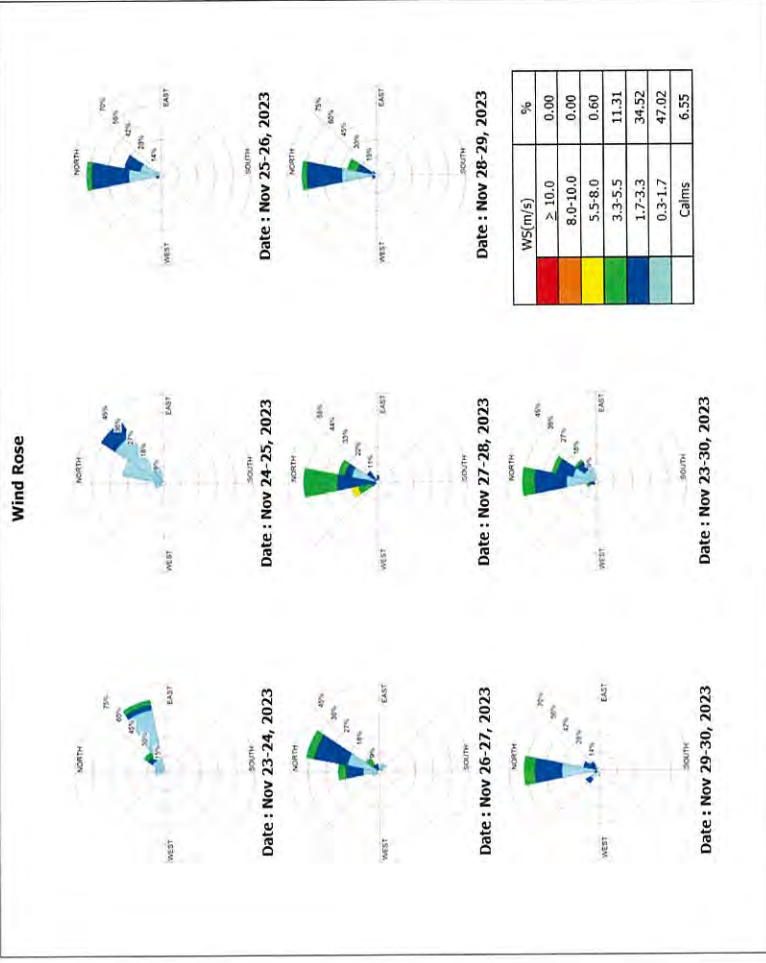
Lot ID: 23125264

Date Received :Dec 04, 2023

Date Reported :Dec 12, 2023

Report Number :2817985-1

Page 2 of 2



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Approved by

Sareyuth Jitranont
Assistant General Manager

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ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบายอากาศ



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

Lot ID: 23125267

Date Received :Nov 27, 2023

Date Reported :Dec 04, 2023

Report Number :2817996-1

Page 1 of 1

Sample Number 23125267-1

Sample Description Emission from Stationary Source

Location Ulaa HRSG 11

Measurement Date Nov 27, 2023

Stack Description									
Ambient Temperature	31	°C	Diameter	3.00	m	Oxygen	14.27	%	
Ambient Pressure	751	mmHg	Shape	Circle		Carbon dioxide	3.68	%	
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.16	m/s	
Type of Fuel	Natural Gas		Moisture	6.62	%	Flow Rate	305252	Nm3/hr	
Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm) at Actual O ₂	Sulfur Dioxide (ppm) at Actual O ₂	at 7% O ₂	at 7% O ₂	at 7% O ₂	
1	10:45 AM - 11:05 AM	14.26	3.68	16.41	34.36	0.24	0.50	0.50	
2	11:06 AM - 11:26 AM	14.29	3.67	15.44	32.45	0.24	0.51	0.51	
3	11:27 AM - 11:47 AM	14.26	3.68	15.31	32.04	0.20	0.42	0.42	
Average (ppm)		14.27	3.68	15.72	32.95	0.23	0.48	0.48	
Guideline ¹ (ppm)				60			6		
Guideline ² (ppm)				-	120		-	20	
Result (mg/Nm ³)				29.57	61.99	0.59	1.25	1.25	
Emission Rate at Actual O ₂ (g/s)				2.5074			0.0504		
Guideline ³ (g/s)				7.4			1.0		
Method				US EPA Method 7E			US EPA Method 6C		

Sampled By : Saleit Phaisanphut

Guideline : ¹Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

²Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Wichan Choonharat
Manager

Approved by

Sarayuth Jitranont
Assistant General Manager

โทรศัพท์ 7-204-6113

โทรศัพท์ 7-204-6113

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

Lot ID: 23125267

Date Received :Nov 27, 2023

Date Reported :Dec 04, 2023

Report Number :2817996-1

Page 1 of 1

Sample Number 23125267-1

Sample Description Emission from Stationary Source

Location Ulaa HRSG 11

Measurement Date Nov 27, 2023

Stack Description									
Ambient Temperature	31	°C	Diameter	3.00	m	Oxygen	14.27	%	
Ambient Pressure	751	mmHg	Shape	Circle		Carbon dioxide	3.68	%	
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.16	m/s	
Type of Fuel	Natural Gas		Moisture	6.62	%	Flow Rate	305252	Nm3/hr	
Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm) at Actual O ₂	at 7% O ₂	at 7% O ₂	at 7% O ₂		
1	10:45 AM - 11:05 AM	14.26	3.68	0.27	0.56	0.56			
2	11:06 AM - 11:26 AM	14.29	3.67	0.27	0.57	0.57			
3	11:27 AM - 11:47 AM	14.26	3.68	0.18	0.37	0.37			
Average (ppm)		14.27	3.68	0.24	0.50	0.50			
Guideline (ppm)				-	690				
Result (mg/Nm ³)				0.28	0.58	0.58			
Emission Rate at Actual O ₂ (g/s)				0.0234					
Method				US EPA Method 10					

Sampled By : Saleit Phaisanphut

Guideline :

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

dated December 4, 2006 (B.E. 2549)

Technical Management

Wichan Choonharat
Manager

Approved by

Sarayuth Jitranont
Assistant General Manager

โทรศัพท์ 7-204-6113

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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand
21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125271

Date Received : Nov 27, 2023
Date Reported : Dec 06, 2023
Report Number: 2818003-1

TESTING
No.0042

Sample Number 23125271-1

Sample Date Nov 27, 2023

Sample Description Emission from Stationary Source

Location Jilaa HRSG 11

Date Analysis Commenced Nov 30, 2023

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

Stack Description									
Ambient Pressure	751	mmHg	3.00	m	Oxygen	14.3	%		
Ambient Temperature	31.0	°C	Circle		Carbon Dioxide	3.7	%		
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.1	m/s	
Type of Fuel	Natural Gas		Moisture	6.56	%	Flow Rate (Actual O2)	304902	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ	Result	Guideline	Method		Testing Location	
			(LOR)	at 14.3 % O ₂	(1)				

Air Testing									
Total Suspended Particulate	10:45 AM - 11:33 AM	mg/m3	0.5	<0.5	<0.5	28	60	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Approved by

Thanita Kulnuiwong
Scientist (4)

โทรศัพท์ ๐-๒๒๓-๙-๙๔๑๗

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S:\Reports_Air Stack_02_2023\pr (10.30AM)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand
21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125271

Date Received : Nov 27, 2023
Date Reported : Dec 06, 2023
Report Number: 2818003-1

TESTING
No.0042

Sample Number 23125271-1

Sample Date Nov 27, 2023

Sample Description Emission from Stationary Source

Location Jilaa HRSG 11

Date Analysis Commenced Nov 30, 2023

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

Stack Description									
Ambient Pressure	751	mmHg	3.00	m	Oxygen	14.3	%		
Ambient Temperature	31.0	°C	Circle		Carbon Dioxide	3.7	%		
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.1	m/s	
Type of Fuel	Natural Gas		Moisture	6.56	%	Flow Rate (Actual O2)	304902	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ	Result	Guideline	Method		Testing Location	
			(LOR)	Emission Rate	(1)				

Air Testing									
Total Suspended Particulate	10:45 AM - 11:33 AM	g/s	-	<0.042	1.8	-	Calculated		Rayong

Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Sampled By : Sitippan Sanachiw

Remark :

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

Technical Management

Approved by

Thanita Kulnuiwong
Scientist (4)

โทรศัพท์ ๐-๒๒๓-๙-๙๔๑๗

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S:\Reports_Air Stack_02_2023\pr (10.30AM)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125268
Date Received :Nov 27, 2023
Date Reported :Dec 04, 2023
Report Number :2818000-1

Page 1 of 1

Sample Number	23125268-1
Sample Description	Emission from Stationary Source
Location	Ulaa HRSG 12
Measurement Date	Nov 27, 2023

Run No.	Sampling Time	Stack Description			Oxygen (%)	Oxides of Nitrogen (ppm)			Sulfur Dioxide (ppm)			Carbon Dioxide (%)			at Actual O ₂ at 7% O ₂		
		31 °C	751 mmHg	Circle		3.00 m	14.24 %	3.70 %	17.79 m/s	305467 Nm ³ /hr	Flow Rate	14.24 %	3.70 %	17.79 m/s	305467 Nm ³ /hr	Flow Rate	305467 Nm ³ /hr
1	12:50 PM - 01:10 PM				14.22		16.92	35.18	0.33	0.69		14.22	3.72	17.79	305467		
2	01:11 PM - 01:31 PM				14.23		17.19	35.84	0.31	0.65		14.23	3.71	17.79	305467		
3	01:32 PM - 01:52 PM				14.28		17.05	35.61	0.33	0.69		14.28	3.68	17.79	305467		
Average (ppm)					14.24		17.05	35.61	0.33	0.68		14.24	3.70	17.79	305467		
Guideline (ppm)							-	60	-	6							
Guideline (ppm)							-	120	-	20							
Result (mg/Nm ³)							32.08	67.00	0.85	1.78							
Emission Rate at Actual O ₂ (g/s)							2.7223			0.0723							
Guideline (g/s)							7.4			1.0							
Method							US EPA Method 7E			US EPA Method 6C							

Sampled By : Saksit Phasphanisut
Guideline : ^v Environmental Impact Assessment Report of Gulf TSS Co., Ltd.
^z Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Wichan Chonharat

Technical Management
Wichan Chonharat
Manager
โทรศัพท์ 7-204-6113

Approved by

Sarayuth Jitranont
Assistant General Manager
โทรศัพท์ 7-204-4702

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125268
Date Received :Nov 27, 2023
Date Reported :Dec 04, 2023
Report Number :2818000-1

Page 1 of 1

Sample Number	23125268-1
Sample Description	Emission from Stationary Source
Location	Ulaa HRSG 12
Measurement Date	Nov 27, 2023

Run No.	Sampling Time	Stack Description			Oxygen (%)	Carbon Dioxide (%)			Carbon Monoxide (ppm)			at Actual O ₂ at 7% O ₂			Flow Rate		
		31 °C	751 mmHg	Circle		3.00 m	14.24 %	3.70 %	17.79 m/s	305467 Nm ³ /hr	Flow Rate	14.24 %	3.70 %	17.79 m/s	305467 Nm ³ /hr	Flow Rate	305467 Nm ³ /hr
1	12:50 PM - 01:10 PM				14.22		14.22	3.72	0.23	0.48		14.22	3.72	17.79	305467		
2	01:11 PM - 01:31 PM				14.23		14.23	3.71	0.24	0.50		14.23	3.71	17.79	305467		
3	01:32 PM - 01:52 PM				14.28		14.28	3.68	0.19	0.40		14.28	3.68	17.79	305467		
Average (ppm)					14.24		14.24	3.70	0.22	0.46		14.24	3.70	17.79	305467		
Guideline (ppm)									-	600							
Result (mg/Nm ³)									0.25	0.53							
Emission Rate at Actual O ₂ (g/s)									0.0214								
Method									US EPA Method 10								

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

Wichan Chonharat

Technical Management
Wichan Chonharat
Manager
โทรศัพท์ 7-204-6113

Approved by

Sarayuth Jitranont
Assistant General Manager
โทรศัพท์ 7-204-4702

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23125273

Client: Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand
21140
P/O : 4210402-483
Project Name : Monitoring EIA
Project Location : GTS3

Sample Number 23125273-1

Sample Date Nov 27, 2023

Sample Description Emission from Stationary Source

Location Ulaa3 HRSG 12

Date Analysis Commenced Nov 30, 2023

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

Stack Description									
Ambient Pressure	751	mmHg	Diameter	3.00	m	Oxygen	14.2	%	
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	3.7	%	
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.8	m/s	
Type of Fuel	Natural Gas		Moisture	9.88	%	Flow Rate (Actual O2)	305488	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ	Result	Guideline	Method			
			(LOR)	at 14.2 % O ₂	(1)	(2)			

Air Testing

Total Suspended Particulate	12:50 PM - 02:38 PM	mg/m3	0.5	<0.5	28	60	United States Environmental Protection Agency, EPA Method 5	Rayong
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Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

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

Page 1 of 2



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125273

Client: Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand
21140
P/O : 4210402-483
Project Name : Monitoring EIA
Project Location : GTS3

Sample Number 23125273-1

Sample Date Nov 27, 2023

Sample Description Emission from Stationary Source

Location Ulaa3 HRSG 12

Date Analysis Commenced Nov 30, 2023

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

Stack Description									
Ambient Pressure	751	mmHg	Diameter	3.00	m	Oxygen	14.2	%	
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	3.7	%	
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	17.8	m/s	
Type of Fuel	Natural Gas		Moisture	9.88	%	Flow Rate (Actual O2)	305488	Nm3/hr	
Analyte	Sampled Time	Unit	LOQ	Result	Guideline	Method			
			(LOR)	Emission Rate	(1)	(2)			

Air Testing

Total Suspended Particulate *	12:50 PM - 02:38 PM	g/s	-	<0.042	1.8	-	Calculated	Rayong
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Guideline :

Guideline (1) Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Sampled By : Sittipon Sanachiw

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

Page 2 of 2



Technical Management

Tharitat.

Approved by

Tharitat.

Tharita Kulurwong
Senior Manager
โทรศัพท์ ๖-323-๙-9447

Technical Management

Tharitat.

Approved by

Tharitat.

Dej Chongchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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ภาคผนวก ค-3

ระดับเสียงโดยทั่วไป



Analysis / Test Report

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857326-1
P/O : 4210402403
Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-2
Parameter	Noise (Leq 24 hrs.)
Location	บ้านจันทน์สามัคคี
Measurement Date	Nov 24 - Nov 25, 2023
Measurement by	Anurak Tongkajonsakda
Sound Level meter	Serial No. 296517
Time	
10:00 AM - 11:00 AM	62.6
11:00 AM - 12:00 PM	62.2
12:00 PM - 01:00 PM	61.3
01:00 PM - 02:00 PM	61.7
02:00 PM - 03:00 PM	62.0
03:00 PM - 04:00 PM	61.6
04:00 PM - 05:00 PM	61.7
05:00 PM - 06:00 PM	62.4
06:00 PM - 07:00 PM	61.1
07:00 PM - 08:00 PM	61.6
08:00 PM - 09:00 PM	61.9
09:00 PM - 10:00 PM	61.6
10:00 PM - 11:00 PM	61.5
11:00 PM - 12:00 AM	61.8
12:00 AM - 01:00 AM	61.3
01:00 AM - 02:00 AM	61.5
02:00 AM - 03:00 AM	61.6
03:00 AM - 04:00 AM	61.4
04:00 AM - 05:00 AM	61.5
05:00 AM - 06:00 AM	61.6
06:00 AM - 07:00 AM	61.8
07:00 AM - 08:00 AM	62.9
08:00 AM - 09:00 AM	62.5
09:00 AM - 10:00 AM	62.3
Leq (dB(A))	
Lmax (dB(A))	
L90 (dB(A))	
	61.3
	60.8
	59.6
	60.4
	60.6
	60.4
	60.3
	60.3
	87.6
	73.1
	75.7
	60.7
	60.7
	60.7
	60.2
	60.5
	60.7
	60.6
	60.6
	60.7
	61.4
	60.9
	61.0

Leq Average 24 hrs. (dB(A))	61.8	
Lmax (dB(A))		85.1
L90 (dB(A))		
Ldn (dB(A))	68.0	60.6
Standard (dB(A))	70	115
Reference Method	ISO1996-1 and 1996-2	
Standard	1. ใช้มาตรฐานการวัดระดับความดันอากาศ แบบ 15 (ม.ค. 2540) ใช้สำหรับอาคารที่มีระดับเสียงภายใน 2. ใช้มาตรฐานการวัดความถี่ตามธรรมชาติสำหรับอาคารที่มีระดับเสียงดังกว่ามาตรฐานเสียงดังภายในอาคาร มาตรฐาน ม.ค. 2548	
Remark	The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management

Tharita K.

Thantia Kulswang
Scientist (4)

Approved by

Supt. S.

Supot Salantith
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A, Phluekdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13430-61 / EMAIL

S:\Reports\Air Noise rpt (1:51PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857327-1

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Page 1 of 1

Sample Number	23125266-3		
Parameter	Noise (Leq 24 hrs.)		
Location	wharf shift 15m/s		
Measurement Date	Nov 25 - Nov 26, 2023		
Measurement by	Anurak Tongkhajonsakda		
Sound Level meter	Serial No. 296517		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.0	74.5	60.8
11:00 AM - 12:00 PM	62.3	79.7	60.9
12:00 PM - 01:00 PM	61.0	71.9	60.0
01:00 PM - 02:00 PM	61.3	72.6	60.2
02:00 PM - 03:00 PM	61.5	74.0	60.3
03:00 PM - 04:00 PM	61.0	73.2	60.0
04:00 PM - 05:00 PM	61.0	75.4	59.9
05:00 PM - 06:00 PM	60.9	75.6	59.8
06:00 PM - 07:00 PM	60.8	72.1	59.9
07:00 PM - 08:00 PM	61.4	77.0	60.1
08:00 PM - 09:00 PM	61.4	74.0	60.0
09:00 PM - 10:00 PM	60.9	75.0	60.0
10:00 PM - 11:00 PM	61.1	74.5	60.1
11:00 PM - 12:00 AM	61.2	72.8	60.2
12:00 AM - 01:00 AM	60.7	74.1	59.9
01:00 AM - 02:00 AM	60.6	74.0	59.9
02:00 AM - 03:00 AM	60.8	74.6	60.0
03:00 AM - 04:00 AM	60.7	73.8	60.0
04:00 AM - 05:00 AM	61.1	71.9	60.1
05:00 AM - 06:00 AM	61.1	70.8	60.1
06:00 AM - 07:00 AM	60.9	74.9	60.0
07:00 AM - 08:00 AM	61.8	92.1	60.3
08:00 AM - 09:00 AM	61.5	77.4	60.0
09:00 AM - 10:00 AM	61.4	75.7	60.2

Technical Management

Tharitat.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameeh
Section Head

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



13430-41/ EMAIL

RIGHT SOLUTIONS RIGHT PARTNER

S. Wipornchai, Air Nasa m (1:52PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857328-1

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Page 1 of 1

Sample Number	23125266-4			
Parameter	Noise (Leq 24 hrs.)			
Location	บริเวณหิฟ15ต.นร			
Measurement Date	Nov 26 - Nov 27, 2023			
Measurement by	Anurak Tongkhajonsakda			
Sound Level meter	Serial No. 296517			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:00 AM - 11:00 AM	61.2	79.8	60.0	
11:00 AM - 12:00 PM	60.8	83.3	59.8	
12:00 PM - 01:00 PM	60.4	73.9	59.5	
01:00 PM - 02:00 PM	60.6	76.5	59.6	
02:00 PM - 03:00 PM	60.3	70.7	59.4	
03:00 PM - 04:00 PM	60.3	73.3	59.5	
04:00 PM - 05:00 PM	60.6	73.2	59.6	
05:00 PM - 06:00 PM	60.3	72.8	59.4	
06:00 PM - 07:00 PM	60.1	74.1	59.3	
07:00 PM - 08:00 PM	59.9	76.1	59.2	
08:00 PM - 09:00 PM	60.3	75.9	59.4	
09:00 PM - 10:00 PM	60.9	74.7	59.8	
10:00 PM - 11:00 PM	60.2	75.3	59.5	
11:00 PM - 12:00 AM	60.0	75.4	59.4	
12:00 AM - 01:00 AM	60.3	77.2	59.7	
01:00 AM - 02:00 AM	60.4	75.9	59.8	
02:00 AM - 03:00 AM	60.4	74.8	59.8	
03:00 AM - 04:00 AM	60.5	74.4	59.8	
04:00 AM - 05:00 AM	60.8	71.5	60.0	
05:00 AM - 06:00 AM	62.7	94.2	60.1	
06:00 AM - 07:00 AM	66.1	97.7	60.5	
07:00 AM - 08:00 AM	62.6	73.4	61.0	
08:00 AM - 09:00 AM	64.2	88.0	61.0	
09:00 AM - 10:00 AM	62.7	74.1	61.3	
Leq Average 24 hrs. (dB(A))	61.4			
Lmax (dB(A))			59.7	
L90 (dB(A))				
Ldn (dB(A))	68.1			
Standard (dB(A))	70	115		
Reference Method : ISO1996-1 and 1996-2				
Standard : 1. ใช้มาตรฐานการวัดและคำนวณระดับเสียงตามข้อกำหนดของกรมควบคุมมลพิษ				
2. ใช้มาตรฐานการวัดและคำนวณระดับเสียงตามข้อกำหนดของกรมควบคุมมลพิษ				
ตาม ม.ร. 2548				
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.				

Technical Management

Tharitat.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameeh
Section Head

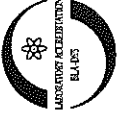
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13430-41/ EMAIL

RIGHT SOLUTIONS RIGHT PARTNER

S. Wipornchai, Air Nasa m (1:52PM)



Analysis / Test Report

TESTING
No.0042

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857229-1

Page 1 of 1

Sample Number	23125266-5
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่ก่อสร้าง
Measurement Date	Nov 27 - Nov 28, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	L ₉₀ (dB(A))
10:00 AM - 11:00 AM	63.1	61.4
11:00 AM - 12:00 PM	62.0	60.8
12:00 PM - 01:00 PM	61.5	59.9
01:00 PM - 02:00 PM	62.1	77.7
02:00 PM - 03:00 PM	62.0	60.7
03:00 PM - 04:00 PM	62.0	60.6
04:00 PM - 05:00 PM	61.5	60.2
05:00 PM - 06:00 PM	60.9	59.8
06:00 PM - 07:00 PM	60.8	59.8
07:00 PM - 08:00 PM	61.1	60.0
08:00 PM - 09:00 PM	61.3	60.3
09:00 PM - 10:00 PM	61.5	60.5
10:00 PM - 11:00 PM	61.8	60.8
11:00 PM - 12:00 AM	61.7	60.8
12:00 AM - 01:00 AM	61.3	60.5
01:00 AM - 02:00 AM	61.8	60.8
02:00 AM - 03:00 AM	61.2	60.5
03:00 AM - 04:00 AM	61.4	60.6
04:00 AM - 05:00 AM	61.5	60.4
05:00 AM - 06:00 AM	61.2	60.2
06:00 AM - 07:00 AM	62.1	61.0
07:00 AM - 08:00 AM	62.7	60.9
08:00 AM - 09:00 AM	62.3	61.0
09:00 AM - 10:00 AM	62.5	61.0

Leq Average 24 hrs. (dB(A))	61.8
L _{max} (dB(A))	87.1
L ₉₀ (dB(A))	60.6
L _{dn} (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดเสียงตามข้อกำหนด 15 (พ.ร.บ. 2540) สำหรับการตรวจวัดระดับเสียงรบกวน 2. ใช้มาตรฐานการวัดเสียงรบกวนตามข้อกำหนด 15 (พ.ร.บ. 2540) สำหรับการตรวจวัดระดับเสียงรบกวนตามข้อกำหนด 15 (พ.ร.บ. 2540)	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Tharitat.

Thantia Kulsunwong
Scientist (4)

Approved by

Supt S

Supt Salameh
Section Head

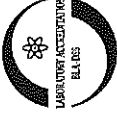
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13432-61/ EMAIL

S. Wapetia, Air Noise rpt (1.53PM)



Analysis / Test Report

TESTING
No.0042

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857330-1

Page 1 of 1

Sample Number	23125266-6
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่ก่อสร้าง
Measurement Date	Nov 28 - Nov 29, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	L _{max} (dB(A))	L ₉₀ (dB(A))
10:00 AM - 11:00 AM	62.3	73.4	61.1
11:00 AM - 12:00 PM	61.9	72.1	60.7
12:00 PM - 01:00 PM	61.1	72.7	59.5
01:00 PM - 02:00 PM	61.6	72.5	60.3
02:00 PM - 03:00 PM	62.0	77.3	60.5
03:00 PM - 04:00 PM	61.6	73.6	60.4
04:00 PM - 05:00 PM	61.4	76.2	60.3
05:00 PM - 06:00 PM	61.3	74.2	60.3
06:00 PM - 07:00 PM	61.2	76.7	60.2
07:00 PM - 08:00 PM	61.7	76.9	60.3
08:00 PM - 09:00 PM	61.6	77.3	60.7
09:00 PM - 10:00 PM	61.6	75.3	60.6
10:00 PM - 11:00 PM	62.0	75.8	61.0
11:00 PM - 12:00 AM	61.7	75.3	60.6
12:00 AM - 01:00 AM	61.2	75.8	60.3
01:00 AM - 02:00 AM	61.9	73.2	60.8
02:00 AM - 03:00 AM	61.7	72.3	60.8
03:00 AM - 04:00 AM	61.8	73.6	60.9
04:00 AM - 05:00 AM	63.2	88.1	60.8
05:00 AM - 06:00 AM	61.7	81.1	60.7
06:00 AM - 07:00 AM	62.3	73.9	61.0
07:00 AM - 08:00 AM	62.6	75.3	60.9
08:00 AM - 09:00 AM	62.3	72.8	61.0
09:00 AM - 10:00 AM	62.2	76.9	60.9

Leq Average 24 hrs. (dB(A))	61.9
L _{max} (dB(A))	88.1
L ₉₀ (dB(A))	60.7
L _{dn} (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดเสียงตามข้อกำหนด 15 (พ.ร.บ. 2540) สำหรับการตรวจวัดระดับเสียงรบกวน 2. ใช้มาตรฐานการวัดเสียงรบกวนตามข้อกำหนด 15 (พ.ร.บ. 2540) สำหรับการตรวจวัดระดับเสียงรบกวนตามข้อกำหนด 15 (พ.ร.บ. 2540)	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Tharitat.

Thantia Kulsunwong
Scientist (4)

Approved by

Supt S

Supt Salameh
Section Head

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

13432-61/ EMAIL

S. Wapetia, Air Noise rpt (1.53PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong Thailand 21140
Date Received : Dec 04, 2023
P/O : 4210402483
Date Reported : Dec 07, 2023
Project Name : Monitoring EIA
Report Number: 2857331-1
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-7
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ถนน
Measurement Date	Nov 29 - Nov 30, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	62.2	89.8	60.6
11:00 AM - 12:00 PM	61.7	72.3	60.4
12:00 PM - 01:00 PM	60.7	73.4	59.5
01:00 PM - 02:00 PM	61.1	73.7	59.9
02:00 PM - 03:00 PM	61.4	76.3	60.1
03:00 PM - 04:00 PM	61.6	78.2	60.3
04:00 PM - 05:00 PM	61.3	75.1	60.1
05:00 PM - 06:00 PM	61.7	75.1	60.2
06:00 PM - 07:00 PM	60.9	74.6	59.9
07:00 PM - 08:00 PM	61.4	74.9	60.0
08:00 PM - 09:00 PM	61.1	75.2	60.1
09:00 PM - 10:00 PM	61.2	75.3	60.2
10:00 PM - 11:00 PM	61.9	73.1	60.7
11:00 PM - 12:00 AM	61.6	73.6	60.7
12:00 AM - 01:00 AM	61.2	72.9	60.3
01:00 AM - 02:00 AM	61.2	73.5	60.3
02:00 AM - 03:00 AM	61.2	75.4	60.3
03:00 AM - 04:00 AM	61.2	72.9	60.3
04:00 AM - 05:00 AM	61.1	74.8	60.2
05:00 AM - 06:00 AM	61.4	75.8	60.5
06:00 AM - 07:00 AM	61.8	73.1	60.6
07:00 AM - 08:00 AM	63.3	82.0	60.5
08:00 AM - 09:00 AM	61.5	72.7	60.4
09:00 AM - 10:00 AM	61.8	88.5	60.5
Leq Average 24 hrs. (dB(A))	61.5	89.8	60.3
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	67.8		
Standard (dB(A))	70	115	

Reference Method : ISO1995-1 and 1996-2
Standard : 1. ใช้มาตรฐานการวัดระดับความดังเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ร.บ. 2540) สำหรับโรงงานอุตสาหกรรม
2. ใช้มาตรฐานการวัดระดับความดังเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ร.บ. 2540) สำหรับโรงงานอุตสาหกรรม

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

Technical Management

Thanitak.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong Thailand 21140
Date Received : Dec 04, 2023
P/O : 4210402483
Date Reported : Dec 07, 2023
Project Name : Monitoring EIA
Report Number: 2857332-1
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-8
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณพื้นที่ถนน
Measurement Date	Nov 23 - Nov 24, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.0	81.0	51.2
11:00 AM - 12:00 PM	56.9	77.0	51.0
12:00 PM - 01:00 PM	55.3	82.1	51.0
01:00 PM - 02:00 PM	57.5	83.1	52.2
02:00 PM - 03:00 PM	57.4	82.6	52.5
03:00 PM - 04:00 PM	56.8	79.5	50.7
04:00 PM - 05:00 PM	57.2	80.0	51.3
05:00 PM - 06:00 PM	56.4	74.4	49.5
06:00 PM - 07:00 PM	56.6	73.6	49.4
07:00 PM - 08:00 PM	57.6	73.6	49.7
08:00 PM - 09:00 PM	58.8	69.5	46.8
09:00 PM - 10:00 PM	64.5	69.1	51.3
10:00 PM - 11:00 PM	65.2	69.3	55.9
11:00 PM - 12:00 AM	64.0	70.9	53.5
12:00 AM - 01:00 AM	64.1	70.9	55.5
01:00 AM - 02:00 AM	62.2	74.0	46.2
02:00 AM - 03:00 AM	53.6	66.9	45.7
03:00 AM - 04:00 AM	50.4	66.2	44.9
04:00 AM - 05:00 AM	56.2	71.6	47.1
05:00 AM - 06:00 AM	49.4	68.2	45.9
06:00 AM - 07:00 AM	53.0	75.6	46.4
07:00 AM - 08:00 AM	55.0	76.9	48.6
08:00 AM - 09:00 AM	51.4	70.3	45.7
09:00 AM - 10:00 AM	52.0	69.5	46.1
Leq Average 24 hrs. (dB(A))	59.2	83.1	49.5
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	67.0	115	
Standard (dB(A))	70		

Reference Method : ISO1995-1 and 1996-2
Standard : 1. ใช้มาตรฐานการวัดระดับความดังเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ร.บ. 2540) สำหรับโรงงานอุตสาหกรรม
2. ใช้มาตรฐานการวัดระดับความดังเสียงตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ (พ.ร.บ. 2540) สำหรับโรงงานอุตสาหกรรม

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

Technical Management

Thanitak.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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



TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857333-1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-9
Parameter	Noise (Leq 24 hrs.)
Location	วัดสุรนารีทุ่งสำโรง
Measurement Date	Nov 24 - Nov 25, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.3	74.3	48.4
11:00 AM - 12:00 PM	53.6	76.5	47.8
12:00 PM - 01:00 PM	53.0	79.9	47.6
01:00 PM - 02:00 PM	52.5	70.0	47.8
02:00 PM - 03:00 PM	53.8	79.2	48.2
03:00 PM - 04:00 PM	55.6	85.9	48.7
04:00 PM - 05:00 PM	53.3	69.5	48.7
05:00 PM - 06:00 PM	55.4	79.1	49.5
06:00 PM - 07:00 PM	54.7	77.3	49.2
07:00 PM - 08:00 PM	58.2	79.2	49.7
08:00 PM - 09:00 PM	55.8	72.0	50.2
09:00 PM - 10:00 PM	52.3	72.4	47.7
10:00 PM - 11:00 PM	50.8	73.5	47.9
11:00 PM - 12:00 AM	60.3	73.2	47.8
12:00 AM - 01:00 AM	64.1	67.9	55.0
01:00 AM - 02:00 AM	63.8	67.7	55.2
02:00 AM - 03:00 AM	59.0	67.7	54.3
03:00 AM - 04:00 AM	62.9	78.1	51.1
04:00 AM - 05:00 AM	62.9	78.4	59.2
05:00 AM - 06:00 AM	60.6	78.9	50.2
06:00 AM - 07:00 AM	59.6	79.6	49.6
07:00 AM - 08:00 AM	58.1	78.7	48.3
08:00 AM - 09:00 AM	56.8	85.4	49.4
09:00 AM - 10:00 AM	53.4	80.6	46.1

Leq Average 24 hrs. (dB(A))	58.7
Lmax (dB(A))	85.9
L90 (dB(A))	48.7
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO 1996-1 and 1996-2	
Standard : 1. ใช้เกณฑ์การประเมินค่าเสียงตามเกณฑ์ ฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตอุตสาหกรรม 2. ใช้เกณฑ์การประเมินค่าเสียงตามเกณฑ์ ฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตชุมชน	
Tested on: 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Tharitat.

Thantika Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salantich
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khru A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13439-61/ EMAIL

S Report_Air Noise rpt (1.54PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857334-1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-10
Parameter	Noise (Leq 24 hrs.)
Location	วัดสุรนารีทุ่งสำโรง
Measurement Date	Nov 25 - Nov 26, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.3	72.5	48.4
11:00 AM - 12:00 PM	58.3	87.9	53.0
12:00 PM - 01:00 PM	57.6	73.9	53.1
01:00 PM - 02:00 PM	58.8	80.8	52.2
02:00 PM - 03:00 PM	56.6	73.8	51.6
03:00 PM - 04:00 PM	58.1	77.0	50.8
04:00 PM - 05:00 PM	60.1	76.6	51.5
05:00 PM - 06:00 PM	61.6	73.9	51.6
06:00 PM - 07:00 PM	64.4	72.0	58.9
07:00 PM - 08:00 PM	68.3	79.0	56.3
08:00 PM - 09:00 PM	67.7	74.6	51.8
09:00 PM - 10:00 PM	64.2	76.2	52.5
10:00 PM - 11:00 PM	61.6	69.1	48.8
11:00 PM - 12:00 AM	62.8	70.8	53.7
12:00 AM - 01:00 AM	61.2	76.2	50.3
01:00 AM - 02:00 AM	60.7	72.3	49.9
02:00 AM - 03:00 AM	66.3	78.5	65.6
03:00 AM - 04:00 AM	66.2	79.0	65.7
04:00 AM - 05:00 AM	66.3	79.1	65.8
05:00 AM - 06:00 AM	66.9	80.6	60.6
06:00 AM - 07:00 AM	66.5	91.3	52.6
07:00 AM - 08:00 AM	65.2	100.8	54.6
08:00 AM - 09:00 AM	57.2	82.2	52.4
09:00 AM - 10:00 AM	58.1	78.2	52.2

Leq Average 24 hrs. (dB(A))	63.7
Lmax (dB(A))	100.8
L90 (dB(A))	52.4
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO 1996-1 and 1996-2	
Standard : 1. ใช้เกณฑ์การประเมินค่าเสียงตามเกณฑ์ ฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตอุตสาหกรรม 2. ใช้เกณฑ์การประเมินค่าเสียงตามเกณฑ์ ฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตชุมชน	
Tested on: 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Tharitat.

Thantika Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salantich
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khru A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13439-61/ EMAIL

S Report_Air Noise rpt (1.54PM)



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857336-1

Client: Gulf TSS Co., Ltd.
 224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Page 1 of 1

Sample Number		23125266-12	
Parameter	Noise (Leq 24 hrs.)		
Location	Tsatsoulinupfifid		
Measurement Date	Nov 27 - Nov 28, 2023		
Measurement by	Anurak Tonghachonsakda		
Sound Level meter	Serial No. 920831		
	Time	Leq (dB(A))	Lmax (dB(A))
	10:00 AM - 11:00 AM	53.8	80.7
	11:00 AM - 12:00 PM	53.3	48.4
	12:00 PM - 01:00 PM	54.6	70.8
	01:00 PM - 02:00 PM	56.4	80.0
	02:00 PM - 03:00 PM	54.1	86.7
	03:00 PM - 04:00 PM	56.2	70.3
	04:00 PM - 05:00 PM	55.5	79.9
	05:00 PM - 06:00 PM	59.0	78.1
	06:00 PM - 07:00 PM	56.6	80.0
	07:00 PM - 08:00 PM	53.1	72.8
	08:00 PM - 09:00 PM	51.6	73.2
	09:00 PM - 10:00 PM	61.1	74.3
	10:00 PM - 11:00 PM	67.2	74.0
	11:00 PM - 12:00 AM	66.9	71.0
	12:00 AM - 01:00 AM	66.3	70.8
	01:00 AM - 02:00 AM	62.1	70.8
	02:00 AM - 03:00 AM	66.0	81.2
	03:00 AM - 04:00 AM	63.7	81.5
	04:00 AM - 05:00 AM	62.7	82.7
	05:00 AM - 06:00 AM	61.2	82.7
	06:00 AM - 07:00 AM	59.9	81.8
	07:00 AM - 08:00 AM	56.5	88.5
	08:00 AM - 09:00 AM	57.4	83.7
	09:00 AM - 10:00 AM	57.0	75.6
			82.6
			51.9

Leq Average 24 hrs. (dB(A))	61.4	88.5	50.5
Umax (dB(A))			
L90 (dB(A))	70.5		
Ldn (dB(A))		115	
Standard (dB(A))	70		
Reference Method : ISO 996-1 and 996-2			
Standard : 1. มาตรฐานการวัดระดับความดังของเสียงตามข้อ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรม 2. มาตรฐานการวัดระดับความดังของเสียงตามข้อ 15 (พ.ศ. 2540) สำหรับอาคารที่อยู่อาศัย			
Issued พ.ศ. 2548			
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.			

Technical Management

Thantia Kulsunwong
Scientist (4)

Approved by

Supt S.

Supt Salameeh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A, Phukdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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1340-61/ EMAIL *S. Waparat, Air Noise pvt (15.02.04)*



TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023

Date Reported : Dec 07, 2023

Report Number: 2857337-1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Page 1 of 1

Sample Number	23125266-13
Parameter	Noise (Leq 24 hrs.)
Location	โรงงาน/ชุมชน
Measurement Date	Nov 28 - Nov 29, 2023
Measurement by	Anurak Tongthajonsakda
Sound Level meter	Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.7	86.8	53.2
11:00 AM - 12:00 PM	60.6	82.8	55.8
12:00 PM - 01:00 PM	61.2	78.9	56.1
01:00 PM - 02:00 PM	58.1	77.4	52.3
02:00 PM - 03:00 PM	58.6	83.1	52.1
03:00 PM - 04:00 PM	59.4	81.7	51.6
04:00 PM - 05:00 PM	59.0	82.2	51.2
05:00 PM - 06:00 PM	68.0	85.0	63.9
06:00 PM - 07:00 PM	65.6	81.0	58.0
07:00 PM - 08:00 PM	63.2	77.8	52.4
08:00 PM - 09:00 PM	64.1	75.0	55.6
09:00 PM - 10:00 PM	63.1	75.8	53.4
10:00 PM - 11:00 PM	61.1	70.3	51.6
11:00 PM - 12:00 AM	61.6	71.9	50.0
12:00 AM - 01:00 AM	61.9	72.6	49.5
01:00 AM - 02:00 AM	59.2	71.5	50.9
02:00 AM - 03:00 AM	58.6	77.6	52.3
03:00 AM - 04:00 AM	63.8	78.9	57.6
04:00 AM - 05:00 AM	67.1	80.2	57.6
05:00 AM - 06:00 AM	66.6	78.7	62.2
06:00 AM - 07:00 AM	62.8	79.1	54.1
07:00 AM - 08:00 AM	59.4	85.3	52.3
08:00 AM - 09:00 AM	55.0	72.9	50.9
09:00 AM - 10:00 AM	54.5	78.9	50.1

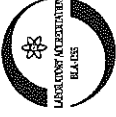
Leq Average 24 hrs. (dB(A))	62.7
Lmax (dB(A))	86.8
L90 (dB(A))	52.3
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดเสียงและค่ามาตรฐานตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ 2. ใช้มาตรฐานการวัดเสียงและค่ามาตรฐานตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ ตาม พ.ร.บ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management : *Tharitat.* Approved by : *Supt S.*
Thanita Kulsunwong Scientist (4) Supot Salameh Section Head

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



13430-61/ EMAIL: S.Vepornai_Air Noise rpt (1.54PM)



Analysis / Test Report

Lot ID: 23125266

Date Received : Dec 04, 2023

Date Reported : Dec 07, 2023

Report Number: 2857338-1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Page 1 of 1

Sample Number	23125266-14
Parameter	Noise (Leq 24 hrs.)
Location	โรงงาน/ชุมชน
Measurement Date	Nov 29 - Nov 30, 2023
Measurement by	Anurak Tongthajonsakda
Sound Level meter	Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.1	78.1	50.9
11:00 AM - 12:00 PM	55.7	81.2	50.5
12:00 PM - 01:00 PM	56.6	78.9	51.3
01:00 PM - 02:00 PM	57.0	82.3	51.7
02:00 PM - 03:00 PM	55.3	74.7	51.1
03:00 PM - 04:00 PM	57.0	79.2	51.6
04:00 PM - 05:00 PM	65.1	78.0	50.5
05:00 PM - 06:00 PM	57.7	83.7	50.0
06:00 PM - 07:00 PM	56.2	87.9	49.2
07:00 PM - 08:00 PM	59.3	78.7	51.9
08:00 PM - 09:00 PM	58.5	78.7	51.9
09:00 PM - 10:00 PM	56.5	75.2	51.6
10:00 PM - 11:00 PM	58.6	79.7	52.1
11:00 PM - 12:00 AM	58.5	71.2	50.9
12:00 AM - 01:00 AM	64.2	78.5	58.6
01:00 AM - 02:00 AM	64.2	72.1	55.8
02:00 AM - 03:00 AM	65.9	77.3	64.8
03:00 AM - 04:00 AM	66.6	79.0	64.2
04:00 AM - 05:00 AM	66.1	77.6	65.7
05:00 AM - 06:00 AM	65.4	79.0	59.5
06:00 AM - 07:00 AM	63.0	77.1	52.5
07:00 AM - 08:00 AM	54.7	72.1	50.6
08:00 AM - 09:00 AM	54.8	73.2	48.7
09:00 AM - 10:00 AM	55.3	74.0	50.3

Leq Average 24 hrs. (dB(A))	61.6
Lmax (dB(A))	87.9
L90 (dB(A))	51.6
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดเสียงและค่ามาตรฐานตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ 2. ใช้มาตรฐานการวัดเสียงและค่ามาตรฐานตามข้อกำหนดของกรมส่งเสริมการค้าระหว่างประเทศ ตาม พ.ร.บ. 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management : *Tharitat.* Approved by : *Supt S.*
Thanita Kulsunwong Scientist (4) Supot Salameh Section Head

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



13430-61/ EMAIL: S.Vepornai_Air Noise rpt (1.54PM)



Analysis / Test Report

TESTING
No.0042

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Puak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857339-1

Page 1 of 1

Sample Number	23125266-15			
Parameter	Noise (Leq 24 hrs.)			
Location	พื้นที่อยู่อาศัย			
Measurement Date	Nov 23 - Nov 24, 2023			
Measurement by	Anurak Tongkhajonsakda			
Sound Level meter	Serial No. 1120939			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
10:00 AM - 11:00 AM	56.8	75.6	45.8	
11:00 AM - 12:00 PM	50.6	72.7	44.2	
12:00 PM - 01:00 PM	52.6	83.1	47.8	
01:00 PM - 02:00 PM	56.8	78.0	47.4	
02:00 PM - 03:00 PM	51.6	70.6	44.3	
03:00 PM - 04:00 PM	52.1	67.9	47.9	
04:00 PM - 05:00 PM	50.4	66.3	47.3	
05:00 PM - 06:00 PM	50.4	70.1	43.7	
06:00 PM - 07:00 PM	47.7	63.5	43.8	
07:00 PM - 08:00 PM	52.5	81.6	47.3	
08:00 PM - 09:00 PM	52.8	65.8	45.2	
09:00 PM - 10:00 PM	51.1	68.7	45.0	
10:00 PM - 11:00 PM	46.6	61.4	44.0	
11:00 PM - 12:00 AM	46.4	70.6	42.0	
12:00 AM - 01:00 AM	47.7	66.1	42.5	
01:00 AM - 02:00 AM	46.2	63.0	43.0	
02:00 AM - 03:00 AM	46.2	58.8	42.9	
03:00 AM - 04:00 AM	45.8	58.8	41.9	
04:00 AM - 05:00 AM	47.0	59.6	44.3	
05:00 AM - 06:00 AM	51.3	74.1	45.3	
06:00 AM - 07:00 AM	54.2	73.5	47.1	
07:00 AM - 08:00 AM	53.1	67.0	47.8	
08:00 AM - 09:00 AM	52.1	75.9	47.0	
09:00 AM - 10:00 AM	51.7	66.7	48.1	

Technical Management

Tharitak.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Samiech
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Puakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13:00-51/ BMOL

S Report_Air Noise ref (1.5SPM)



Analysis / Test Report

TESTING
No.0042

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Puak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857340-1

Page 1 of 1

Sample Number	23125266-16		
Parameter	Noise (Leq 24 hrs.)		
Location	พื้นที่อยู่อาศัย		
Measurement Date	Nov 24 - Nov 25, 2023		
Measurement by	Anurak Tongkhajonsakda		
Sound Level meter	Serial No. 1120939		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.4	77.3	46.8
11:00 AM - 12:00 PM	49.9	68.6	45.0
12:00 PM - 01:00 PM	49.5	65.3	43.9
01:00 PM - 02:00 PM	49.8	64.7	45.1
02:00 PM - 03:00 PM	50.8	77.3	46.1
03:00 PM - 04:00 PM	49.9	66.5	45.7
04:00 PM - 05:00 PM	50.2	65.2	45.8
05:00 PM - 06:00 PM	52.7	76.1	46.2
06:00 PM - 07:00 PM	48.5	68.6	43.4
07:00 PM - 08:00 PM	47.7	70.7	44.4
08:00 PM - 09:00 PM	52.6	66.0	44.4
09:00 PM - 10:00 PM	48.6	71.7	43.9
10:00 PM - 11:00 PM	47.1	63.2	44.8
11:00 PM - 12:00 AM	46.9	65.5	44.3
12:00 AM - 01:00 AM	47.3	62.6	43.3
01:00 AM - 02:00 AM	50.8	73.6	44.4
02:00 AM - 03:00 AM	49.2	72.1	44.4
03:00 AM - 04:00 AM	49.2	62.1	46.5
04:00 AM - 05:00 AM	49.0	63.9	46.9
05:00 AM - 06:00 AM	50.1	62.9	47.0
06:00 AM - 07:00 AM	53.8	72.1	46.7
07:00 AM - 08:00 AM	55.2	80.7	49.3
08:00 AM - 09:00 AM	53.5	72.8	48.7
09:00 AM - 10:00 AM	53.0	67.3	49.0

Technical Management

Tharitak.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Samiech
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Puakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13:00-51/ BMOL

S Report_Air Noise ref (1.5SPM)



TESTING
No.0042

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857341-1

Page 1 of 1

Sample Number	23125266-17
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่ภายในงาน
Measurement Date	Nov 25 - Nov 26, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 1120939

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.2	73.0	48.1
11:00 AM - 12:00 PM	52.8	72.9	47.6
12:00 PM - 01:00 PM	49.0	66.9	44.5
01:00 PM - 02:00 PM	51.0	68.7	45.9
02:00 PM - 03:00 PM	51.8	67.4	46.7
03:00 PM - 04:00 PM	51.0	69.3	45.7
04:00 PM - 05:00 PM	50.2	74.9	44.7
05:00 PM - 06:00 PM	51.4	72.7	45.1
06:00 PM - 07:00 PM	48.9	70.2	45.1
07:00 PM - 08:00 PM	49.8	73.0	46.1
08:00 PM - 09:00 PM	48.5	68.8	45.5
09:00 PM - 10:00 PM	46.8	63.0	43.4
10:00 PM - 11:00 PM	47.8	62.3	43.4
11:00 PM - 12:00 AM	45.6	64.5	43.1
12:00 AM - 01:00 AM	45.5	64.7	41.9
01:00 AM - 02:00 AM	45.6	73.5	42.3
02:00 AM - 03:00 AM	45.2	65.2	42.7
03:00 AM - 04:00 AM	45.6	58.8	42.5
04:00 AM - 05:00 AM	46.8	66.8	43.1
05:00 AM - 06:00 AM	49.1	76.1	43.4
06:00 AM - 07:00 AM	53.8	77.4	45.1
07:00 AM - 08:00 AM	52.7	77.0	45.8
08:00 AM - 09:00 AM	51.6	75.7	47.1
09:00 AM - 10:00 AM	50.5	70.9	46.4

Leq Average 24 hrs. (dB(A))	50.1
Lmax (dB(A))	77.4
L90 (dB(A))	45.1
Ldn (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้เกณฑ์การประเมินค่าเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตเมือง 2. ใช้เกณฑ์การวัดค่าความถี่เสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตเมือง	
Issued on : 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management

Tharitak.

Approved by

Supt S.

Thantia Kulnirong
Scientist (t)

Supt Solamteh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phakdaeng Rayong 21140 Thailand. PHONE +66 0 3304 8553 FAX +66 0 3304 8556
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13436-61/ EMAIL

S. Wapornet, Air Noise rpt (1.55PM)



TESTING
No.0042

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125266
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857342-1

Page 1 of 1

Sample Number	23125266-18
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่ภายในงาน
Measurement Date	Nov 26 - Nov 27, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 1120939

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.1	67.0	45.2
11:00 AM - 12:00 PM	48.4	73.9	43.5
12:00 PM - 01:00 PM	46.3	60.6	41.1
01:00 PM - 02:00 PM	47.3	65.2	42.3
02:00 PM - 03:00 PM	47.2	66.0	42.5
03:00 PM - 04:00 PM	49.9	72.4	43.3
04:00 PM - 05:00 PM	46.4	65.7	42.1
05:00 PM - 06:00 PM	51.9	74.5	41.7
06:00 PM - 07:00 PM	49.7	67.8	42.1
07:00 PM - 08:00 PM	44.7	65.9	42.3
08:00 PM - 09:00 PM	47.6	75.2	42.9
09:00 PM - 10:00 PM	46.3	68.7	42.3
10:00 PM - 11:00 PM	49.9	74.7	42.4
11:00 PM - 12:00 AM	48.5	67.8	40.2
12:00 AM - 01:00 AM	43.8	63.1	40.4
01:00 AM - 02:00 AM	47.2	64.3	40.9
02:00 AM - 03:00 AM	47.2	62.7	41.0
03:00 AM - 04:00 AM	47.0	64.2	43.0
04:00 AM - 05:00 AM	48.0	62.1	45.7
05:00 AM - 06:00 AM	50.2	77.6	44.7
06:00 AM - 07:00 AM	52.8	71.6	46.4
07:00 AM - 08:00 AM	53.7	73.2	47.0
08:00 AM - 09:00 AM	51.6	78.7	46.1
09:00 AM - 10:00 AM	50.5	71.3	46.1

Leq Average 24 hrs. (dB(A))	49.2
Lmax (dB(A))	78.7
L90 (dB(A))	
Ldn (dB(A))	55.3
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้เกณฑ์การประเมินค่าเสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตเมือง 2. ใช้เกณฑ์การวัดค่าความถี่เสียงตามมาตรฐานฉบับที่ 15 (พ.ศ. 2540) สำหรับอาคารโรงงานอุตสาหกรรมในเขตเมือง	
Issued on : 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management

Tharitak.

Approved by

Supt S.

Thantia Kulnirong
Scientist (t)

Supt Solamteh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phakdaeng Rayong 21140 Thailand. PHONE +66 0 3304 8553 FAX +66 0 3304 8556
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13436-61/ EMAIL

S. Wapornet, Air Noise rpt (1.55PM)



Analysis / Test Report

TESTING
No.0042

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring ETA
Project Location : GTSS

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857343-1

Page 1 of 1

Sample Number	23125266-19		
Parameter	Noise (Leq 24 hrs.)		
Location	ชุมชนบ้านท่า		
Measurement Date	Nov 27 - Nov 28, 2023		
Measurement by	Anurak Tongkhajonsakda		
Sound Level meter	Serial No. 1120939		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.9	77.9	45.8
11:00 AM - 12:00 PM	48.6	64.0	44.9
12:00 PM - 01:00 PM	48.4	69.1	44.4
01:00 PM - 02:00 PM	47.8	64.7	44.3
02:00 PM - 03:00 PM	47.8	65.6	44.3
03:00 PM - 04:00 PM	46.4	66.4	44.3
04:00 PM - 05:00 PM	48.3	66.4	44.4
05:00 PM - 06:00 PM	51.8	87.5	44.4
06:00 PM - 07:00 PM	56.5	75.3	45.5
07:00 PM - 08:00 PM	50.3	72.4	43.9
08:00 PM - 09:00 PM	52.3	82.8	47.5
09:00 PM - 10:00 PM	56.5	77.7	47.1
10:00 PM - 11:00 PM	61.1	92.0	47.8
11:00 PM - 12:00 AM	59.9	90.3	48.3
12:00 AM - 01:00 AM	61.4	95.5	44.7
01:00 AM - 02:00 AM	55.8	91.9	43.9
02:00 AM - 03:00 AM	53.7	96.4	43.1
03:00 AM - 04:00 AM	45.1	68.0	42.5
04:00 AM - 05:00 AM	46.0	65.4	41.5
05:00 AM - 06:00 AM	45.5	63.0	41.2
06:00 AM - 07:00 AM	46.5	65.6	41.7
07:00 AM - 08:00 AM	52.0	71.0	44.7
08:00 AM - 09:00 AM	52.5	67.4	48.3
09:00 AM - 10:00 AM	50.8	66.7	47.7
10:00 AM - 11:00 AM	49.0	75.7	45.1

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ปริมาณการรบกวนเสียงจากแหล่งกำเนิดเสียง 15 (พ.ร.บ. 2540) ซึ่งกำหนดการรบกวนเสียงจากแหล่งกำเนิดเสียง
2. ปริมาณการรบกวนเสียงจากแหล่งกำเนิดเสียงจากโรงงานอุตสาหกรรมตามมาตรฐานของกรมอุตสาหกรรมพื้นฐานและการเหมืองแร่
พ.ร.บ. 2548

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

Tharitat.

Tharita Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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S Report_Air Noise m1 (158PM)

1340-61/ENAL



Analysis / Test Report

TESTING
No.0042

Lot ID: 23125266

Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857344-1

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring ETA
Project Location : GTSS

Page 1 of 1

Sample Number	23125266-20		
Parameter	Noise (Leq 24 hrs.)		
Location	พื้นที่หน้างาน		
Measurement Date	Nov 28 - Nov 29, 2023		
Measurement by	Anurak Tongkhajonsakda		
Sound Level meter	Serial No. 1120939		
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.0	74.6	44.6
11:00 AM - 12:00 PM	48.7	69.0	44.1
12:00 PM - 01:00 PM	46.8	62.8	42.3
01:00 PM - 02:00 PM	48.3	65.4	42.5
02:00 PM - 03:00 PM	48.3	69.0	44.0
03:00 PM - 04:00 PM	50.3	72.1	44.3
04:00 PM - 05:00 PM	48.8	70.8	44.6
05:00 PM - 06:00 PM	49.4	74.2	44.2
06:00 PM - 07:00 PM	49.3	72.3	43.5
07:00 PM - 08:00 PM	48.8	62.7	45.2
08:00 PM - 09:00 PM	47.7	62.7	44.2
09:00 PM - 10:00 PM	50.1	69.1	44.7
10:00 PM - 11:00 PM	47.7	64.0	44.7
11:00 PM - 12:00 AM	46.0	64.9	43.9
12:00 AM - 01:00 AM	45.8	73.2	43.1
01:00 AM - 02:00 AM	48.1	62.7	43.0
02:00 AM - 03:00 AM	48.9	77.4	43.3
03:00 AM - 04:00 AM	50.4	82.7	42.8
04:00 AM - 05:00 AM	48.8	77.0	43.6
05:00 AM - 06:00 AM	48.2	61.7	45.3
06:00 AM - 07:00 AM	50.1	67.1	45.1
07:00 AM - 08:00 AM	53.8	76.3	48.9
08:00 AM - 09:00 AM	52.0	74.1	47.6
09:00 AM - 10:00 AM	51.2	70.6	46.8

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ปริมาณการรบกวนเสียงจากแหล่งกำเนิดเสียง 15 (พ.ร.บ. 2540) ซึ่งกำหนดการรบกวนเสียงจากแหล่งกำเนิดเสียง
2. ปริมาณการรบกวนเสียงจากแหล่งกำเนิดเสียงจากโรงงานอุตสาหกรรมตามมาตรฐานของกรมอุตสาหกรรมพื้นฐานและการเหมืองแร่
พ.ร.บ. 2548

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

Tharitat.

Tharita Kulsurwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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1340-61/ENAL

S Report_Air Noise m1 (158PM)



Analysis / Test Report



TESTING
No.0042

Lot ID: 23125266

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pliak Daeng, Rayong Thailand 21140
Date Received : Dec 04, 2023
Date Reported : Dec 07, 2023
Report Number: 2857345-1

P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	23125266-21
Parameter	Noise (Leq 24 hrs.)
Location	ถนนสายพัฒนา
Measurement Date	Nov 29 - Nov 30, 2023
Measurement by	Anurak Tongkhajonsakda
Sound Level meter	Serial No. 1120939

Type	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.5	70.3	44.9
11:00 AM - 12:00 PM	49.6	72.0	44.4
12:00 PM - 01:00 PM	49.6	72.3	42.7
01:00 PM - 02:00 PM	47.7	67.9	42.6
02:00 PM - 03:00 PM	48.5	63.6	42.6
03:00 PM - 04:00 PM	49.5	65.1	44.7
04:00 PM - 05:00 PM	49.2	67.3	45.2
05:00 PM - 06:00 PM	50.3	73.4	45.1
06:00 PM - 07:00 PM	47.2	67.3	43.4
07:00 PM - 08:00 PM	48.6	70.7	44.8
08:00 PM - 09:00 PM	47.9	63.3	45.0
09:00 PM - 10:00 PM	47.0	67.2	44.3
10:00 PM - 11:00 PM	46.1	63.9	43.5
11:00 PM - 12:00 AM	45.3	63.3	42.9
12:00 AM - 01:00 AM	49.1	80.7	42.7
01:00 AM - 02:00 AM	46.2	76.8	42.1
02:00 AM - 03:00 AM	47.1	70.8	42.0
03:00 AM - 04:00 AM	46.4	68.2	44.2
04:00 AM - 05:00 AM	47.1	61.8	44.0
05:00 AM - 06:00 AM	50.6	64.6	42.8
06:00 AM - 07:00 AM	50.5	65.8	46.0
07:00 AM - 08:00 AM	52.8	73.6	48.5
08:00 AM - 09:00 AM	51.4	77.9	46.1
09:00 AM - 10:00 AM	49.8	81.1	44.2

Leq Average 24 hrs. (dB(A))	49.1
Lmax (dB(A))	81.1
L90 (dB(A))	44.2
L01 (dB(A))	
Standard (dB(A))	115
Reference Method : ISO1996-1 and 1996-2	
Standard : 1. ใช้มาตรฐานการวัดระดับความดังเสียงตามวิธี 15 (พ.ร.บ. 2540) ใช้กำหนดค่าการวางนัยเป็นระดับเสียงดัง	
2. ใช้มาตรฐานการวางนัยตามวิธี 15 (พ.ร.บ. 2540) ใช้กำหนดค่าการวางนัยเป็นระดับเสียงดัง	
Tested on : 2548	
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.	

Technical Management
Tharitat.
Thanika Kulsurawong
Scientist (4)

Approved by
Supt S.
Supot Salameh
Section Head

ADDRESS 616/10 Moo 5 T. Muang Khu A. Pliakdaeng Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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S. Voparis, Air Noise (p. 1/56p.10)

131430-61/ EMAIL

ภาคผนวก ค-4

คุณภาพน้ำทิ้งจากระบบการผลิต



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location: GTS3

TESTING
No.0042
Lot ID: 2371075
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number: 2689950-1

Page 1 of 2

Sample Number	2371075-1
Sampled Date	Jul 03, 2023 10:45 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากโรงงาน
Date Analysis Commenced	Jul 03, 2023
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
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	6	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	5	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	38.9	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	152	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Narontat Thammassarn รหัสประจำตัว 7-323-a-9477

Remark :

Technical Management

Narumon Banchongkit
Supervisor

Approved by

D. Chongchon
Senior Manager

รหัสประจำตัว 7-323-a-9445

Daj Chongchon
Senior Manager

รหัสประจำตัว 7-323-a-9442

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

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ALS SOLUTIONS PHL 04.8 P-PAET FILE 85

134946/EPH4

S. Wongsatit, M. G. Pr (3.1.18M)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location: GTS3

TESTING
No.0042
Lot ID: 2371075
Date Received : Jul 03, 2023
Date Reported : Jul 10, 2023
Report Number: 2689950-1

Page 2 of 2

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

Technical Management

N. Banchongkit
Supervisor

Approved by

D. Chongchon
Senior Manager

รหัสประจำตัว 7-323-a-9445

Daj Chongchon
Senior Manager

รหัสประจำตัว 7-323-a-9442

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134946/EPH4

S. Wongsatit, M. G. Pr (3.1.18M)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 2376491

Date Received : Aug 04, 2023
Date Reported : Aug 11, 2023
Report Number : 2702182-1

Page 1 of 2

Sample Number	2376491-1						
Sample Date	Aug 04, 2023 10:20 AM						
Sample Description	Wastewater						
Location	น้ำทิ้งจากโรงงาน						
Date Analysis Commenced	Aug 04, 2023						
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
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	10	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	9	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.9	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	628	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central

wastewater Treatment Plant

Sampling By : Narurat thammassaro รหัสประจำตัว 323-3-9477

Remark :

Technical Management

N.Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 323-3-9445

Approved by

Dhuan

Dej Changchon
Senior Manager
รหัสประจำตัว 323-3-9442

Technical Management

N.Banphit

Narumon Banchoangkit
Supervisor
รหัสประจำตัว 323-3-9445

Approved by

Dhuan

Dej Changchon
Senior Manager
รหัสประจำตัว 323-3-9442

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13100-61/THAI

S.Visornthai, M.Sc. (P.1344)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 2376491

Date Received : Aug 04, 2023
Date Reported : Aug 11, 2023
Report Number : 2702182-1

Page 2 of 2

- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)
- "-" : Analyte(s) not detected or not included in scope of Accreditation (ISO/IEC 17025).
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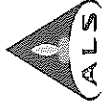
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13100-61/THAI

S.Visornthai, M.Sc. (P.1344)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 2393202
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2741971-1

Page 1 of 2

Sample Number		2393202-1					
Sampled Date		Sep 04, 2023 10:00 AM					
Sample Description		Wastewater					
Location		หน้าถังพักน้ำ					
Date Analysis Commenced		Sep 04, 2023					
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
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	8	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	10	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (b)	Rayong
Temperature *	Degree C	-	-	35.1	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	160	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Narunat thammassano นารุนาต ธรรมาสนา น. 323-9-9477

Remark :

Technical Management : N. Banphit
Narumon Bandhokkit
Supervisor
วิบูลณัฐ 3-323-9-9445

Approved by : D. Changchon
Dej Changchon
Senior Manager
วิบูลณัฐ 3-323-9-9442

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

Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 2393202
Date Received : Sep 04, 2023
Date Reported : Sep 11, 2023
Report Number : 2741971-1

Page 2 of 2

- LOD : Limit of Detection
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Technical Management : N. Banphit
Narumon Bandhokkit
Supervisor
วิบูลณัฐ 3-323-9-9445

Approved by : D. Changchon
Dej Changchon
Senior Manager
วิบูลณัฐ 3-323-9-9442

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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107356
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2779884-1

Page 1 of 2

Sample Number	23107356-1
Sampled Date	Oct 04, 2023 10:22 AM
Sample Description	Wastewater
Location	บ่อกักเก็บน้ำ
Date Analysis Commenced	Oct 04, 2023
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
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	14	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.5	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	628	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narongpon วสุวิทย์ นารองปน

Remark :

Technical Management

N. Bangpit

Narumon Banchongkit
Supervisor
โทรศัพท์ ๐-๓๒๓-๙-๙๔๕

Approved by

D. Jumsai

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙-๙๔๕

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13190-AJ-ENH

5 Report_LAB_04 (3-2019)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107356
Date Received : Oct 04, 2023
Date Reported : Oct 11, 2023
Report Number : 2779884-1

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

N. Bangpit

Narumon Banchongkit
Supervisor
โทรศัพท์ ๐-๓๒๓-๙-๙๔๕

Approved by

D. Jumsai

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙-๙๔๕

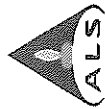
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13190-AJ-ENH

5 Report_LAB_04 (3-2019)



Analysis / Test Report

TESTING
No.0042
Lot ID: 23125305

Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2818067-1

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GT53

Page 1 of 2

Sample Number	23125305-1
Sampled Date	Nov 01, 2023 10:10 AM
Sample Description	Wastewater
Location	พื้นที่น้ำทิ้ง
Date Analysis Commenced	Nov 01, 2023
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
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADHI	-	5	10	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADHI	-	5	9	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *	-	-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	37.2	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	208	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 - Criteria of wastewater characteristic from factory discharge to central

wastewater Treatment Plant

Sampling by : Natunet thannasaro รหัสฐานที่ 323-9-9477

Remark :

Technical Management

N. Bangkit
Narumon Banchongkit
Supervisor
รหัสฐานที่ 323-9-9445

Approved by

D. Changchon
Dej Changchon
Senior Manager
รหัสฐานที่ 323-9-9442

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Analysis / Test Report

TESTING
No.0042
Lot ID: 23125305

Date Received : Nov 01, 2023
Date Reported : Nov 08, 2023
Report Number : 2818067-1

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GT53

Page 2 of 2

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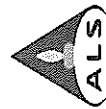
Technical Management

N. Bangkit
Narumon Banchongkit
Supervisor
รหัสฐานที่ 323-9-9445

Approved by

D. Changchon
Dej Changchon
Senior Manager
รหัสฐานที่ 323-9-9442

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

TESTING
No.0042
Lot ID: 23125307

Date Received : Dec 04, 2023

Date Reported : Dec 12, 2023

Report Number : 2818070-1

Page 1 of 2

Sample Number		23125307-1					
Sample Date		Dec 04, 2023 10:00 AM					
Sample Description	Wastewater						
Location	ในพื้นที่ชุมชน						
Date Analysis Commenced		Dec 04, 2023					
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 (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	17	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	14	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease *	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	35.4	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	424	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central

wastewater Treatment Plant

Sampling By : Narumon Banchongkit ๓๓๓๓๓๓๓๓ ๓-323-๙-9477

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

๓๓๓๓๓๓๓ ๓-323-๙-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

๓๓๓๓๓๓๓ ๓-323-๙-9442

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13100 617 EMAIL

S. Weerathai, M. Sc. (E-1149)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

TESTING
No.0042
Lot ID: 23125307

Date Received : Dec 04, 2023

Date Reported : Dec 12, 2023

Report Number : 2818070-1

Page 2 of 2

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOD (Limit of Quantification) / LOQ (Limit of Reporting)
- Analytes marked * refers are included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

๓๓๓๓๓๓๓ ๓-323-๙-9445

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

๓๓๓๓๓๓๓ ๓-323-๙-9442

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

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S. Weerathai, M. Sc. (E-1149)

ภาคผนวก ค-5

คุณภาพน้ำที่ระบายจากหอหล่อเย็น



Analysis / Test Report

Client : Gulf TSC Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong

Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 2382803

Date Received : Jul 18, 2023

Date Reported : Jul 26, 2023

Report Number : 2718546-2

Page 1 of 1

Sample Number	2382803-1
Sample Date	Jul 18, 2023 10:05 AM
Sample Description	Wastewater
Location	ในน้ำบึงน้ำดิบ
Date Analysis Commenced	Jul 19, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium	mg/L	0.003	0.005	3.87	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.003	0.005	1.17	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR	-	-	-	4.03	No Standard	0-10	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.003	0.005	6.40	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chloride	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1995, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	6.8	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 1900-D (C)	Rayong

Guideline : Guideline (1) : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment (1) and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).

Guideline (2) : Environmental Impact Assessment Report of Gulf TSC Co., Ltd.

Sampling By : Pathompong Kornasawat รหัสประจำตัว 3-323-9-9468, Panupong Manit รหัสประจำตัว 3-204-9-8600

Remark :

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

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Nant Somb

Approved by

Nanthawadee Sombhoon
Specialist 1

ADDRESS 104 Phatthananan 40, Phatthananan Rd., Khwaeng Phatthananan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197

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S.Reports_A4_20x141 (3.04mm)



Analysis / Test Report

Client : Gulf TSC Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong

Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTS3

TESTING
No.0042
Lot ID: 2376492

Date Received : Aug 04, 2023

Date Reported : Aug 11, 2023

Report Number : 2702183-1

Page 1 of 2

Sample Number	2376492-1
Sample Date	Aug 04, 2023 10:05 AM
Sample Description	Wastewater
Location	ในน้ำบึงน้ำดิบ
Date Analysis Commenced	Aug 04, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	25	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	23	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
pH at 25 degree C *	-	-	-	8.2	5.5-9.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.9	≤40	≤34	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1136	≤3000	≤1300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Guideline (1) : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment (1) and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).

Guideline (2) : Environmental Impact Assessment Report of Gulf TSC Co., Ltd.

Sampling By : Narurat thammassaro รหัสประจำตัว 3-323-9-9477, Panupong Manit รหัสประจำตัว 3-204-9-8600

Remark :

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

N.Bangmit

Technical Management

Nanamon Bandongthit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

Dhuanon
Senior Manager
รหัสประจำตัว 3-323-9-9442

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GTSS

TESTING
No.0042
Lot ID: 2376492
Date Received : Aug 04, 2023
Date Reported : Aug 11, 2023
Report Number : 2702183-1

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

Page 2 of 2



TESTING

TESTING
No.0042
Lot ID: 2376492
Date Received : Aug 04, 2023
Date Reported : Aug 11, 2023
Report Number : 2702183-1

Page 2 of 2



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GTSS

Lot ID: 2376492
Date Received : Aug 04, 2023
Date Reported : Aug 11, 2023
Report Number : 2702183-2

Page 1 of 1

Sample Number	2376492-1
Sample Date	Aug 04, 2023 10:05 AM
Sample Description	Wastewater
Location	ภายในโรงงาน
Date Analysis Commenced	Aug 05, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium	mg/L	0.003	0.005	5.40	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.003	0.005	1.70	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR	-	-	-	4.56	No Standard	0-10	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.003	0.005	8.60	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chloride	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	7.0	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

Sampling By : นันทน์ ธรรมสาร นันทน์ธรรมสาร 3-323-9-9477, Panupong Manitwongwong 3-204-8-8600

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

Technical Management

N. Banphit
Narumon Banphongkiet
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

D. Changchon
Dej Changchon
Senior Manager
โทรศัพท์ 3-323-9-9442

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Approved by

Chanatt L.
Chanattagarn Inthorn
Section Head

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0042
Lot ID: 2393203
Date Received : Sep 04, 2023
Date Reported : Sep 12, 2023
Report Number : 2741975-1

Page 1 of 2

Sample Number	2393203-1	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Sample Date	Sep 04, 2023 9:45 AM								
Sample Description	Wastewater								
Location	via khwaifu								
Date Analysis Commenced	Sep 04, 2023								
Condition of Sample	Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)								
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location	
Water Testing									
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong	
Color (at Original pH)	ADMI	-	5	13	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong	
Color (at pH 7.0)	ADMI	-	5	11	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong	
pH at 25 degree C *		-	-	8.4	5.5-9.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	
Temperature *	Degree C	-	-	32.2	≤40	≤34	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	792	≤3000	≤1300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong	

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

Sampling By : Namrat thammapho รหัสประจำตัว 3-323-9-9477 , Panupong Namit รหัสประจำตัว 3-204-9-8600

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

Technical Management

Nanonon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon
Senior Manager
รหัสประจำตัว 3-323-9-9442

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1349-637 (FAX)

S.Boonrat, AL 20, 4st (3.20PH)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong
Thailand 21140

P/O :
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0042
Lot ID: 2393203

Date Received : Sep 04, 2023
Date Reported : Sep 12, 2023
Report Number : 2741975-1

Page 2 of 2

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

Technical Management

Nanonon Banchoangkit
Supervisor
รหัสประจำตัว 3-323-9-9445

Approved by

Dej Changchon
Senior Manager
รหัสประจำตัว 3-323-9-9442

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S.Boonrat, AL 20, 4st (3.20PH)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong
Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GT53

Lot ID: 2393203

Date Received : Sep 04, 2023

Date Reported : Sep 12, 2023

Report Number : 2741975-2

Page 1 of 1

Sample Number	2393203-1
Sampled Date	Sep 04, 2023 9:45 AM
Sample Description	Wastewater
Location	uabn'waaflu
Date Analysis Commenced	Sep 05, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium	mg/L	0.003	0.005	3.42	No Standard	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.003	0.005	1.12	No Standard	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR	-	-	-	3.91	No Standard	0-10	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.003	0.005	5.89	No Standard	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chlorite	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method: STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen	mg/L	-	0.1	6.7	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

Guideline : Guideline (1) : 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).

Guideline (2) : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

Sampling By : Nannat thannasaro vsttduanv 7-323-a-9477, Panupong Manit vsttduanv 7-204-a-8600

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

Approved by
Savitree N.
Savitree Nonsangam
Manager

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1310-947 (MAL)

S:\Report\MAL_Jul_2023\1-30979



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

TESTING
No.0042
Lot ID: 23107358

Date Received : Oct 04, 2023

Date Reported : Oct 12, 2023

Report Number : 2774985-1

Page 1 of 2

Sample Number	23107358-1
Sampled Date	Oct 04, 2023 10:12 AM
Sample Description	Wastewater
Location	uabn'waaflu
Date Analysis Commenced	Oct 04, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210-B, part 4500-O-G	Rayong
Color (at Original pH)	ADMI	-	5	17	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120-F	Rayong
Color (at pH 7.0)	ADMI	-	5	16	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120-F	Rayong
pH at 25 degree C *	-	-	-	7.6	5.5-9.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.9	≤40	≤34	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550-B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	764	≤3000	≤1300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540-C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540-D	Rayong

Guideline : Guideline (1) : 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).

Guideline (2) : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

Sampling By : Surawit Narongvong vsttduanv 7-323-a-0011, Smart Khumplee vsttduanv 7-204-a-7830

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

Approved by
N. Bangphit
Narumon Banchoangkit
Supervisor
vsttduanv 7-323-a-9445

Approved by
D. Chongchuan
Dej Chongchuan
Senior Manager
vsttduanv 7-323-a-9442

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

1310-947 (MAL)

S:\Report\MAL_Jul_2023\1-30979



Analysis / Test Report

NO.0042
Lot ID: 23107358
Date Received : Oct 04, 2023
Date Reported : Oct 12, 2023
Report Number : 2774985-1

Client : Gulf T53 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name :Monitoring EIA
Project Location :GT53

Page 2 of 2

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

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

Approved by

N. Banphit

Narumon Banchoangkit

D. Phum.

Dej Chiangdon

•

Technical Manuscript

Technical Management Approved by Dej Changthong Narumon Banchongkit

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ORATORY GROUP (THAILAND) CO., LTD. An ALS Limited



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTSS

TESTING

No.0042
Lot ID: 23125311

Date Received : Nov 01, 2023

Date Reported : Nov 09, 2023

Report Number : 2818077-1

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTSS

Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTSS

TESTING

No.0042
Lot ID: 23125311

Date Received : Nov 01, 2023

Date Reported : Nov 09, 2023

Report Number : 2818077-1

Page 1 of 2

Page 2 of 2

Sample Number	23125311-1
Sample Date	Nov 01, 2023 9:55 AM
Sample Description	Wastewater
Location	วามันไพร่าณ
Date Analysis Commenced	Nov 01, 2023
Condition of Sample	Combined in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210-B, part 4590 - O-G	Rayong
Color (at Original pH)	ADMI	-	5	19	≤100	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120-F	Rayong
Color (at pH 7.0)	ADMI	-	5	17	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120-F	Rayong
pH at 25 degrees C *	-	-	-	8.3	5.5-9.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.9	≤40	≤34	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550-B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	892	≤3000	≤1300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540-C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540-D	Rayong

Guideline : Guideline (1) : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resources 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.

Sampling By : Narinatt thammassaro วิธนาถ ธรรมสาร วิ-323-9-9477, Panupong Manit วิธนาถ 3-204-9-8600

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
วิธนาถ 3-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
วิธนาถ 3-323-9-9442

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
วิธนาถ 3-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
วิธนาถ 3-323-9-9442

The above results are valid only for the analytical method(s) indicated in this report. Any report for additional test(s) requested in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) Private Limited. This report is not reproduced except in full.
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Analysis / Test Report

TESTING

Client : Gulf T33 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23125311
Date Received : Nov 01, 2023
Date Reported : Nov 09, 2023
Report Number : 2818077-2

Client : Gulf T33 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-1

Page 1 of 1

Page 1 of 2

Sample Number	23125311-1
Sample Date	Nov 01, 2023 9:55 AM
Sample Description	Wastewater
Location	พื้นที่ขุดลอก
Date Analysis Commenced	Nov 02, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium *	mg/L	0.003	0.005	5.11	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	1.44	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	3.51	No Standard	0-10	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	6.35	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chloride *	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1995, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.2	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 1900 C (C)	Rayong

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf T33 Co., Ltd.

Sampling By : Nanarat Thammassaro รหัสผู้ตรวจ 323-9-9477 , Panupong Manit รหัสผู้ตรวจ 204-9-8600

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

Approved by

Sawitree N.
Manager

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Analysis / Test Report

TESTING

Client : Gulf T33 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-1

Page 1 of 1

Page 1 of 2

Sample Number	23135892-1
Sample Date	Dec 04, 2023 9:40 AM
Sample Description	Wastewater
Location	พื้นที่ขุดลอก
Date Analysis Commenced	Dec 04, 2023
Condition of Sample	Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Color (at Original pH)	ADMI	-	5	15	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	15	≤300	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
pH at 25 degree C *	-	-	-	8.4	5.5-9.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (H)	Rayong
Temperature *	Degree C	-	-	30.4	≤40	≤34	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	844	≤3000	≤1300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf T33 Co., Ltd.

Sampling By : Nanarat Thammassaro รหัสผู้ตรวจ 323-9-9477 , Panupong Manit รหัสผู้ตรวจ 204-9-8600

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

Approved by

N. Banphit
Supervisor
รหัสผู้ตรวจ 323-9-9445

Approved by

Dej Changchon
Senior Manager
รหัสผู้ตรวจ 323-9-9442

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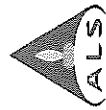
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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0042
Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-1



Page 2 of 2

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

Page 1 of 1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0009
Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-2



Page 1 of 1

Sample Number 23135892-1
Sampled Date Dec 04, 2023 9:40 AM
Sample Description Wastewater
Location บ้านใหม่พัฒนา
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium	mg/L	0.003	0.005	4.33	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.003	0.005	1.31	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	0.10	4.08	No Standard	0-10	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.003	0.005	6.85	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chloride *	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.1	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 2nd ed., 2017, part 1930-D (C)	Rayong

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Sampling By : Natural thannasaro watthanasari 7-323-9477, Panupong Manit watthanasari 7-204-8600

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

Chanatt L.

Chanattagarn Indrom
Section Head

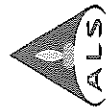
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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0042
Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-1



Page 2 of 2

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

Page 1 of 1

Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

TESTING
No.0009
Lot ID: 23135892
Date Received : Dec 04, 2023
Date Reported : Dec 13, 2023
Report Number : 2842271-2



Page 1 of 1

Sample Number 23135892-1
Sampled Date Dec 04, 2023 9:40 AM
Sample Description Wastewater
Location บ้านใหม่พัฒนา
Date Analysis Commenced Dec 06, 2023
Condition of Sample Contained in one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Calcium	mg/L	0.003	0.005	4.33	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium	mg/L	0.003	0.005	1.31	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	0.10	4.08	No Standard	0-10	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium	mg/L	0.003	0.005	6.85	No Standard	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing								
Chloride *	mg/L	0.05	0.1	Not Detected	No Standard	≤1.0	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.1	No Standard	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 2nd ed., 2017, part 1930-D (C)	Rayong

Guideline : Guideline (1) : 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).
Guideline (2) : Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
Sampling By : Natural thannasaro watthanasari 7-323-9477, Panupong Manit watthanasari 7-204-8600

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

Results apply to the sample(s) as submitted, unless the sample(s) was/were conducted by ALS Laboratory Group (Thailand) Public Co., Ltd. and this report is not reproduced except in full. This report is not valid without the original sample(s).

Approved by

Dej Chongchon

Senior Manager

N. Banphit

Narumon Banthongkit
Supervisor

7-323-9442

7-323-9445

ADDRESS 104 Phurthanan 40, Phatthananan Rd., Khwaeng Phatthananan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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ภาคผนวก ค-6

คุณภาพน้ำผิวดิน



Analysis / Test Report

TESTING
No.0042
Lot ID: 23107360

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

Analysis / Test Report

TESTING
No.0042
Lot ID: 23107360

Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 1 of 12

Sample Number	23107360-1
Sampled Date	Oct 18, 2023 9:40 AM
Sample Description	Surface water
Location	หน้าพื้นที่อุตสาหกรรม 200 units
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Calcium *	mg/L	0.003	0.005	0.28	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.15	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *		-	-	0.63	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	0.29	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	3.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chloride *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	6.5	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 O (C)	Rayong
pH at 25 degrees C		-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

D. Chanchon
Dej Chanchon
Senior Manager

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1340-611 (TML)

S. Wipatun, LAB. CLERK (7.2AM)



Analysis / Test Report

TESTING
No.0042
Lot ID: 23107360

Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 2 of 12

Sample Number	23107360-1
Sampled Date	Oct 18, 2023 9:40 AM
Sample Description	Surface water
Location	หน้าพื้นที่อุตสาหกรรม 200 units
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	31.7	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	81	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	11	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

1: Change from Natural condition not more than 3 degree C

Sampling By : Surawit Nitropong

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

D. Chanchon
Dej Chanchon
Senior Manager

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

1340-611 (TML)

S. Wipatun, LAB. CLERK (7.2AM)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 3 of 12

Sample Number	23107360-2
Sample Date	Oct 18, 2023 10:15 AM
Sample Description	Surface water
Location	แนวสัดน้ำด้านหน้ารั้วด้าน 200 เมตร
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Calcium *	mg/L	0.003	0.005	0.96	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.37	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	0.91	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	0.74	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2210 B, part 4500 - G C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	8.2	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

D. Changchon
Dej Changchon
Senior Manager

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RIGHT SOLUTIONS RIGHT PEOPLE

13400-611 EHAEL

S. Weerapong, M. Chaiyapattana



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 4 of 12

Sample Number	23107360-2
Sample Date	Oct 18, 2023 10:15 AM
Sample Description	Surface water
Location	แนวสัดน้ำด้านหน้ารั้วด้าน 200 เมตร
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.1	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	170	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	14	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampling By : Surawit Nampong

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

Approved by

D. Changchon
Dej Changchon
Senior Manager

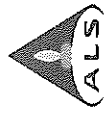
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13400-611 EHAEL

S. Weerapong, M. Chaiyapattana



Analysis / Test Report

TESTING

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GTSS

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuk Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GTSS

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 5 of 12

Sample Number	23107360-3
Sampled Date	Oct 18, 2023 10:35 AM
Sample Description	Surface water
Location	ภายในพื้นที่โรงงานอุตสาหกรรม 200 เมตร
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium *	mg/L	0.003	0.005	1.43	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.42	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	2.19	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	2.11	No Standard	In-house method: STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	2.7	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method: STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.7	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.7	5.0-9.0	In-house method: STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

D. Chongchuan
Dej Chongchuan
Senior Manager

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13109-817 (PHIL)

S. Wipatanakul (T. 22499)

Page 6 of 12

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.8	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	350	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	15	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n: Change from Natural condition not more than 3 degree C
Sampling By : Surawit Narapong

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

Approved by

D. Chongchuan
Dej Chongchuan
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ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13109-817 (PHIL)

S. Wipatanakul (T. 22499)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

TESTING
No.0042
Lot ID: 23107360

Date Received : Oct 18, 2023

Date Reported : Oct 27, 2023

Report Number : 2774986-1

Page 7 of 12

Sample Number	23107360-4
Sample Date	Oct 18, 2023 10:50 AM
Sample Description	Surface water
Location	หน้าประตูน้ำเขื่อนจุฬาภรณ์ 200 เมตร
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Calcium *	mg/L	0.003	0.005	1.22	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.41	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	1.53	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	1.38	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	<2.0	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 01-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.9	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

D. Chongchon

Dej Chongchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13199-61/PALE

S. Kongsuwan Co. (P) 22499



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong

Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GT53

TESTING
No.0042
Lot ID: 23107360

Date Received : Oct 18, 2023

Date Reported : Oct 27, 2023

Report Number : 2774986-1

Page 8 of 12

Sample Number	23107360-4
Sample Date	Oct 18, 2023 10:50 AM
Sample Description	Surface water
Location	หน้าประตูน้ำเขื่อนจุฬาภรณ์ 200 เมตร
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.7	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	244	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	60	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampling By : Surawit Narong

Remark :

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

Approved by

D. Chongchon

Dej Chongchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13199-61/PALE

S. Kongsuwan Co. (P) 22499



Analysis / Test Report

TESTING
No.0042
Lot ID: 23107360

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GTSS3

Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 9 of 12

Sample Number	23107360-5
Sampled Date	Oct 18, 2023 11:15 AM
Sample Description	Surface water
Location	ส่วนที่ 1 ของพื้นที่โครงการท่าเรืออุตสาหกรรมมาบตาพุด ระยะที่ 2 นอ.
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Calcium *	mg/L	0.003	0.005	0.86	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.29	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	1.52	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	1.15	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	2.8	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 01-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	9.5	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.9	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

Dej Changchong
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13105-01/ (THAI)

S. Wapornchai, CH. J. P. 17/20/09



Analysis / Test Report

TESTING
No.0042
Lot ID: 23107360

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasil, Pluak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location: GTSS3

Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 10 of 12

Sample Number	23107360-5
Sampled Date	Oct 18, 2023 11:15 AM
Sample Description	Surface water
Location	ส่วนที่ 1 ของพื้นที่โครงการท่าเรืออุตสาหกรรมมาบตาพุด ระยะที่ 2 นอ.
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	32.0	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	182	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	12	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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

Sampling By : Surawit Nareponing

Remark :

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

Approved by

Dej Changchong
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13105-01/ (THAI)

S. Wapornchai, CH. J. P. 17/20/09



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 11 of 12

Sample Number	23107360-6
Sample Date	Oct 18, 2023 11:35 AM
Sample Description	Surface water
Location	ท่าเรืออุตสาหกรรมมาบตาพุด ระยะที่ 4 นู
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Calcium *	mg/L	0.003	0.005	0.87	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Magnesium *	mg/L	0.003	0.005	0.29	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
SAR *	-	-	-	1.54	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Sodium *	mg/L	0.003	0.005	1.17	No Standard	In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7	Bangkok
Water Testing							
BOD *	mg/L	-	2	3.7	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
Chlorite *	mg/L	0.05	0.1	Not Detected	No Standard	In-house method : STM 04-061 based on United States Environmental Protection Agency, 1999, EPA Method 300.1	Bangkok
Dissolved Oxygen *	mg/L	-	0.1	7.9	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	9.0	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Approved by

D. Chongchon

Dej Chongchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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13450 617 EMAIL

S. Sreemathi, M. G. (17 2249)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong
Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GT53

TESTING
No.0042
Lot ID: 23107360
Date Received : Oct 18, 2023
Date Reported : Oct 27, 2023
Report Number : 2774986-1

Page 12 of 12

Sample Number	23107360-6
Sample Date	Oct 18, 2023 11:35 AM
Sample Description	Surface water
Location	ท่าเรืออุตสาหกรรมมาบตาพุด ระยะที่ 4 นู
Date Analysis Commenced	Oct 18, 2023
Condition of Sample	Contained in four plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	32.1	Not Change from natural condition	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	184	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	10	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
n° Change from Natural condition not more than 3 degree C
Sampling By : Suravit Narapong

Remark :

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

Approved by

D. Chongchon

Dej Chongchon
Senior Manager

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S. Sreemathi, M. G. (17 2249)

ภาคผนวก ค-7

ระดับเสียงภายในสถานประกอบการ



Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755378-1

P/O :
Project Name : Monitoring EIA
Project Location : GT53

Page 1 of 1

Sample Number	2375488-1				
Parameter	Noise (Leq 8 hrs.)				
Location	ด้าน Cooling Tower				
Measurement Date	Aug 18, 2023				
Measurement by	Jaradrawee Srinuksa				
Time		Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:53 AM - 10:53 AM		78.4	79.3	78.3	
10:53 AM - 11:53 AM		78.3	78.8	78.1	
11:53 AM - 12:53 PM		78.1	78.7	78.0	
12:53 PM - 01:53 PM		78.0	78.6	77.9	
01:53 PM - 02:53 PM		77.9	78.6	77.8	
02:53 PM - 03:53 PM		77.9	78.5	77.7	
03:53 PM - 04:53 PM		77.9	78.5	77.8	
04:53 PM - 05:53 PM		78.0	78.7	77.9	

Technical Management : Thanitak. Scientist (4)

Approved by : Supt S. Supt Salameh Section Head

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1336-61/ ENVI

S. Veporn_Lar Nosa m (11 254M)



Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755379-1

P/O :
Project Name : Monitoring EIA
Project Location : GT53

Page 1 of 1

Sample Number	2376488-2			
Parameter	Noise (Leq 8 hrs.)			
Location	u82nu Boiler Feed Pump			
Measurement Date	Aug 18, 2023			
Measurement by	Jaredrawee Srinuksa			
	Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
	09:15 AM - 10:15 AM	79.3	82.7	78.9
	10:15 AM - 11:15 AM	79.2	81.4	79.0
	11:15 AM - 12:15 PM	79.2	82.5	79.0
	12:15 PM - 01:15 PM	79.2	81.5	79.0
	01:15 PM - 02:15 PM	79.2	81.6	79.0
	02:15 PM - 03:15 PM	79.2	83.5	79.0
	03:15 PM - 04:15 PM	79.3	81.2	79.0
	04:15 PM - 05:15 PM	79.4	81.4	79.2

Technical Management : Thanitak. Scientist (4)

Approved by : Supt S. Supt Salameh Section Head

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S. Veporn_Lar Nosa m (11 254M)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluk Daeng, Rayong Thailand 21140
Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755380-1

P/O :
Project Name : Monitoring EIA
Project Location : GT53

Page 1 of 1

Sample Number	2376488-3
Parameter	Noise (Leq 8 hrs.)
Location	ภายใน Gas Melting
Measurement Date	Aug 18, 2023
Measurement by	Jaradrawee Sirukea
Time	
09:29 AM - 10:29 AM	63.9
10:29 AM - 11:29 AM	63.8
11:29 AM - 12:29 PM	63.5
12:29 PM - 01:29 PM	63.4
01:29 PM - 02:29 PM	63.6
02:29 PM - 03:29 PM	63.4
03:29 PM - 04:29 PM	63.2
04:29 PM - 05:29 PM	63.3
Leq Average 8 hrs. (dB(A))	63.5
Lmax (dB(A))	74.8
Standard (dB(A))	85
Reference Method : ISO1996-1 and 1996-2	
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.	
ใช้มาตรฐานการประเมินผลกระทบสิ่งแวดล้อมโรงงานอุตสาหกรรม	
ตามประกาศกระทรวงอุตสาหกรรมว่าด้วยการประเมินผลกระทบจากโรงงาน	



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluk Daeng, Rayong Thailand 21140
Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755381-1

P/O :
Project Name : Monitoring EIA
Project Location : GT53

Page 1 of 1

Sample Number	2376488-4
Parameter	Noise (Leq 8 hrs.)
Location	ภายใน Gas Turbine Accessories System (ภายในอาคาร GTG 11 use GTG12)
Measurement Date	Aug 18, 2023
Measurement by	Jaradrawee Sirukea
Time	
10:00 AM - 11:00 AM	77.3
11:00 AM - 12:00 PM	77.4
12:00 PM - 01:00 PM	77.4
01:00 PM - 02:00 PM	77.1
02:00 PM - 03:00 PM	77.3
03:00 PM - 04:00 PM	77.1
04:00 PM - 05:00 PM	77.1
05:00 PM - 06:00 PM	77.1
Leq Average 8 hrs. (dB(A))	77.2
Lmax (dB(A))	82.0
Standard (dB(A))	140
Reference Method : ISO1996-1 and 1996-2	
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.	
ใช้มาตรฐานการประเมินผลกระทบสิ่งแวดล้อมโรงงานอุตสาหกรรม	
ตามประกาศกระทรวงอุตสาหกรรมว่าด้วยการประเมินผลกระทบจากโรงงาน	

Technical Management

Tharitat.

Tharita Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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S Report_Air Noise rpt (11.2544)

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S Report_Air Noise rpt (11.2544)

Technical Management

Tharitat.

Tharita Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
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S Report_Air Noise rpt (11.2544)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755382-1

Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755383-1

Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	2376488-5
Parameter	Noise (Leq 8 hrs.)
Location	ใกล้ Steam Turbine Lube Oil Skid
Measurement Date	Aug 18, 2023
Measurement by	Jaradrawee Sinuksa
Time	
10:19 AM - 11:19 AM	82.6
11:19 AM - 12:19 PM	82.7
12:19 PM - 01:19 PM	82.4
01:19 PM - 02:19 PM	82.2
02:19 PM - 03:19 PM	82.4
03:19 PM - 04:19 PM	82.3
04:19 PM - 05:19 PM	82.3
05:19 PM - 06:19 PM	82.1
Leq Average 8 hrs. (dB(A))	82.4
Lmax (dB(A))	84.3
Standard (dB(A))	85
Reference Method : ISO1996-1 and 1996-2	
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.	
หมายเหตุ: ผลการวัดค่าเสียงที่ได้จากการวัดค่าเสียงตามมาตรฐาน ISO 1996-1 และ 1996-2	

ผลการวัดค่าเสียงที่ได้จากการวัดค่าเสียงตามมาตรฐาน ISO 1996-1 และ 1996-2

Technical Management

Tharitat.

Approved by

Supt S.

Thantia Kulsumwong
Scientist (4)

Supot Salameh
Section Head

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S Reports_Air Noise (21.28AM)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755383-1

Lot ID: 2376488
Date Received : Aug 21, 2023
Date Reported : Aug 24, 2023
Report Number: 2755383-1

Project Name : Monitoring EIA
Project Location : GTS3

Page 1 of 1

Sample Number	2376488-6
Parameter	Noise (Leq 8 hrs.)
Location	ใกล้ Steam Turbine Lube Oil Skid
Measurement Date	Aug 18, 2023
Measurement by	Jaradrawee Sinuksa
Time	
09:42 AM - 10:42 AM	72.9
10:42 AM - 11:42 AM	72.8
11:42 AM - 12:42 PM	72.4
12:42 PM - 01:42 PM	72.6
01:42 PM - 02:42 PM	72.7
02:42 PM - 03:42 PM	72.6
03:42 PM - 04:42 PM	72.8
04:42 PM - 05:42 PM	72.7
Leq Average 8 hrs. (dB(A))	72.7
Lmax (dB(A))	76.1
Standard (dB(A))	85
Reference Method : ISO1996-1 and 1996-2	
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.	
หมายเหตุ: ผลการวัดค่าเสียงที่ได้จากการวัดค่าเสียงตามมาตรฐาน ISO 1996-1 และ 1996-2	

ผลการวัดค่าเสียงที่ได้จากการวัดค่าเสียงตามมาตรฐาน ISO 1996-1 และ 1996-2

Technical Management

Tharitat.

Approved by

Supt S.

Thantia Kulsumwong
Scientist (4)

Supot Salameh
Section Head

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S Reports_Air Noise (21.28AM)



Analysis / Test Report

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTSS

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842124-1

Page 1 of 1

Sample Number	23125275-1
Parameter	Noise (Leq 8 hrs.)
Location	อุโมงค์ Cooling Tower
Measurement Date	Nov 15, 2023
Measurement by	Thitipong Buddheng

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:21 AM - 10:21 AM	78.7	84.9	78.4
10:21 AM - 11:21 AM	78.5	80.0	78.4
11:21 AM - 12:21 PM	78.5	79.1	78.4
12:21 PM - 01:21 PM	83.0	97.7	78.4
01:21 PM - 02:21 PM	78.6	79.1	78.4
02:21 PM - 03:21 PM	78.6	79.2	78.5
03:21 PM - 04:21 PM	78.7	79.2	78.5
04:21 PM - 05:21 PM	79.1	79.6	78.9
Leq Average 8 hrs. (dB(A))	79.5		
Lmax (dB(A))	97.7		
Standard (dB(A))	85		

Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.
ใช้มาตรฐานการประเมินผลกระทบสิ่งแวดล้อม (EIA) ของกรมทรัพยากรธรรมชาติและสิ่งแวดล้อม
ตามประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2562



Analysis / Test Report

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTSS

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842125-1

Page 1 of 1

Sample Number	23125275-2
Parameter	Noise (Leq 8 hrs.)
Location	อุโมงค์ Boiler Feed Pump
Measurement Date	Nov 15, 2023
Measurement by	Thitipong Buddheng

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:57 AM - 10:57 AM	81.6	86.1	80.0
10:57 AM - 11:57 AM	80.4	86.2	79.7
11:57 AM - 12:57 PM	80.0	87.9	79.4
12:57 PM - 01:57 PM	79.7	80.9	79.3
01:57 PM - 02:57 PM	79.6	81.1	79.3
02:57 PM - 03:57 PM	79.8	80.8	79.4
03:57 PM - 04:57 PM	79.9	81.7	79.6
04:57 PM - 05:57 PM	79.7	81.5	79.4
Leq Average 8 hrs. (dB(A))	80.1		
Lmax (dB(A))	87.9		
Standard (dB(A))	85		

Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.
ใช้มาตรฐานการประเมินผลกระทบสิ่งแวดล้อม (EIA) ของกรมทรัพยากรธรรมชาติและสิ่งแวดล้อม
ตามประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2562

Technical Management

Tharitat.

Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supt. Salameh
Section Head

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

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Thantia Kulsurwong
Scientist (4)

Approved by

Supt S.

Supt. Salameh
Section Head

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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842126-1

Page 1 of 1

Sample Number	23125275-3
Parameter	Noise (Leq 8 hrs.)
Location	พื้นที่ Gas Metering
Measurement Date	Nov 15, 2023
Measurement by	Thilpong Budaeng

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:02 AM - 11:02 AM	65.2	72.8	64.5
11:02 AM - 12:02 PM	64.9	69.9	64.2
12:02 PM - 01:02 PM	64.1	72.7	62.6
01:02 PM - 02:02 PM	64.6	70.4	64.1
02:02 PM - 03:02 PM	65.0	80.5	64.3
03:02 PM - 04:02 PM	65.1	81.2	64.2
04:02 PM - 05:02 PM	65.3	75.2	64.6
05:02 PM - 06:02 PM	65.1	80.6	64.4

Leq Average 8 hrs. (dB(A))
Lmax (dB(A))
Standard (dB(A))
Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
พื้นที่ Gas Metering (พื้นที่วัดเสียง)
วันที่ 15 พฤศจิกายน 2566

Technical Management

Tharitat.

Thantia Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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S Reports/ Air Noise rpt (117PM)



Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842127-1

Page 1 of 1

Sample Number	23125275-4
Parameter	Noise (Leq 8 hrs.)
Location	พื้นที่ Gas Turbine Accessories System (ใกล้ประตูทางขึ้น GTG 11 unit GTG12)
Measurement Date	Nov 15, 2023
Measurement by	Thilpong Budaeng

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:01 AM - 10:01 AM	77.4	79.1	76.8
10:01 AM - 11:01 AM	76.7	78.3	76.2
11:01 AM - 12:01 PM	76.2	78.2	75.7
12:01 PM - 01:01 PM	76.0	77.2	75.5
01:01 PM - 02:01 PM	75.8	77.1	75.5
02:01 PM - 03:01 PM	76.1	77.9	75.8
03:01 PM - 04:01 PM	76.7	78.1	76.2
04:01 PM - 05:01 PM	77.2	78.9	76.6

Leq Average 8 hrs. (dB(A))
Lmax (dB(A))
Standard (dB(A))
Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TS3 Co., Ltd.
พื้นที่ Gas Turbine Accessories System (ใกล้ประตูทางขึ้น GTG 11 unit GTG12)
วันที่ 15 พฤศจิกายน 2566

Technical Management

Tharitat.

Thantia Kulsumwong
Scientist (4)

Approved by

Supt S.

Supot Salameh
Section Head

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

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842128-1

Page 1 of 1

Sample Number	23125275-5			
Parameter	Noise (Leq 8 hrs.)			
Location	ใกล้ Steam Turbine Generator			
Measurement Date	Nov 15, 2023			
Measurement by	Thirapong Buadeng			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:00 AM - 10:00 AM	84.1	94.5	82.4	
10:00 AM - 11:00 AM	84.3	94.7	82.6	
11:00 AM - 12:00 PM	83.0	93.9	81.2	
12:00 PM - 01:00 PM	82.3	84.9	81.6	
01:00 PM - 02:00 PM	82.2	85.0	81.6	
02:00 PM - 03:00 PM	82.4	85.1	81.7	
03:00 PM - 04:00 PM	82.1	84.4	81.6	
04:00 PM - 05:00 PM	82.6	85.3	81.9	

Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.
ใช้เกณฑ์การรายงานผลตามมาตรฐาน ISO1996-1 และ ISO1996-2
ผลการวัดค่าเสียงตามเกณฑ์มาตรฐานที่กำหนดไว้

Supot Salameh
Section Head

Tharita Kulsinwong
Scientist (4)

Approved by

Technical Management

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

Client: Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O : 4210402483
Project Name : Monitoring EIA
Project Location : GTS3

Lot ID: 23125275
Date Received : Nov 16, 2023
Date Reported : Nov 21, 2023
Report Number: 2842129-1

Page 1 of 1

Sample Number	23125275-6			
Parameter	Noise (Leq 8 hrs.)			
Location	ใกล้ Steam Turbine Lubr Oil Skid			
Measurement Date	Nov 15, 2023			
Measurement by	Thirapong Buadeng			
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))	
09:53 AM - 10:53 AM	75.3	80.3	73.7	
10:53 AM - 11:53 AM	74.0	77.9	73.3	
11:53 AM - 12:53 PM	73.5	80.5	71.8	
12:53 PM - 01:53 PM	72.9	76.8	71.9	
01:53 PM - 02:53 PM	72.9	76.2	71.9	
02:53 PM - 03:53 PM	73.3	76.7	72.1	
03:53 PM - 04:53 PM	73.2	76.5	72.4	
04:53 PM - 05:53 PM	73.0	76.3	72.0	

Reference Method : ISO1996-1 and 1996-2
Standard : Environmental Impact Assessment Report of Gulf TSS Co., Ltd.
ใช้เกณฑ์การรายงานผลตามมาตรฐาน ISO1996-1 และ ISO1996-2
ผลการวัดค่าเสียงตามเกณฑ์มาตรฐานที่กำหนดไว้

Tharita Kulsinwong
Scientist (4)

Supot Salameh
Section Head

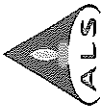
Approved by

Technical Management

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ภาคผนวก ค-8

ความร้อนภายในสถานประกอบการ



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Phrak Daeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 2376489

Date Received : Aug 21, 2023

Date Reported : Aug 24, 2023

Report Number: 2702180-1

Page 1 of 4

Sample Number	2376489-1
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Aug 18, 2023
Measurement by	Natakam Yongjinyoo
Location	เบี่ยงซ้าย 1 ชั้น (ค่า-ความกดอากาศ : - เมตร : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Condenser Exhaust Unit	120	31.2	28.7	37.4	36.5
Average (WBGT)		31.2			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Phrak Daeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 2376489

Date Received : Aug 21, 2023

Date Reported : Aug 24, 2023

Report Number: 2702180-1

Page 2 of 4

Sample Number	2376489-2
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Aug 18, 2023
Measurement by	Natakam Yongjinyoo
Location	เบี่ยงซ้าย 1 ชั้น (ค่า-ความกดอากาศ : - เมตร : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณห้องเครื่อง	120	29.8	26.5	37.6	37.0
Average (WBGT)		29.8			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot Salameh
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTSS

Lot ID: 2376489

Date Received : Aug 21, 2023

Date Reported : Aug 24, 2023

Report Number: 2702180-1

Page 4 of 4

Sample Number	2376489-4
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Aug 18, 2023
Measurement by	Natakan Vongjinyoo
Location	บริเวณประตู 1 หน้า (ด้านหน้าประตู) : - อุณหภูมิ : -

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Gas Turbine	120	28.6	25.7	35.6	35.0
Average (WBGT)		28.6			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supt. Salamat
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Pluak Daeng,
Rayong Thailand 21140

P/O :

Project Name : Monitoring EIA

Project Location : GTSS

Lot ID: 2376489

Date Received : Aug 21, 2023

Date Reported : Aug 24, 2023

Report Number: 2702180-1

Page 3 of 4

Sample Number	2376489-3
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Aug 18, 2023
Measurement by	Natakan Vongjinyoo
Location	บริเวณประตู 1 หน้า (ด้านหน้าประตู) : - อุณหภูมิ : -

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณ Generator	120	29.0	26.1	36.2	35.0
Average (WBGT)		29.0			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supt. Salamat
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Phrak Daeng,
Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125281

Date Received : Nov 16, 2023

Date Reported : Nov 20, 2023

Report Number: 2818016-1

Page 1 of 4

Sample Number	23125281-1				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Nov 15, 2023				
Measurement by	Annat Wongsakhe				
Location	ตู้คอนเดนเซอร์ 1 หน่วย (ด้านหน้าอาคาร : - นาน : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
ตู้คอนเดนเซอร์ Exhaust Unit	120	30.1	26.6	38.4	37.6

Average (WBGT)
Guideline WBGT (°C)

30.1
34.0

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot S.

Supot Salameeh
Section Head

Approved by

Wichan Chonharat

Wichan Chonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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S. Reports_Air Heat (10/20/24)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasit, Phrak Daeng,
Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125281

Date Received : Nov 16, 2023

Date Reported : Nov 20, 2023

Report Number: 2818016-1

Page 2 of 4

Sample Number	23125281-2				
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)				
Measurement Date	Nov 15, 2023				
Measurement by	Annat Wongsakhe				
Location	ตู้คอนเดนเซอร์ 1 หน่วย (ด้านหน้าอาคาร : - นาน : -)				
Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
ตู้คอนเดนเซอร์ Exhaust Unit	120	29.4	26.3	36.7	36.2

Average (WBGT)
Guideline WBGT (°C)

29.4
34.0

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supot S.

Supot Salameeh
Section Head

Approved by

Wichan Chonharat

Wichan Chonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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13430-61 / ENAIL

S. Reports_Air Heat (10/20/24)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng,
Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125281

Date Received : Nov 16, 2023

Date Reported : Nov 20, 2023

Report Number: 2818016-1

Page 4 of 4

Sample Number	23125281-4
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Nov 15, 2023
Measurement by	Amnat Wongsakhe
Location	อุปกรณ์ 1 หน่วย (ค่าอุณหภูมิ : - อุณหภูมิ : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อุปกรณ์ Gas Turbine	120	29.7	27.4	35.5	34.2
Average (WBGT)		29.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salameh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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S. Viroon, Air Mail ref (10 2849)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.

224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng,
Rayong Thailand 21140

P/O : 4210402483

Project Name : Monitoring EIA

Project Location : GTS3

Lot ID: 23125281

Date Received : Nov 16, 2023

Date Reported : Nov 20, 2023

Report Number: 2818016-1

Page 3 of 4

Sample Number	23125281-3
Parameter	Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
Measurement Date	Nov 15, 2023
Measurement by	Amnat Wongsakhe
Location	อุปกรณ์ 1 หน่วย (ค่าอุณหภูมิ : - อุณหภูมิ : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อุปกรณ์ Generator	120	30.1	27.2	37.4	36.2
Average (WBGT)		30.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management

Supt S.

Supot Salameh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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ภาคผนวก ค-9

แสงสว่างภายในสถานประกอบการ



Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Project Name : Monitoring EIA
Report Number: 2375088 (1)-1
Project Location: GTS3

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Comment
						Spot	Illuminance (Lux)	Guideline Limit	
						Average	Spot/Min	Average	
1	Spot : Administration Building : 1st Floor : 1st Admin. 1	2375088 (1)-1	18-Aug-23	Day time	1	719	-	300-400	Pass
2	Spot : Administration Building : 1st Floor : 1st Admin. 1	2375088 (1)-2	18-Aug-23	Day time	1	422	-	400-500	Pass
3	Spot : Administration Building : 1st Floor : 1st Admin. 2	2375088 (1)-3	18-Aug-23	Day time	1	433	-	400-500	Pass
4	Spot : Administration Building : 1st Floor : 1st Operation Manager	2375088 (1)-4	18-Aug-23	Day time	1	474	-	400-500	Pass
5	Spot : Administration Building : 1st Floor : 1st EHS	2375088 (1)-5	18-Aug-23	Day time	1	745	-	400-500	Pass
6	Spot : Administration Building : 1st Floor : 1st EHS Manager	2375088 (1)-6	18-Aug-23	Day time	1	844	-	400-500	Pass
7	Spot : Administration Building : 1st Floor : 1st Admin. Manager	2375088 (1)-7	18-Aug-23	Day time	1	440	-	400-500	Pass
8	Spot : Administration Building : 1st Floor : 1st Plant Manager	2375088 (1)-8	18-Aug-23	Day time	1	439	-	400-500	Pass
9	Spot : Administration Building : 1st Floor : 1st IT	2375088 (1)-9	18-Aug-23	Day time	1	407	-	400-500	Pass
10	Spot : Administration Building : 1st Floor : 1st Admin. 1	2375088 (1)-10	18-Aug-23	Day time	1	533	-	400-500	Pass
11	Spot : Administration Building : 1st Floor : 1st Admin. 2	2375088 (1)-11	18-Aug-23	Day time	1	452	-	400-500	Pass
12	Area : Administration Building : 1st Floor : 1st Admin	2375088 (1)-12	18-Aug-23	Day time	1	340	318	50	100
		2375088 (1)-13	18-Aug-23	Day time	2	411			
		2375088 (1)-14	18-Aug-23	Day time	3	480			
		2375088 (1)-15	18-Aug-23	Day time	4	245			
		2375088 (1)-16	18-Aug-23	Day time	5	190			
		2375088 (1)-17	18-Aug-23	Day time	6	244			
13	Area : Administration Building : 1st Floor : 1st Admin. 1	2375088 (1)-18	18-Aug-23	Day time	1	710	741	150	300
		2375088 (1)-19	18-Aug-23	Day time	2	772			

Technical Management: *Supot S.* Supot Salantich Section Head
Approved by: *Nichan C.* Nichan Choonharat Assistant Manager

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Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Project Name : Monitoring EIA
Report Number: 2375088 (1)-1
Project Location: GTS3

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Comment
						Spot	Illuminance (Lux)	Guideline Limit	
						Average	Spot/Min	Average	
15	Area : Administration Building : 1st Floor : 1st Admin. 1	2375088 (1)-20	18-Aug-23	Day time	1	300	362	150	300
		2375088 (1)-21	18-Aug-23	Day time	2	319			
		2375088 (1)-22	18-Aug-23	Day time	3	317			
		2375088 (1)-23	18-Aug-23	Day time	4	400			
		2375088 (1)-24	18-Aug-23	Day time	5	452			
		2375088 (1)-25	18-Aug-23	Day time	6	411			
		2375088 (1)-26	18-Aug-23	Day time	7	400			
		2375088 (1)-27	18-Aug-23	Day time	8	359			
		2375088 (1)-28	18-Aug-23	Day time	9	327			
		2375088 (1)-29	18-Aug-23	Day time	10	316			
		2375088 (1)-30	18-Aug-23	Day time	11	342			
		2375088 (1)-31	18-Aug-23	Day time	12	402			
16	Area : Administration Building : 1st Floor : 1st Admin	2375088 (1)-32	18-Aug-23	Day time	1	606	529	150	300
		2375088 (1)-33	18-Aug-23	Day time	2	532			
		2375088 (1)-34	18-Aug-23	Day time	3	531			
		2375088 (1)-35	18-Aug-23	Day time	4	446			
17	Area : Administration Building : 1st Floor : 1st Admin	2375088 (1)-36	18-Aug-23	Day time	1	412	369	150	300
		2375088 (1)-37	18-Aug-23	Day time	2	365			
		2375088 (1)-38	18-Aug-23	Day time	3	311			
		2375088 (1)-39	18-Aug-23	Day time	4	388			

Measurement by : Nattakorn Vongnyoo

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2561 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management: *Supot S.* Supot Salantich Section Head
Approved by: *Nichan C.* Nichan Choonharat Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (2)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (2)-1

Page 1 of 2

Lay out No.	Location	GTS3				Reference Number	Date	Time	No.	Spot	Illuminance (Lux)		Guideline Limit	Comment
		Average	Spot/Min	Average	Spot/Min						Average	Spot/Min		
1	Area : CCR : Control Building : 1st Floor : Switchgear Room	2375088 (2)-1	18-Aug-23	Day time	1	385	1	385	1	385	352	100	200	Pass
		2375088 (2)-2	18-Aug-23	Day time	2	369	2	369	2	369	352	100	200	Pass
		2375088 (2)-3	18-Aug-23	Day time	3	355	3	355	3	355	352	100	200	Pass
		2375088 (2)-4	18-Aug-23	Day time	4	362	4	362	4	362	352	100	200	Pass
		2375088 (2)-5	18-Aug-23	Day time	5	325	5	325	5	325	352	100	200	Pass
		2375088 (2)-6	18-Aug-23	Day time	6	311	6	311	6	311	352	100	200	Pass
		2375088 (2)-7	18-Aug-23	Day time	7	372	7	372	7	372	352	100	200	Pass
		2375088 (2)-8	18-Aug-23	Day time	8	365	8	365	8	365	352	100	200	Pass
		2375088 (2)-9	18-Aug-23	Day time	9	362	9	362	9	362	352	100	200	Pass
		2375088 (2)-10	18-Aug-23	Day time	10	378	10	378	10	378	352	100	200	Pass
		2375088 (2)-11	18-Aug-23	Day time	11	312	11	312	11	312	352	100	200	Pass
		2375088 (2)-12	18-Aug-23	Day time	12	349	12	349	12	349	352	100	200	Pass
		2375088 (2)-13	18-Aug-23	Day time	13	330	13	330	13	330	352	100	200	Pass
		2375088 (2)-14	18-Aug-23	Day time	14	355	14	355	14	355	352	100	200	Pass
		2375088 (2)-15	18-Aug-23	Day time	15	360	15	360	15	360	352	100	200	Pass
		2375088 (2)-16	18-Aug-23	Day time	16	350	16	350	16	350	352	100	200	Pass
		2375088 (2)-17	18-Aug-23	Day time	17	377	17	377	17	377	352	100	200	Pass
		2375088 (2)-18	18-Aug-23	Day time	18	371	18	371	18	371	352	100	200	Pass
		2375088 (2)-19	18-Aug-23	Night time	1	372	1	372	1	372	345	100	200	Pass
		2375088 (2)-20	18-Aug-23	Night time	2	366	2	366	2	366	345	100	200	Pass
		2375088 (2)-21	18-Aug-23	Night time	3	340	3	340	3	340	345	100	200	Pass
		2375088 (2)-22	18-Aug-23	Night time	4	337	4	337	4	337	345	100	200	Pass
		2375088 (2)-23	18-Aug-23	Night time	5	324	5	324	5	324	345	100	200	Pass
		2375088 (2)-24	18-Aug-23	Night time	6	315	6	315	6	315	345	100	200	Pass
		2375088 (2)-25	18-Aug-23	Night time	7	344	7	344	7	344	345	100	200	Pass
		2375088 (2)-26	18-Aug-23	Night time	8	360	8	360	8	360	345	100	200	Pass
		2375088 (2)-27	18-Aug-23	Night time	9	366	9	366	9	366	345	100	200	Pass
		2375088 (2)-28	18-Aug-23	Night time	10	371	10	371	10	371	345	100	200	Pass
		2375088 (2)-29	18-Aug-23	Night time	11	369	11	369	11	369	345	100	200	Pass
		2375088 (2)-30	18-Aug-23	Night time	12	342	12	342	12	342	345	100	200	Pass
		2375088 (2)-31	18-Aug-23	Night time	13	327	13	327	13	327	345	100	200	Pass
		2375088 (2)-32	18-Aug-23	Night time	14	360	14	360	14	360	345	100	200	Pass
		2375088 (2)-33	18-Aug-23	Night time	15	366	15	366	15	366	345	100	200	Pass
		2375088 (2)-34	18-Aug-23	Night time	16	351	16	351	16	351	345	100	200	Pass
		2375088 (2)-35	18-Aug-23	Night time	17	348	17	348	17	348	345	100	200	Pass
		2375088 (2)-36	18-Aug-23	Night time	18	353	18	353	18	353	345	100	200	Pass

2	Area : CCR : Control Building : 1st Floor : mtaudio	2375088 (2)-37	18-Aug-23	Day time	1	375	1	375	1	375	462	50	100	Pass
		2375088 (2)-38	18-Aug-23	Day time	2	549	2	549	2	549	211	50	100	Pass
		2375088 (2)-39	18-Aug-23	Night time	1	205	1	205	1	205	211	50	100	Pass
		2375088 (2)-40	18-Aug-23	Night time	2	217	2	217	2	217	211	50	100	Pass

Technical Management
Supot Salameh
Section Head

Approved by
Wichan Choonharet
Assistant Manager

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



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (2)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (2)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit	Comment
						Spot	Average		
GT53									
Measurement by : Nattakorn Vonginyoo									
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)									

Technical Management
Supot Salameh
Section Head

Approved by
Wichan Choonharet
Assistant Manager

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Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Project Name : Monitoring EIA
Report Number: 2375088 (3)-1
Project Location: GTS3

Lot ID: 2375088 (3)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (3)-1

Page 1 of 2

GTS3									
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux) Average	Spot/Min	Guideline Limit Average
1	Spot : CCR : Control Building : 3rd Floor : Control GTS3 No.1	2375088 (3)-1 2375088 (3)-2	18-Aug-23 18-Aug-23	Day time Night time	1 1	407 409	- -	400-500 400-500	- -
2	Spot : CCR : Control Building : 3rd Floor : Control GTS3 No.2	2375088 (3)-3 2375088 (3)-4	18-Aug-23 18-Aug-23	Day time Night time	1 1	403 412	- -	400-500 400-500	- -
3	Spot : CCR : Control Building : 3rd Floor : Control GTS4 No.1	2375088 (3)-5 2375088 (3)-6	18-Aug-23 18-Aug-23	Day time Night time	1 1	450 422	- -	400-500 400-500	- -
4	Spot : CCR : Control Building : 3rd Floor : Control GTS4 No.2	2375088 (3)-7 2375088 (3)-8	18-Aug-23 18-Aug-23	Day time Night time	1 1	414 461	- -	400-500 400-500	- -
5	Spot : CCR : Control Building : 3rd Floor : DCS	2375088 (3)-9 2375088 (3)-10	18-Aug-23 18-Aug-23	Day time Night time	1 1	541 543	- -	400-500 400-500	- -
6	Spot : CCR : Control Building : 3rd Floor : Infrastructure	2375088 (3)-11 2375088 (3)-12	18-Aug-23 18-Aug-23	Day time Night time	1 1	341 309	- -	300-400 300-400	- -
7	Spot : CCR : Control Building : 3rd Floor : Infrastructure	2375088 (3)-13 2375088 (3)-14	18-Aug-23 18-Aug-23	Day time Night time	1 1	485 527	- -	300-400 300-400	- -
8	Spot : CCR : Control Building : 3rd Floor : 1st Daytime Operation	2375088 (3)-15	18-Aug-23	Day time	1	432	-	400-500	-
9	Spot : CCR : Control Building : 3rd Floor : 1st Operation Manager	2375088 (3)-16	18-Aug-23	Day time	1	560	-	400-500	-
10	Spot : CCR : Control Building : 3rd Floor : 1st Permit	2375088 (3)-17 2375088 (3)-18	18-Aug-23 18-Aug-23	Day time Night time	1 1	643 514	- -	400-500 400-500	- -
11	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader Daytime	2375088 (3)-19	18-Aug-23	Day time	1	511	-	400-500	-
12	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader GTS3	2375088 (3)-20 2375088 (3)-21	18-Aug-23 18-Aug-23	Day time Night time	1 1	535 496	- -	400-500 400-500	- -
13	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader GTS4	2375088 (3)-22 2375088 (3)-23	18-Aug-23 18-Aug-23	Day time Night time	1 1	490 493	- -	400-500 400-500	- -

Technical Management : *Supot S.* Supot Salantah Section Head
Approved by : *Nichan Chonharat* Wichan Choonharat Assistant Manager

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Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Project Name : Monitoring EIA
Report Number: 2375088 (3)-1
Project Location: GTS3

Lot ID: 2375088 (3)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (3)-1

Page 2 of 2

GTS3									
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux) Average	Spot/Min	Guideline Limit Average
14	Area : CCR : Control Building : 3rd Floor : Warehouse	2375088 (3)-24 2375088 (3)-25 2375088 (3)-27 2375088 (3)-28 2375088 (3)-29 2375088 (3)-30 2375088 (3)-31 2375088 (3)-32 2375088 (3)-33	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Day time Day time Night time Night time Night time Night time Night time	1 2 3 4 5 2 3 4 5	245 584 673 554 551 208 609 520 515	521	50	100
15	Area : CCR : Control Building : 3rd Floor : Warehouse	2375088 (3)-34 2375088 (3)-35 2375088 (3)-36 2375088 (3)-37	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Night time Night time	1 2 1 2	560 584 264 290	572 277	50 50	100 100

Measurement by : Natakarn Vongjinyoo
Notification of Department of Labour Protection and Welfare, D.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management : *Supot S.* Supot Salantah Section Head
Approved by : *Nichan Chonharat* Wichan Choonharat Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS3

Lot ID: 2375088 (4)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (4)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTSS3			Comment
						Spot	Illuminance (Lux)	Guideline Limit	
						Average	Spot/Min	Average	
1	Area : Electrical Building : ชั้น 2 : Battery Room	2375088 (4)-1	18-Aug-23	Day time	1	245	270	100	Pass
		2375088 (4)-2	18-Aug-23	Day time	2	294			
		2375088 (4)-3	18-Aug-23	Night time	1	300	312	100	Pass
		2375088 (4)-4	18-Aug-23	Night time	2	324			
		2375088 (4)-5	18-Aug-23	Day time	1	1,846	1208	100	Pass
2	Area : Electrical Building : ชั้น 2 : Electrical Room	2375088 (4)-6	18-Aug-23	Day time	2	290			
		2375088 (4)-7	18-Aug-23	Day time	3	3,442			
		2375088 (4)-8	18-Aug-23	Day time	4	2,184			
		2375088 (4)-9	18-Aug-23	Day time	5	447			
		2375088 (4)-10	18-Aug-23	Day time	6	556			
		2375088 (4)-11	18-Aug-23	Day time	7	649			
		2375088 (4)-12	18-Aug-23	Day time	8	562			
		2375088 (4)-13	18-Aug-23	Day time	9	400			
		2375088 (4)-14	18-Aug-23	Day time	10	480			
		2375088 (4)-15	18-Aug-23	Day time	11	1,775			
		2375088 (4)-16	18-Aug-23	Day time	12	1,235			
		2375088 (4)-17	18-Aug-23	Day time	13	1,321			
		2375088 (4)-18	18-Aug-23	Day time	14	1,179			
		2375088 (4)-19	18-Aug-23	Day time	15	972			
		2375088 (4)-20	18-Aug-23	Day time	16	926			
		2375088 (4)-21	18-Aug-23	Day time	17	1,021			
		2375088 (4)-22	18-Aug-23	Day time	18	983			
		2375088 (4)-23	18-Aug-23	Night time	1	336	350	100	Pass
		2375088 (4)-24	18-Aug-23	Night time	2	180			
		2375088 (4)-25	18-Aug-23	Night time	3	356			
		2375088 (4)-26	18-Aug-23	Night time	4	371			
		2375088 (4)-27	18-Aug-23	Night time	5	289			
		2375088 (4)-28	18-Aug-23	Night time	6	310			
		2375088 (4)-29	18-Aug-23	Night time	7	379			
		2375088 (4)-30	18-Aug-23	Night time	8	344			
		2375088 (4)-31	18-Aug-23	Night time	9	305			
		2375088 (4)-32	18-Aug-23	Night time	10	326			
		2375088 (4)-33	18-Aug-23	Night time	11	415			
		2375088 (4)-34	18-Aug-23	Night time	12	395			
		2375088 (4)-35	18-Aug-23	Night time	13	338			
		2375088 (4)-36	18-Aug-23	Night time	14	372			
		2375088 (4)-37	18-Aug-23	Night time	15	366			
		2375088 (4)-38	18-Aug-23	Night time	16	348			
		2375088 (4)-39	18-Aug-23	Night time	17	297			
		2375088 (4)-40	18-Aug-23	Night time	18	369			

Technical Management

Supot Salameh
Section Head

Approved by

Nichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS3

Lot ID: 2375088 (4)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (4)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTSS3			Comment	
						Spot	Illuminance (Lux)	Guideline Limit		
						Average	Spot/Min	Average		
3	Area : Electrical Building : ชั้น 1 : โรง เก็บสินค้า	2375088 (4)-41	18-Aug-23	Day time	1	3,349	3498	50	100	Pass
		2375088 (4)-42	18-Aug-23	Day time	2	3,647				
		2375088 (4)-43	18-Aug-23	Night time	1	267	261	50	100	Pass
		2375088 (4)-44	18-Aug-23	Night time	2	255				
4	Area : Electrical Building : ชั้น 2 : โรง เก็บสินค้า	2375088 (4)-45	18-Aug-23	Day time	1	339	332	50	100	Pass
		2375088 (4)-46	18-Aug-23	Day time	2	325				
		2375088 (4)-47	18-Aug-23	Night time	1	207	220	50	100	Pass
		2375088 (4)-48	18-Aug-23	Night time	2	234				

Measurement by : Nattakam Vonginyoo

Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management

Supot Salameh
Section Head

Approved by

Nichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (5)-1
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (5)

Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (5)-1

Page 1 of 1

Lay out No.	Location	Reference Number	GTS3		Spot	Illuminance (Lux)	Guideline Limit		Comment
			Date	Time		Average	Spot/Min	Average	
1	Spot : Electrical Building : 5u 3 : Switchgear	2375088 (5)-1 2375088 (5)-2	18-Aug-23 18-Aug-23	Day time Night time	1 1	332 309	300-400 300-400	- -	Pass Pass
2	Area : Electrical Building : 5u 3 : wu 1u 1u	2375088 (5)-3 2375088 (5)-4 2375088 (5)-5 2375088 (5)-6	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Night time Night time	1 2 1 2	324 315 108 136	320 50 50 100	100 100	Pass Pass Pass Pass

Measurement by : Nattaborn Vongjirayod
Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management : *Supot S.*
Supot Salamatich
Section Head

Approved by : *Wichan Choonharat*
Wichan Choonharat
Assistant Manager

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



Analysis / Test Report

Client : Gulf TSC Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (5)-1
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (6)

Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (5)-1

Page 1 of 2

Lay out No.	Location	Reference Number	GTS3		Spot	Illuminance (Lux)	Guideline Limit		Comment
			Date	Time		Average	Spot/Min	Average	
1	Area : Switchyard Control Building Plan : GTS3 : Battery Room	2375088 (6)-1 2375088 (6)-2 2375088 (6)-3 2375088 (6)-4	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Night time Night time	1 2 1 2	309 313 306 309	311 100 100 100	200 200 200 200	Pass Pass Pass Pass
2	Area : Switchyard Control Building Plan : GTS3 : Substation GTS3	2375088 (6)-5 2375088 (6)-6 2375088 (6)-7 2375088 (6)-8 2375088 (6)-9 2375088 (6)-10 2375088 (6)-11 2375088 (6)-12	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Day time Day time Night time Night time Night time Night time	1 2 3 4 1 2 3 4	507 514 535 467 489 444 476 459	539 100 100 100 100 200 200 200	200 200 200 200 200 200 200 200	Pass Pass Pass Pass Pass Pass Pass Pass
3	Spot : Switchyard Control Building Plan : GTS3 : Switchgear	2375088 (6)-13 2375088 (6)-14	18-Aug-23 18-Aug-23	Day time Night time	1 1	308 306	300-400 300-400	- -	Pass Pass
4	Area : Switchyard Control Building Plan : GTS3 : Switchyard Control Room	2375088 (6)-15 2375088 (6)-16 2375088 (6)-17 2375088 (6)-18 2375088 (6)-19 2375088 (6)-20 2375088 (6)-21 2375088 (6)-22	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Day time Day time Night time Night time Night time Night time	1 2 3 4 1 2 3 4	521 549 551 592 473 468 470 465	553 100 100 100 100 200 200 200	200 200 200 200 200 200 200 200	Pass Pass Pass Pass Pass Pass Pass Pass
5	Area : Switchyard Control Building Plan : GTS4 : Battery Room	2375088 (6)-23 2375088 (6)-24 2375088 (6)-25 2375088 (6)-26	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Night time Night time	1 2 1 2	227 245 230 245	236 100 100 100	200 200 200 200	Pass Pass Pass Pass
6	Area : Switchyard Control Building Plan : GTS4 : Substation GTS4	2375088 (6)-27 2375088 (6)-28 2375088 (6)-29 2375088 (6)-30 2375088 (6)-31 2375088 (6)-32 2375088 (6)-33 2375088 (6)-34	18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23 18-Aug-23	Day time Day time Day time Day time Night time Night time Night time Night time	1 2 3 4 1 2 3 4	415 409 400 415 427 433 409 411	410 100 100 100 100 200 200 200	200 200 200 200 200 200 200 200	Pass Pass Pass Pass Pass Pass Pass Pass
7	Spot : Switchyard Control Building Plan : GTS4 : Switchgear	2375088 (6)-35 2375088 (6)-36	18-Aug-23 18-Aug-23	Day time Night time	1 1	469 378	300-400 300-400	- -	Pass Pass

Technical Management : *Supot S.*
Supot Salamatich
Section Head

Approved by : *Wichan Choonharat*
Wichan Choonharat
Assistant Manager

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



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (6)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (6)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
8	Area : Switchyard Control Building Plan : GTS4 : Switchyard Control Room	2375088 (6)-37	18-Aug-23	Day time	1	423	458	100	200	Pass
		2375088 (6)-38	18-Aug-23	Day time	2	468				
		2375088 (6)-39	18-Aug-23	Day time	3	477				
		2375088 (6)-40	18-Aug-23	Day time	4	465				
		2375088 (6)-41	18-Aug-23	Night time	1	409				
		2375088 (6)-42	18-Aug-23	Night time	2	466				
		2375088 (6)-43	18-Aug-23	Night time	3	453				
		2375088 (6)-44	18-Aug-23	Night time	4	442				

Measurement by : Nattakarn Vonginyoo

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management
Supot Salameh
Section Head

Approved by
Nichan Chonharat
Assistant Manager

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



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (7)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (7)-1

Page 1 of 1

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Spot : Water Treatment Control Building : Fire Pump	2375088 (7)-1	18-Aug-23	Day time	1	3,290		300-400	-	Pass
		2375088 (7)-2	18-Aug-23	Day time	2	3,442		600	-	Pass
		2375088 (7)-3	18-Aug-23	Day time	3	4,239		300	-	Pass
		2375088 (7)-4	18-Aug-23	Night time	1	315		300-400	-	Pass
2	Spot : Water Treatment Control Building : Laboratory 1 (Fume Hood)	2375088 (7)-5	18-Aug-23	Day time	1	489		400-500	-	Pass
		2375088 (7)-6	18-Aug-23	Night time	1	446		400-500	-	Pass
3	Spot : Water Treatment Control Building : Laboratory 2 (Water Table)	2375088 (7)-7	18-Aug-23	Day time	1	572		400-500	-	Pass
		2375088 (7)-8	18-Aug-23	Night time	1	501		400-500	-	Pass
4	Spot : Water Treatment Control Building : Office Laboratory	2375088 (7)-9	18-Aug-23	Day time	1	417		400-500	-	Pass
		2375088 (7)-10	18-Aug-23	Night time	1	403		400-500	-	Pass
5	Spot : Water Treatment Control Building : Water Treatment	2375088 (7)-11	18-Aug-23	Day time	1	572		300-400	-	Pass
		2375088 (7)-12	18-Aug-23	Night time	1	594		300-400	-	Pass

Measurement by : Nattakarn Vonginyoo

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management
Supot Salameh
Section Head

Approved by
Nichan Chonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS

Lot ID: 2375088 (8)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (8)-1

Page 1 of 2

GTSS									
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)	Spot	Guideline Limit	Comment
						Average	Spot/Min	Average	
1	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-1	18-Aug-23	Day time	1	345	-	300-400	Pass
4	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-2	18-Aug-23	Day time	1	413	-	400-500	Pass
5	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 2	2375088 (8)-3	18-Aug-23	Day time	1	435	-	400-500	Pass
6	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 3	2375088 (8)-4	18-Aug-23	Day time	1	411	-	400-500	Pass
7	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 4	2375088 (8)-5	18-Aug-23	Day time	1	408	-	400-500	Pass
8	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 5	2375088 (8)-6	18-Aug-23	Day time	1	416	-	400-500	Pass
9	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 6	2375088 (8)-7	18-Aug-23	Day time	1	412	-	400-500	Pass
10	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 7	2375088 (8)-8	18-Aug-23	Day time	1	422	-	400-500	Pass
11	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 8	2375088 (8)-9	18-Aug-23	Day time	1	415	-	400-500	Pass
12	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 9	2375088 (8)-10	18-Aug-23	Day time	1	409	-	400-500	Pass
13	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 10	2375088 (8)-11	18-Aug-23	Day time	1	413	-	400-500	Pass
14	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 11	2375088 (8)-12	18-Aug-23	Day time	1	407	-	400-500	Pass
15	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 12	2375088 (8)-13	18-Aug-23	Day time	1	402	-	400-500	Pass
16	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 13	2375088 (8)-14	18-Aug-23	Day time	1	424	-	400-500	Pass
17	Area : Workshop and Warehouse : 2nd Floor : Warehouse 14	2375088 (8)-15	18-Aug-23	Day time	1	412	448	50	Pass
18	Area : Workshop and Warehouse : 2nd Floor : Warehouse 15	2375088 (8)-16	18-Aug-23	Day time	2	392			
		2375088 (8)-17	18-Aug-23	Day time	3	541			
		2375088 (8)-18	18-Aug-23	Day time	1	99	102	50	100
		2375088 (8)-19	18-Aug-23	Day time	2	104			

Technical Management : *Supat S.* Approved by : *Nichan Chana*
Supot Salanteh Section Head Wichan Choonharat Assistant Manager

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



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS

Lot ID: 2375088 (8)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (8)-1

Page 2 of 2

GTSS									
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)	Spot	Guideline Limit	Comment
						Average	Spot/Min	Average	
19	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-20	18-Aug-23	Day time	1	87	114	50	100
		2375088 (8)-21	18-Aug-23	Day time	2	141			Pass
20	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-22	18-Aug-23	Day time	1	499		150	300
		2375088 (8)-23	18-Aug-23	Day time	2	411			Pass
21	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-24	18-Aug-23	Day time	1	310	316	50	100
		2375088 (8)-25	18-Aug-23	Day time	2	321			Pass
22	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-26	18-Aug-23	Day time	1	362		150	300
		2375088 (8)-27	18-Aug-23	Day time	2	351			Pass
		2375088 (8)-28	18-Aug-23	Day time	3	349			
		2375088 (8)-29	18-Aug-23	Day time	4	473			
		2375088 (8)-30	18-Aug-23	Day time	5	309			
		2375088 (8)-31	18-Aug-23	Day time	6	328			
23	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-32	18-Aug-23	Day time	1	421	466	25	50
		2375088 (8)-33	18-Aug-23	Day time	2	511			Pass
24	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1	2375088 (8)-34	18-Aug-23	Day time	1	114	581	50	100
		2375088 (8)-35	18-Aug-23	Day time	2	133			
		2375088 (8)-36	18-Aug-23	Day time	3	143			
		2375088 (8)-37	18-Aug-23	Day time	4	152			
		2375088 (8)-38	18-Aug-23	Day time	5	600			
		2375088 (8)-39	18-Aug-23	Day time	6	544			
		2375088 (8)-40	18-Aug-23	Day time	7	842			
		2375088 (8)-41	18-Aug-23	Day time	8	831			
		2375088 (8)-42	18-Aug-23	Day time	9	977			
		2375088 (8)-43	18-Aug-23	Day time	10	938			
		2375088 (8)-44	18-Aug-23	Day time	11	745			
		2375088 (8)-45	18-Aug-23	Day time	12	669			
		2375088 (8)-46	18-Aug-23	Day time	13	635			
		2375088 (8)-47	18-Aug-23	Day time	14	739			
		2375088 (8)-48	18-Aug-23	Day time	15	622			
		2375088 (8)-49	18-Aug-23	Day time	16	609			

Measurement by : Natakarn Vongyoo

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management : *Supat S.* Approved by : *Nichan Chana*
Supot Salanteh Section Head Wichan Choonharat Assistant Manager

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



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (9)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (9)-1

Page 1 of 2

Lay out No.	Location	Reference Number	GTS3		No.	Illuminance (Lux)		Guideline Limit		Comment
			Date	Time		Spot	Average	Spot/Min	Average	
1	Area : Workshop and Warehouse : Ground Floor : Store 3u.1	2375088 (9)-1	18-Aug-23	Day time	1	519	357	50	100	Pass
		2375088 (9)-2	18-Aug-23	Day time	2	293				
		2375088 (9)-3	18-Aug-23	Day time	3	393				
		2375088 (9)-4	18-Aug-23	Day time	4	380				
		2375088 (9)-5	18-Aug-23	Day time	5	378				
		2375088 (9)-6	18-Aug-23	Day time	6	311				
		2375088 (9)-7	18-Aug-23	Day time	7	367				
		2375088 (9)-8	18-Aug-23	Day time	8	386				
		2375088 (9)-9	18-Aug-23	Day time	9	361				
		2375088 (9)-10	18-Aug-23	Day time	10	455				
		2375088 (9)-11	18-Aug-23	Day time	11	266				
		2375088 (9)-12	18-Aug-23	Day time	12	230				
		2375088 (9)-13	18-Aug-23	Day time	13	373				
		2375088 (9)-14	18-Aug-23	Day time	14	392				
		2375088 (9)-15	18-Aug-23	Day time	15	324				
		2375088 (9)-16	18-Aug-23	Day time	16	287				
2	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-17	18-Aug-23	Day time	1	479	372	50	100	Pass
		2375088 (9)-18	18-Aug-23	Day time	2	266				
3	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-19	18-Aug-23	Day time	1	597	562	50	100	Pass
		2375088 (9)-20	18-Aug-23	Day time	2	627				
4	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-21	18-Aug-23	Day time	1	329	336	50	100	Pass
		2375088 (9)-22	18-Aug-23	Day time	2	344				
		2375088 (9)-23	18-Aug-23	Day time	3	327				
		2375088 (9)-24	18-Aug-23	Day time	4	346				
		2375088 (9)-25	18-Aug-23	Day time	5	355				
		2375088 (9)-26	18-Aug-23	Day time	6	317				
5	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-27	18-Aug-23	Day time	1	495	396	50	100	Pass
		2375088 (9)-28	18-Aug-23	Day time	2	367				
		2375088 (9)-29	18-Aug-23	Day time	3	327				
6	Spot : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-30	18-Aug-23	Day time	1	423	-	400-500	-	Pass
7	Spot : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-31	18-Aug-23	Day time	1	634	-	400-500	-	Pass
8	Spot : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-32	18-Aug-23	Day time	1	419	-	400-500	-	Pass

Technical Management : Supot Salamiah
Section Head

Approved by : *Nichan Choonharat*
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 2375088 (9)
Date Received : Aug 20, 2023
Date Reported : Sep 07, 2023
Report Number: 2375088 (9)-1

Page 2 of 2

Lay out No.	Location	Reference Number	GTS3		No.	Illuminance (Lux)		Guideline Limit		Comment
			Date	Time		Spot	Average	Spot/Min	Average	
9	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H	2375088 (9)-33	18-Aug-23	Day time	1	367	380	150	300	Pass
		2375088 (9)-34	18-Aug-23	Day time	2	445				
		2375088 (9)-35	18-Aug-23	Day time	3	344				
		2375088 (9)-36	18-Aug-23	Day time	4	378				
		2375088 (9)-37	18-Aug-23	Day time	5	364				
		2375088 (9)-38	18-Aug-23	Day time	6	375				
		2375088 (9)-39	18-Aug-23	Day time	7	376				
		2375088 (9)-40	18-Aug-23	Day time	8	388				
		2375088 (9)-41	18-Aug-23	Day time	9	380				

Measurement by : Nattakorn Vongyoo

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 35D dated February 21 B.E.2561 (2018)

Technical Management : Supot Salamiah
Section Head

Approved by : *Nichan Choonharat*
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Taat, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (1)-1
Project Name : Monitoring EIA
Project Location: GTSS

Page 1 of 2

GTSS									
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux) Average	Spot/Min	Comment
1	Spot : Administration Building : 1st Floor : Infrastructure	23125282 (1)-1	15-Nov-23	Day time	1	878	-	300-400	Pass
2	Spot : Administration Building : 1st Floor : Admin. 1	23125282 (1)-2	15-Nov-23	Day time	1	427	-	400-500	Pass
3	Spot : Administration Building : 1st Floor : Admin. 2	23125282 (1)-3	15-Nov-23	Day time	1	462	-	400-500	Pass
4	Spot : Administration Building : 1st Floor : Operation Manager	23125282 (1)-4	15-Nov-23	Day time	1	503	-	400-500	Pass
5	Spot : Administration Building : 1st Floor : EHS	23125282 (1)-5	15-Nov-23	Day time	1	733	-	400-500	Pass
6	Spot : Administration Building : 1st Floor : EHS Manager	23125282 (1)-6	15-Nov-23	Day time	1	968	-	400-500	Pass
7	Spot : Administration Building : 1st Floor : Admin. Manager	23125282 (1)-7	15-Nov-23	Day time	1	415	-	400-500	Pass
8	Spot : Administration Building : 1st Floor : Plant Manager	23125282 (1)-8	15-Nov-23	Day time	1	456	-	400-500	Pass
9	Spot : Administration Building : 1st Floor : IT	23125282 (1)-9	15-Nov-23	Day time	1	429	-	400-500	Pass
10	Spot : Administration Building : 1st Floor : Test 1	23125282 (1)-10	15-Nov-23	Day time	1	431	-	400-500	Pass
11	Spot : Administration Building : 1st Floor : Test 2	23125282 (1)-11	15-Nov-23	Day time	1	587	-	400-500	Pass
12	Area : Administration Building : 1st Floor : enviro	23125282 (1)-12	15-Nov-23	Day time	1	305	433	50	100
		23125282 (1)-13	15-Nov-23	Day time	2	508			Pass
		23125282 (1)-14	15-Nov-23	Day time	3	414			
		23125282 (1)-15	15-Nov-23	Day time	4	446			
		23125282 (1)-16	15-Nov-23	Day time	5	321			
		23125282 (1)-17	15-Nov-23	Day time	6	523			
13	Area : Administration Building : 1st Floor : Warehouse	23125282 (1)-18	15-Nov-23	Day time	1	641	876	100	200
		23125282 (1)-19	15-Nov-23	Day time	2	910			Pass

Supot Salantich
Section Head

Wichan Choonharat
Assistant Manager

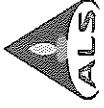
Approved by

Wichan Choonharat
Assistant Manager

Technical Management

ADDRESS 104 Phatthanakarn 40, Phatthanakarn Rd. Khwaeng Phatthanakarn, Khet Suan Luang, Bangkok 10250 Thailand PHONE : 06 0 2760 3000 FAX : 06 0 2760 3197
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Analysis / Test Report

Client : Gulf TS3 Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Taat, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (1)-1
Project Name : Monitoring EIA
Project Location: GTSS

Page 2 of 2

GTSS										
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux) Average	Spot/Min	Comment	
15	Area : Administration Building : 1st Floor : Warehouse 1	23125282 (1)-20	15-Nov-23	Day time	1	324	383	150	300	Pass
		23125282 (1)-21	15-Nov-23	Day time	2	347				
		23125282 (1)-22	15-Nov-23	Day time	3	370				
		23125282 (1)-23	15-Nov-23	Day time	4	400				
		23125282 (1)-24	15-Nov-23	Day time	5	404				
		23125282 (1)-25	15-Nov-23	Day time	6	382				
		23125282 (1)-26	15-Nov-23	Day time	7	395				
		23125282 (1)-27	15-Nov-23	Day time	8	421				
		23125282 (1)-28	15-Nov-23	Day time	9	384				
		23125282 (1)-29	15-Nov-23	Day time	10	361				
		23125282 (1)-30	15-Nov-23	Day time	11	410				
		23125282 (1)-31	15-Nov-23	Day time	12	402				
16	Area : Administration Building : 1st Floor : Warehouse 1	23125282 (1)-32	15-Nov-23	Day time	1	453	430	50	100	Pass
		23125282 (1)-33	15-Nov-23	Day time	2	414				
		23125282 (1)-34	15-Nov-23	Day time	3	412				
		23125282 (1)-35	15-Nov-23	Day time	4	441				
17	Area : Administration Building : 1st Floor : Warehouse 1	23125282 (1)-36	15-Nov-23	Day time	1	501	446	150	300	Pass
		23125282 (1)-37	15-Nov-23	Day time	2	445				
		23125282 (1)-38	15-Nov-23	Day time	3	410				
		23125282 (1)-39	15-Nov-23	Day time	4	428				

Measurement by : Anmol Wongrakhen

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Supot Salantich
Section Head

Wichan Choonharat
Assistant Manager

Approved by

Wichan Choonharat
Assistant Manager

Technical Management

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS

Lot ID: 23125282 (2)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (2)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)			Guideline Limit		Comment
						Spot	Average	Spot/Min	Average		
1	Area : CCR : Control Building : 1st Floor : Switchgear Room	23125282 (2)-1	15-Nov-23	Day time	1	262	362	100	200	Pass	
		23125282 (2)-2	15-Nov-23	Day time	2	374					
		23125282 (2)-3	15-Nov-23	Day time	3	298					
		23125282 (2)-4	15-Nov-23	Day time	4	361					
		23125282 (2)-5	15-Nov-23	Day time	5	314					
		23125282 (2)-6	15-Nov-23	Day time	6	372					
		23125282 (2)-7	15-Nov-23	Day time	7	487					
		23125282 (2)-8	15-Nov-23	Day time	8	362					
		23125282 (2)-9	15-Nov-23	Day time	9	318					
		23125282 (2)-10	15-Nov-23	Day time	10	362					
		23125282 (2)-11	15-Nov-23	Day time	11	340					
		23125282 (2)-12	15-Nov-23	Day time	12	285					
		23125282 (2)-13	15-Nov-23	Day time	13	318					
		23125282 (2)-14	15-Nov-23	Day time	14	414					
		23125282 (2)-15	15-Nov-23	Day time	15	400					
		23125282 (2)-16	15-Nov-23	Day time	16	513					
		23125282 (2)-17	15-Nov-23	Day time	17	442					
		23125282 (2)-18	15-Nov-23	Day time	18	219					
23125282 (2)-19	15-Nov-23	Night time	1	257	348	100	200	Pass			
23125282 (2)-20	15-Nov-23	Night time	2	341							
23125282 (2)-21	15-Nov-23	Night time	3	300							
23125282 (2)-22	15-Nov-23	Night time	4	302							
23125282 (2)-23	15-Nov-23	Night time	5	283							
23125282 (2)-24	15-Nov-23	Night time	6	331							
23125282 (2)-25	15-Nov-23	Night time	7	491							
23125282 (2)-26	15-Nov-23	Night time	8	367							
23125282 (2)-27	15-Nov-23	Night time	9	308							
23125282 (2)-28	15-Nov-23	Night time	10	400							
23125282 (2)-29	15-Nov-23	Night time	11	342							
23125282 (2)-30	15-Nov-23	Night time	12	291							
23125282 (2)-31	15-Nov-23	Night time	13	324							
23125282 (2)-32	15-Nov-23	Night time	14	391							
23125282 (2)-33	15-Nov-23	Night time	15	406							
23125282 (2)-34	15-Nov-23	Night time	16	412							
23125282 (2)-35	15-Nov-23	Night time	17	431							
23125282 (2)-36	15-Nov-23	Night time	18	229							

Measurement by : Annat Wongsekhien

Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTSS

Lot ID: 23125282 (2)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (2)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTSS			Guideline Limit	Comment
						Illuminance (Lux)				
						Spot	Average	Spot/Min		
2	Area : CCR : Control Building : 1st Floor : วัสดุเก็บน้ำ	23125282 (2)-37	15-Nov-23	Day time	1	431	396	50	100	Pass
		23125282 (2)-38	15-Nov-23	Day time	2	362				
		23125282 (2)-39	15-Nov-23	Night time	1	264	288	50	100	Pass
		23125282 (2)-40	15-Nov-23	Night time	2	312				

Supot Salmitheh
Section Head

Wichan Choonharat
Assistant Manager

Supot Salmitheh
Section Head

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasek, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (3)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (3)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Comment
						Spot	Average	Guideline Limit	
1	Spot : CCR : Control Building : 3rd Floor : Control GTS3 No.1	23125282 (3)-1	15-Nov-23	Day time	1	419	-	400-500	Pass
		23125282 (3)-2	15-Nov-23	Night time	1	405	-	400-500	Pass
2	Spot : CCR : Control Building : 3rd Floor : Control GTS3 No.2	23125282 (3)-3	15-Nov-23	Day time	1	402	-	400-500	Pass
		23125282 (3)-4	15-Nov-23	Night time	1	411	-	400-500	Pass
3	Spot : CCR : Control Building : 3rd Floor : Control GTS4 No.1	23125282 (3)-5	15-Nov-23	Day time	1	568	-	400-500	Pass
		23125282 (3)-6	15-Nov-23	Night time	1	557	-	400-500	Pass
4	Spot : CCR : Control Building : 3rd Floor : Control GTS4 No.2	23125282 (3)-7	15-Nov-23	Day time	1	492	-	400-500	Pass
		23125282 (3)-8	15-Nov-23	Night time	1	499	-	400-500	Pass
5	Spot : CCR : Control Building : 3rd Floor : DCS	23125282 (3)-9	15-Nov-23	Day time	1	572	-	400-500	Pass
		23125282 (3)-10	15-Nov-23	Night time	1	538	-	400-500	Pass
6	Spot : CCR : Control Building : 3rd Floor : Warehouse	23125282 (3)-11	15-Nov-23	Day time	1	342	-	300-400	Pass
		23125282 (3)-12	15-Nov-23	Night time	1	457	-	300-400	Pass
7	Spot : CCR : Control Building : 3rd Floor : Warehouse	23125282 (3)-13	15-Nov-23	Day time	1	551	-	300-400	Pass
		23125282 (3)-14	15-Nov-23	Night time	1	549	-	300-400	Pass
8	Spot : CCR : Control Building : 3rd Floor : 1st Daytime Operation	23125282 (3)-15	15-Nov-23	Day time	1	434	-	400-500	Pass
		23125282 (3)-16	15-Nov-23	Day time	1	642	-	400-500	Pass
10	Spot : CCR : Control Building : 3rd Floor : 1st Permit	23125282 (3)-17	15-Nov-23	Day time	1	671	-	400-500	Pass
		23125282 (3)-18	15-Nov-23	Night time	1	678	-	400-500	Pass
11	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader Daytime	23125282 (3)-19	15-Nov-23	Day time	1	501	-	400-500	Pass
		23125282 (3)-20	15-Nov-23	Day time	1	451	-	400-500	Pass
12	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader GTS3	23125282 (3)-21	15-Nov-23	Night time	1	526	-	400-500	Pass
		23125282 (3)-22	15-Nov-23	Day time	1	547	-	400-500	Pass
13	Spot : CCR : Control Building : 3rd Floor : 1st Shift Leader GTS4	23125282 (3)-23	15-Nov-23	Night time	1	549	-	400-500	Pass
		23125282 (3)-24	15-Nov-23	Day time	1	591	-	400-500	Pass

Technical Management
Supt S
Supt Salatch
Section Head

Approved by
Wichan Choocharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasek, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (3)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (3)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Comment
						Spot	Average	Guideline Limit	
14	Area : CCR : Control Building : 3rd Floor : Warehouse	23125282 (3)-24	15-Nov-23	Day time	1	793	695	50 100	Pass
		23125282 (3)-25	15-Nov-23	Day time	2	883			
		23125282 (3)-26	15-Nov-23	Day time	3	525			
		23125282 (3)-27	15-Nov-23	Day time	4	736			
		23125282 (3)-28	15-Nov-23	Day time	5	538			
		23125282 (3)-29	15-Nov-23	Night time	1	752	656	50 100	Pass
		23125282 (3)-30	15-Nov-23	Night time	2	591			
		23125282 (3)-31	15-Nov-23	Night time	3	411			
		23125282 (3)-32	15-Nov-23	Night time	4	815			
		23125282 (3)-33	15-Nov-23	Night time	5	711			
15	Area : CCR : Control Building : 3rd Floor : Warehouse	23125282 (3)-34	15-Nov-23	Day time	1	539	577	50 100	Pass
		23125282 (3)-35	15-Nov-23	Day time	2	615			
		23125282 (3)-36	15-Nov-23	Night time	1	214	265	50 100	Pass
		23125282 (3)-37	15-Nov-23	Night time	2	316			

Measurement by : Anant Wongkhan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management
Supt S
Supt Salatch
Section Head

Approved by
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Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (4)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (4)-1

Page 1 of 2

GTS3									
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux)	Guideline Limit	Comment
						Average	Spot/Min	Average	
1	Area : Electrical Building : ชั้น 2 : Battery Room	23125282 (4)-1	15-Nov-23	Day time	1	205	211	100	Pass
		23125282 (4)-2	15-Nov-23	Day time	2	217			
		23125282 (4)-3	15-Nov-23	Night time	1	221	215	100	Pass
		23125282 (4)-4	15-Nov-23	Night time	2	209			
		23125282 (4)-5	15-Nov-23	Day time	1	1,446	1384	100	Pass
2	Area : Electrical Building : ชั้น 2 : Electrical Room	23125282 (4)-6	15-Nov-23	Day time	2	991			
		23125282 (4)-7	15-Nov-23	Day time	3	815			
		23125282 (4)-8	15-Nov-23	Day time	4	2,383			
		23125282 (4)-9	15-Nov-23	Day time	5	1,874			
		23125282 (4)-10	15-Nov-23	Day time	6	1,214			
		23125282 (4)-11	15-Nov-23	Day time	7	987			
		23125282 (4)-12	15-Nov-23	Day time	8	899			
		23125282 (4)-13	15-Nov-23	Day time	9	2,716			
		23125282 (4)-14	15-Nov-23	Day time	10	2,093			
		23125282 (4)-15	15-Nov-23	Day time	11	1,068			
		23125282 (4)-16	15-Nov-23	Day time	12	1,439			
		23125282 (4)-17	15-Nov-23	Day time	13	1,372			
		23125282 (4)-18	15-Nov-23	Day time	14	1,846			
		23125282 (4)-19	15-Nov-23	Day time	15	1,126			
		23125282 (4)-20	15-Nov-23	Day time	16	1,372			
		23125282 (4)-21	15-Nov-23	Day time	17	991			
		23125282 (4)-22	15-Nov-23	Day time	18	1,044			
		23125282 (4)-23	15-Nov-23	Night time	1	911	1080	100	Pass
		23125282 (4)-24	15-Nov-23	Night time	2	441			
		23125282 (4)-25	15-Nov-23	Night time	3	741			
		23125282 (4)-26	15-Nov-23	Night time	4	1,211			
		23125282 (4)-27	15-Nov-23	Night time	5	1,211			
		23125282 (4)-28	15-Nov-23	Night time	6	1,126			
		23125282 (4)-29	15-Nov-23	Night time	7	619			
		23125282 (4)-30	15-Nov-23	Night time	8	711			
		23125282 (4)-31	15-Nov-23	Night time	9	1,981			
		23125282 (4)-32	15-Nov-23	Night time	10	1,819			
		23125282 (4)-33	15-Nov-23	Night time	11	900			
		23125282 (4)-34	15-Nov-23	Night time	12	1,211			
		23125282 (4)-35	15-Nov-23	Night time	13	1,093			
		23125282 (4)-36	15-Nov-23	Night time	14	1,421			
		23125282 (4)-37	15-Nov-23	Night time	15	1,009			
		23125282 (4)-38	15-Nov-23	Night time	16	1,211			
		23125282 (4)-39	15-Nov-23	Night time	17	811			
		23125282 (4)-40	15-Nov-23	Night time	18	911			

Measurement by : Anant Wongsakhen

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salameeth
Section Head

Approved by

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (4)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (4)-1

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GTS3									
Lay out No.	Location	Reference Number	Date	Time	No.	Spot	Illuminance (Lux)	Guideline Limit	Comment
						Average	Spot/Min	Average	
3	Area : Electrical Building : ชั้น 1 : โรงเก็บวัสดุ	23125282 (4)-41	15-Nov-23	Day time	1	6,410	6010	50	100
		23125282 (4)-42	15-Nov-23	Day time	2	5,610			
		23125282 (4)-43	15-Nov-23	Night time	1	121	128	50	100
		23125282 (4)-44	15-Nov-23	Night time	2	134			
4	Area : Electrical Building : ชั้น 2 : โรงเก็บวัสดุ	23125282 (4)-45	15-Nov-23	Day time	1	198	200	50	100
		23125282 (4)-46	15-Nov-23	Day time	2	201			
		23125282 (4)-47	15-Nov-23	Night time	1	210	214	50	100
		23125282 (4)-48	15-Nov-23	Night time	2	219			

Measurement by : Anant Wongsakhen

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

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Supot Salameeth
Section Head

Approved by

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Assistant Manager

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Analysis / Test Report

Lot ID: 23125282 (6)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (6)-1

Client : Gulf TSS Co., Ltd.
 Z24 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Phuak Daeng, Rayong Thailand 21140

P/O :
Project Name : Monitoring EIA

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GT53										
Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)		Guideline Limit		Comment
						Spot	Average	Spot/Min	Average	
1	Area : Switchyard Control Building Plan : GT53 : Battery Room	23125282 (6)-1	15-Nov-23	Day time	1	252	240	100	200	Pass
		23125282 (6)-2	15-Nov-23	Day time	2	227				
		23125282 (6)-3	15-Nov-23	Night time	1	244	270	100	200	Pass
		23125282 (6)-4	15-Nov-23	Night time	2	295				
2	Area : Switchyard Control Building Plan : GT53 : Substation GT53	23125282 (6)-5	15-Nov-23	Day time	1	607	522	100	200	Pass
		23125282 (6)-6	15-Nov-23	Day time	2	615				
		23125282 (6)-7	15-Nov-23	Day time	3	449				
		23125282 (6)-8	15-Nov-23	Day time	4	416				
		23125282 (6)-9	15-Nov-23	Night time	1	346	393	100	200	Pass
		23125282 (6)-10	15-Nov-23	Night time	2	412				
		23125282 (6)-11	15-Nov-23	Night time	3	400				
		23125282 (6)-12	15-Nov-23	Night time	4	414				
3	Spot : Switchyard Control Building Plan : GT53 : Switchgear	23125282 (6)-13	15-Nov-23	Day time	1	398	-	300-400	-	Pass
		23125282 (6)-14	15-Nov-23	Night time	1	356	-	300-400	-	Pass

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
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P/O :
Date Received : Nov 17, 2023
Project Name : Monitoring EIA
Report Number: 23125282 (6)-1
Project Location: GT53

Lot ID: 23125282 (6)

Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (6)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GT53			Illuminance (Lux)	Spot	Average	Guideline Limit	Comment
						Spot	Min	Average					
7	Spot : Switchyard Control Building Plan : GT54 : Switchgear	23125282 (6)-35 23125282 (6)-36	15-Nov-23	Day time	1	455	-	-	-	-	-	300-400	Pass
				Night time	1	439	-	-					
8	Area : Switchyard Control Building Plan : GT54 : Switchyard Control Room	23125282 (6)-37 23125282 (6)-38 23125282 (6)-39 23125282 (6)-40	15-Nov-23	Day time	1	549	473	100	200	200	200	Pass	Pass
				Day time	2	410							
				Day time	3	426							
				Day time	4	506							
		23125282 (6)-41 23125282 (6)-42 23125282 (6)-43 23125282 (6)-44	15-Nov-23	Night time	1	515	501	100	200	200	200	Pass	Pass
				Night time	2	501							
				Night time	3	503							
				Night time	4	484							

Measurement by : Annat Wongskhien

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017), dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 380 dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Task, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Nov 17, 2023
Project Name : Monitoring EIA
Report Number: 23125282 (7)-1
Project Location: GT53

Lot ID: 23125282 (7)

Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (7)-1

Page 1 of 1

Lay out No.	Location	Reference Number	Date	Time	No.	GT53			Illuminance (Lux)	Spot	Average	Guideline Limit	Comment
						Spot	Min	Average					
1	Spot : Water Treatment Control Building : Fire Pump	23125282 (7)-1 23125282 (7)-2 23125282 (7)-3 23125282 (7)-4	15-Nov-23	Day time	1	3,890	-	-	-	-	-	300-400	Pass
				Day time	2	4,120	-	-					
				Day time	3	6,740	-	-					
				Night time	1	301	-	-					
2	Spot : Water Treatment Control Building : Laboratory 1 (Fume Hood)	23125282 (7)-5 23125282 (7)-6	15-Nov-23	Day time	1	501	-	-	-	-	-	400-500	Pass
				Night time	1	499	-	-					
3	Spot : Water Treatment Control Building : Laboratory 2 (Water Table)	23125282 (7)-7 23125282 (7)-8	15-Nov-23	Day time	1	485	-	-	-	-	-	400-500	Pass
				Night time	1	588	-	-					
4	Spot : Water Treatment Control Building : Office Laboratory	23125282 (7)-9 23125282 (7)-10	15-Nov-23	Day time	1	423	-	-	-	-	-	400-500	Pass
				Night time	1	406	-	-					
5	Spot : Water Treatment Control Building : Water Treatment	23125282 (7)-11 23125282 (7)-12	15-Nov-23	Day time	1	620	-	-	-	-	-	300-400	Pass
				Night time	1	670	-	-					

Measurement by : Annat Wongskhien

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017), dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 380 dated February 21 B.E.2561 (2018)

Supt S.
Supot Salamtich
Section Head

Technical Management

Approved by

Nichan Choonharat
Wichan Choonharat
Assistant Manager

Supt S.
Supot Salamtich
Section Head

Technical Management

Approved by

Nichan Choonharat
Wichan Choonharat
Assistant Manager

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ADDRESS 104 Phatthanaikan 40, Phatthanaikan Rd., Khwaeng Phatthanaikan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (8)-1
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (8)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (8)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Comment	
						Spot	Illuminance (Lux) Average	Guideline Limit Spot/Min Average		
1	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 1	23125282 (8)-1	15-Nov-23	Day time	1	317	-	300-400	Pass	
4	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 1	23125282 (8)-2	15-Nov-23	Day time	1	405	-	400-500	Pass	
5	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 2	23125282 (8)-3	15-Nov-23	Day time	1	432	-	400-500	Pass	
6	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 3	23125282 (8)-4	15-Nov-23	Day time	1	410	-	400-500	Pass	
7	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 4	23125282 (8)-5	15-Nov-23	Day time	1	419	-	400-500	Pass	
8	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 5	23125282 (8)-6	15-Nov-23	Day time	1	438	-	400-500	Pass	
9	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 6	23125282 (8)-7	15-Nov-23	Day time	1	441	-	400-500	Pass	
10	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 7	23125282 (8)-8	15-Nov-23	Day time	1	404	-	400-500	Pass	
11	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 8	23125282 (8)-9	15-Nov-23	Day time	1	419	-	400-500	Pass	
12	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 9	23125282 (8)-10	15-Nov-23	Day time	1	403	-	400-500	Pass	
13	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 10	23125282 (8)-11	15-Nov-23	Day time	1	408	-	400-500	Pass	
14	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 11	23125282 (8)-12	15-Nov-23	Day time	1	449	-	400-500	Pass	
15	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 12	23125282 (8)-13	15-Nov-23	Day time	1	471	-	400-500	Pass	
16	Spot : Workshop and Warehouse : 2nd Floor : Warehouse 13	23125282 (8)-14	15-Nov-23	Day time	1	565	-	400-500	Pass	
17	Area : Workshop and Warehouse : 2nd Floor : Warehouse 14	23125282 (8)-15	15-Nov-23	Day time	1	327	314	50	100	Pass
		23125282 (8)-16	15-Nov-23	Day time	2	302				
		23125282 (8)-17	15-Nov-23	Day time	3	312				

Technical Management
Supt S
Supt Salangkha
Section Head

Approved by
Wichan Choonharat
Assistant Manager

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ADDRESS 104 Phatthanasak 40, Phatthanasak Rd., Khwaeng Phatthanasak, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tasi, Pluak Daeng, Rayong Thailand 21140
P/O :
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (8)-1
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (8)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (8)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3			Guideline Limit	Comment
						Spot	Average	Spot/Min		
18	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-18	15-Nov-23	Day time	1	121	120	50	100	Pass
		23125282 (8)-19	15-Nov-23	Day time	2	119				
19	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-20	15-Nov-23	Day time	1	123	132	50	100	Pass
		23125282 (8)-21	15-Nov-23	Day time	2	142				
20	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-22	15-Nov-23	Day time	1	498	459	100	200	Pass
		23125282 (8)-23	15-Nov-23	Day time	2	420				
21	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-24	15-Nov-23	Day time	1	426	434	50	100	Pass
		23125282 (8)-25	15-Nov-23	Day time	2	441				
22	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-26	15-Nov-23	Day time	1	712	559	150	300	Pass
		23125282 (8)-27	15-Nov-23	Day time	2	755				
		23125282 (8)-28	15-Nov-23	Day time	3	604				
		23125282 (8)-29	15-Nov-23	Day time	4	622				
		23125282 (8)-30	15-Nov-23	Day time	5	687				
		23125282 (8)-31	15-Nov-23	Day time	6	573				
23	Area : Workshop and Warehouse : 2nd Floor : Warehouse 1 to 2	23125282 (8)-32	15-Nov-23	Day time	1	897	765	25	50	Pass
		23125282 (8)-33	15-Nov-23	Day time	2	633				
24	Area : Workshop and Warehouse : 2nd Floor : Store	23125282 (8)-34	15-Nov-23	Day time	1	727	620	100	200	Pass
		23125282 (8)-35	15-Nov-23	Day time	2	685				
		23125282 (8)-36	15-Nov-23	Day time	3	826				
		23125282 (8)-37	15-Nov-23	Day time	4	942				
		23125282 (8)-38	15-Nov-23	Day time	5	756				
		23125282 (8)-39	15-Nov-23	Day time	6	858				
		23125282 (8)-40	15-Nov-23	Day time	7	698				
		23125282 (8)-41	15-Nov-23	Day time	8	723				
		23125282 (8)-42	15-Nov-23	Day time	9	191				
		23125282 (8)-43	15-Nov-23	Day time	10	411				
		23125282 (8)-44	15-Nov-23	Day time	11	391				
		23125282 (8)-45	15-Nov-23	Day time	12	998				
		23125282 (8)-46	15-Nov-23	Day time	13	841				
		23125282 (8)-47	15-Nov-23	Day time	14	421				
		23125282 (8)-48	15-Nov-23	Day time	15	311				
		23125282 (8)-49	15-Nov-23	Day time	16	139				

Measurement by : Annat Wongsakhen

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management
Supt S
Supt Salangkha
Section Head

Approved by
Wichan Choonharat
Assistant Manager

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ADDRESS 104 Phatthanasak 40, Phatthanasak Rd., Khwaeng Phatthanasak, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197

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Analysis / Test Report

Client : Gulf TSS Co., Ltd.
224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (9)
Date Received : Nov 17, 2023
Date Reported : Nov 21, 2023
Report Number: 23125282 (9)-1

Page 1 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	Illuminance (Lux)			Guideline Limit	Comment
						Spot	Average	Spot/Min		
1	Area : Workshop and Warehouse : Ground Floor : Store 1u 1	23125282 (9)-1	15-Nov-23	Day time	1	497	401	100	200	Pass
		23125282 (9)-2	15-Nov-23	Day time	2	363				
		23125282 (9)-3	15-Nov-23	Day time	3	393				
		23125282 (9)-4	15-Nov-23	Day time	4	389				
		23125282 (9)-5	15-Nov-23	Day time	5	346				
		23125282 (9)-6	15-Nov-23	Day time	6	437				
		23125282 (9)-7	15-Nov-23	Day time	7	514				
		23125282 (9)-8	15-Nov-23	Day time	8	362				
		23125282 (9)-9	15-Nov-23	Day time	9	404				
		23125282 (9)-10	15-Nov-23	Day time	10	323				
		23125282 (9)-11	15-Nov-23	Day time	11	441				
		23125282 (9)-12	15-Nov-23	Day time	12	484				
		23125282 (9)-13	15-Nov-23	Day time	13	431				
		23125282 (9)-14	15-Nov-23	Day time	14	349				
		23125282 (9)-15	15-Nov-23	Day time	15	352				
		23125282 (9)-16	15-Nov-23	Day time	16	328				
		23125282 (9)-17	15-Nov-23	Day time	1	676	768	50	100	Pass
		23125282 (9)-18	15-Nov-23	Day time	2	859				
3	Area : Workshop and Warehouse : Ground Floor : Warehouse W/H 1u)	23125282 (9)-19	15-Nov-23	Day time	1	1,146	1224	50	100	Pass
		23125282 (9)-20	15-Nov-23	Day time	2	1,301				
4	Area : Workshop and Warehouse : Ground Floor : Warehouse 1u 1	23125282 (9)-21	15-Nov-23	Day time	1	403	380	50	100	Pass
		23125282 (9)-22	15-Nov-23	Day time	2	396				
		23125282 (9)-23	15-Nov-23	Day time	3	358				
		23125282 (9)-24	15-Nov-23	Day time	4	407				
		23125282 (9)-25	15-Nov-23	Day time	5	368				
		23125282 (9)-26	15-Nov-23	Day time	6	347				
5	Area : Workshop and Warehouse : Ground Floor : Warehouse Tool Room (AC 1-3)	23125282 (9)-27	15-Nov-23	Day time	1	640	607	100	200	Pass
		23125282 (9)-28	15-Nov-23	Day time	2	653				
		23125282 (9)-29	15-Nov-23	Day time	3	529				
6	Spot : Workshop and Warehouse : Ground Floor : Warehouse Office 1 TS3	23125282 (9)-30	15-Nov-23	Day time	1	443	-	400-500	-	Pass
7	Spot : Workshop and Warehouse : Ground Floor : Warehouse Office 2 TS4	23125282 (9)-31	15-Nov-23	Day time	1	404	-	400-500	-	Pass

Measurement by : Annat Wongkhan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management

Supot Salmitoh
Section Head

Approved by

Wichan Choonhant
Assistant Manager

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Analysis / Test Report

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224 Moo 3, WHA Eastern Seaboard Industrial Estate 1, Tassit, Phrak Daeng, Rayong Thailand 21140
P/O :
Project Name : Monitoring EIA
Project Location: GTS3

Lot ID: 23125282 (9)
Date Received : Nov 17, 2023
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Report Number: 23125282 (9)-1

Page 2 of 2

Lay out No.	Location	Reference Number	Date	Time	No.	GTS3					Comment
						Illuminance (Lux)		Guideline Limit			
						Spot	Average	Spot/Min	Average		
8	Spot : Workshop and Warehouse ; Ground Floor : Warehouse W/H Calibration line	23125282 (9)-32	15-Nov-23	Day time	1	466	-	400-500	-	Pass	
9	Area : Workshop and Warehouse ; Ground Floor : Warehouse W/H	23125282 (9)-33 23125282 (9)-34 23125282 (9)-35 23125282 (9)-36 23125282 (9)-37 23125282 (9)-38 23125282 (9)-39 23125282 (9)-40 23125282 (9)-41	15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23 15-Nov-23	Day time Day time Day time Day time Day time Day time Day time Day time Day time	1 2 3 4 5 6 7 8 9	632 542 495 460 539 615 523 495 9	537	150	300	Pass	

Measurement by : Annat Wongkhan

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 390 dated February 21 B.E.2561 (2018)

Technical Management

Supot Salmitoh
Section Head

Approved by

Wichan Choonhant
Assistant Manager

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ภาคผนวก ค-10

แผนผังแสดงเส้นระดับเสียง (Noise Contour Map)



Noise Contour Map

Name Project : Gulf TS3 Co., Ltd.

บริเวณพื้นที่โรงไฟฟ้าตาสีทรี 3

Reference Number : Lot 20133809-1

Measurement Date : Aug 25, 2021

