

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



Analysis / Test Report

Client : Global Power Synergy Public Company Limited

92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23105845

Date Received : Sep 18, 2023

Date Reported : Sep 22, 2023

Report Number: 2770998-1

Page 1 of 1

Sample Description Air Quality

Location รัศมีทองเพน (GPS 47P 0729830, 1403321)

Parameter Nitrogen dioxide (ppm)

Measurement Date Sep 10, 2023 - Sep 17, 2023

Measurement by Chatchai Sukpia

Time	23105845-1 Sep 10, 2023	23105845-2 Sep 11, 2023	23105845-3 Sep 12, 2023	23105845-4 Sep 13, 2023	23105845-5 Sep 14, 2023	23105845-6 Sep 15, 2023	23105845-7 Sep 16, 2023
11:00 AM - 12:00 PM	0.006	0.013	0.010	0.014	0.014	0.012	0.006
12:00 PM - 01:00 PM	0.006	0.012	0.011	0.013	0.014	0.012	0.006
01:00 PM - 02:00 PM	0.006	0.009	0.008	0.007	0.009	0.008	0.006
02:00 PM - 03:00 PM	0.006	0.008	0.007	0.005	0.007	0.006	0.005
03:00 PM - 04:00 PM	0.010	0.007	0.007	0.005	0.007	0.006	0.005
04:00 PM - 05:00 PM	0.009	0.007	0.006	0.004	0.006	0.006	0.006
05:00 PM - 06:00 PM	0.009	0.006	0.006	0.004	0.005	0.006	0.006
06:00 PM - 07:00 PM	0.009	0.006	0.006	0.003	0.005	0.005	0.004
07:00 PM - 08:00 PM	0.009	0.006	0.005	0.003	0.004	0.005	0.003
08:00 PM - 09:00 PM	0.010	0.011	0.004	0.003	0.005	0.005	0.004
09:00 PM - 10:00 PM	0.012	0.007	0.005	0.004	0.005	0.006	0.004
10:00 PM - 11:00 PM	0.015	0.007	0.005	0.004	0.008	0.005	0.004
11:00 PM - 12:00 AM	0.018	0.007	0.005	0.004	0.008	0.006	0.004
12:00 AM - 01:00 AM	0.017	0.006	0.006	0.004	0.006	0.006	0.003
01:00 AM - 02:00 AM	0.017	0.006	0.006	0.004	0.008	0.006	0.004
02:00 AM - 03:00 AM	0.016	0.007	0.006	0.004	0.008	0.005	0.005
03:00 AM - 04:00 AM	0.015	0.007	0.006	0.004	0.009	0.005	0.005
04:00 AM - 05:00 AM	0.014	0.007	0.006	0.005	0.009	0.005	0.005
05:00 AM - 06:00 AM	0.014	0.007	0.006	0.006	0.010	0.006	0.005
06:00 AM - 07:00 AM	0.013	0.007	0.006	0.008	0.010	0.006	0.005
07:00 AM - 08:00 AM	0.012	0.007	0.006	0.009	0.009	0.005	0.005
08:00 AM - 09:00 AM	0.012	0.007	0.006	0.009	0.008	0.005	0.005
09:00 AM - 10:00 AM	0.012	0.007	0.006	0.011	0.008	0.005	0.005
10:00 AM - 11:00 AM	0.012	0.007	0.007	0.011	0.008	0.005	0.005
Average	0.012	0.008	0.006	0.006	0.008	0.006	0.005
1hr - Maximum	0.018	0.013	0.011	0.014	0.014	0.012	0.006
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited

92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23105845

Date Received : Sep 18, 2023

Date Reported : Sep 22, 2023

Report Number: 2786626-1

Page 1 of 1

Sample Description Air Quality

Location รัศมีทองเพน (GPS 47P 0730831, 1407365)

Parameter Nitrogen dioxide (ppm)

Measurement Date Sep 10, 2023 - Sep 17, 2023

Measurement by Chatchai Sukpia

Time	23105845-8 Sep 10, 2023	23105845-9 Sep 11, 2023	23105845-10 Sep 12, 2023	23105845-11 Sep 13, 2023	23105845-12 Sep 14, 2023	23105845-13 Sep 15, 2023	23105845-14 Sep 16, 2023
12:00 PM - 01:00 PM	0.006	0.012	0.011	0.013	0.014	0.012	0.006
01:00 PM - 02:00 PM	0.005	0.012	0.012	0.013	0.014	0.012	0.007
02:00 PM - 03:00 PM	0.005	0.008	0.009	0.007	0.009	0.008	0.006
03:00 PM - 04:00 PM	0.006	0.007	0.008	0.005	0.007	0.006	0.006
04:00 PM - 05:00 PM	0.009	0.006	0.006	0.006	0.007	0.006	0.006
05:00 PM - 06:00 PM	0.007	0.007	0.005	0.006	0.006	0.006	0.007
06:00 PM - 07:00 PM	0.008	0.006	0.005	0.006	0.006	0.006	0.007
07:00 PM - 08:00 PM	0.008	0.006	0.005	0.006	0.005	0.005	0.006
08:00 PM - 09:00 PM	0.008	0.006	0.005	0.006	0.005	0.006	0.006
09:00 PM - 10:00 PM	0.009	0.011	0.006	0.006	0.005	0.006	0.006
10:00 PM - 11:00 PM	0.008	0.007	0.006	0.008	0.006	0.006	0.006
11:00 PM - 12:00 AM	0.009	0.007	0.006	0.008	0.009	0.005	0.006
12:00 AM - 01:00 AM	0.007	0.007	0.005	0.007	0.008	0.006	0.006
01:00 AM - 02:00 AM	0.007	0.006	0.005	0.007	0.007	0.006	0.005
02:00 AM - 03:00 AM	0.006	0.007	0.005	0.006	0.008	0.006	0.005
03:00 AM - 04:00 AM	0.006	0.007	0.005	0.006	0.009	0.005	0.005
04:00 AM - 05:00 AM	0.005	0.008	0.005	0.006	0.010	0.005	0.006
05:00 AM - 06:00 AM	0.004	0.008	0.005	0.006	0.010	0.005	0.005
06:00 AM - 07:00 AM	0.005	0.008	0.005	0.006	0.011	0.006	0.005
07:00 AM - 08:00 AM	0.004	0.008	0.005	0.008	0.011	0.005	0.005
08:00 AM - 09:00 AM	0.004	0.008	0.005	0.009	0.010	0.005	0.005
09:00 AM - 10:00 AM	0.004	0.008	0.005	0.009	0.008	0.005	0.005
10:00 AM - 11:00 AM	0.005	0.008	0.006	0.011	0.008	0.005	0.005
11:00 AM - 12:00 PM	0.010	0.008	0.006	0.011	0.008	0.006	0.006
Average	0.006	0.008	0.006	0.008	0.008	0.006	0.006
1hr - Maximum	0.010	0.012	0.012	0.013	0.014	0.012	0.007
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105845
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2786627-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดเขากอกกู่ (GPS 47P 0730051, 1409676)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105845-15 Sep 10, 2023	23105845-16 Sep 11, 2023	23105845-17 Sep 12, 2023	23105845-18 Sep 13, 2023	23105845-19 Sep 14, 2023	23105845-20 Sep 15, 2023	23105845-21 Sep 16, 2023
01:00 PM - 02:00 PM	0.003	0.016	0.020	0.009	0.009	0.010	0.008
02:00 PM - 03:00 PM	0.010	0.010	0.010	0.006	0.009	0.012	0.009
03:00 PM - 04:00 PM	0.027	0.010	0.009	0.013	0.010	0.009	0.010
04:00 PM - 05:00 PM	0.009	0.011	0.009	0.008	0.012	0.008	0.011
05:00 PM - 06:00 PM	0.012	0.010	0.010	0.008	0.011	0.009	0.010
06:00 PM - 07:00 PM	0.011	0.009	0.009	0.008	0.012	0.012	0.010
07:00 PM - 08:00 PM	0.010	0.008	0.007	0.009	0.015	0.010	0.007
08:00 PM - 09:00 PM	0.006	0.007	0.007	0.005	0.010	0.008	0.006
09:00 PM - 10:00 PM	0.005	0.004	0.007	0.005	0.005	0.008	0.005
10:00 PM - 11:00 PM	0.004	0.003	0.004	0.005	0.002	0.007	0.004
11:00 PM - 12:00 AM	0.004	0.003	0.004	0.004	0.005	0.004	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.005	0.004	0.005	0.006	0.002
01:00 AM - 02:00 AM	0.003	0.004	0.003	0.002	0.004	0.009	0.003
02:00 AM - 03:00 AM	0.002	0.002	0.003	0.004	0.003	0.007	0.003
03:00 AM - 04:00 AM	0.002	0.002	0.003	0.006	0.003	0.011	0.003
04:00 AM - 05:00 AM	0.002	0.003	0.003	0.007	0.005	0.011	0.003
05:00 AM - 06:00 AM	0.002	0.004	0.006	0.011	0.007	0.009	0.003
06:00 AM - 07:00 AM	0.004	0.010	0.027	0.027	0.028	0.021	0.006
07:00 AM - 08:00 AM	0.013	0.028	0.027	0.028	0.027	0.008	0.007
08:00 AM - 09:00 AM	0.028	0.018	0.022	0.026	0.028	0.023	0.010
09:00 AM - 10:00 AM	0.020	0.012	0.014	0.018	0.022	0.016	0.012
10:00 AM - 11:00 AM	0.012	0.010	0.010	0.014	0.019	0.011	0.008
11:00 AM - 12:00 PM	0.010	0.010	0.009	0.014	0.014	0.007	0.008
12:00 PM - 01:00 PM	0.010	0.019	0.008	0.010	0.011	0.008	0.009
Average	0.009	0.009	0.010	0.010	0.011	0.011	0.007
1hr - Maximum	0.028	0.028	0.027	0.028	0.028	0.028	0.012
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105845
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2786628-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดโสภณวนาราม (GPS 47P 0735037, 1405845)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105845-22 Sep 10, 2023	23105845-23 Sep 11, 2023	23105845-24 Sep 12, 2023	23105845-25 Sep 13, 2023	23105845-26 Sep 14, 2023	23105845-27 Sep 15, 2023	23105845-28 Sep 16, 2023
10:00 AM - 11:00 AM	0.006	0.021	0.018	0.020	0.026	0.014	0.021
11:00 AM - 12:00 PM	0.006	0.006	0.015	0.008	0.009	0.009	0.011
12:00 PM - 01:00 PM	0.004	0.012	0.009	0.015	0.013	0.009	0.015
01:00 PM - 02:00 PM	0.009	0.017	0.014	0.022	0.016	0.012	0.015
02:00 PM - 03:00 PM	0.006	0.009	0.006	0.010	0.011	0.009	0.006
03:00 PM - 04:00 PM	0.008	0.006	0.008	0.011	0.012	0.007	0.008
04:00 PM - 05:00 PM	0.016	0.015	0.017	0.024	0.032	0.025	0.021
05:00 PM - 06:00 PM	0.011	0.008	0.011	0.014	0.014	0.018	0.013
06:00 PM - 07:00 PM	0.012	0.008	0.015	0.017	0.016	0.018	0.012
07:00 PM - 08:00 PM	0.016	0.017	0.015	0.027	0.022	0.026	0.017
08:00 PM - 09:00 PM	0.010	0.011	0.011	0.014	0.010	0.010	0.008
09:00 PM - 10:00 PM	0.014	0.012	0.012	0.016	0.011	0.010	0.017
10:00 PM - 11:00 PM	0.030	0.036	0.016	0.029	0.020	0.022	0.026
11:00 PM - 12:00 AM	0.011	0.016	0.012	0.011	0.007	0.011	0.016
12:00 AM - 01:00 AM	0.009	0.009	0.013	0.006	0.012	0.010	0.009
01:00 AM - 02:00 AM	0.015	0.017	0.016	0.012	0.016	0.011	0.015
02:00 AM - 03:00 AM	0.009	0.007	0.008	0.010	0.008	0.007	0.011
03:00 AM - 04:00 AM	0.011	0.009	0.010	0.009	0.011	0.008	0.006
04:00 AM - 05:00 AM	0.019	0.016	0.018	0.011	0.016	0.009	0.011
05:00 AM - 06:00 AM	0.008	0.009	0.011	0.010	0.009	0.007	0.008
06:00 AM - 07:00 AM	0.011	0.010	0.008	0.012	0.013	0.009	0.005
07:00 AM - 08:00 AM	0.019	0.028	0.012	0.015	0.016	0.017	0.010
08:00 AM - 09:00 AM	0.009	0.009	0.007	0.008	0.008	0.005	0.005
09:00 AM - 10:00 AM	0.013	0.013	0.009	0.011	0.010	0.008	0.005
Average	0.012	0.013	0.012	0.014	0.014	0.012	0.012
1hr - Maximum	0.030	0.036	0.018	0.029	0.032	0.026	0.026
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105849
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2771007-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดหนองพยอม (GPS 47P 0729830, 1403321)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105849-1 Sep 10, 2023	23105849-2 Sep 11, 2023	23105849-3 Sep 12, 2023	23105849-4 Sep 13, 2023	23105849-5 Sep 14, 2023	23105849-6 Sep 15, 2023	23105849-7 Sep 16, 2023
11:00 AM - 12:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 PM - 02:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 PM - 03:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 PM - 04:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 PM - 05:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 PM - 06:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 PM - 07:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 PM - 08:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 PM - 09:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09:00 PM - 10:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 PM - 11:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 PM - 12:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 AM - 01:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 AM - 02:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 AM - 03:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 AM - 04:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 AM - 05:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 AM - 06:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 AM - 07:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 AM - 08:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 AM - 09:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09:00 AM - 10:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 AM - 11:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Average	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1hr - Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105849
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2786629-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดนาบุด (GPS 47P 0730831, 1407365)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105849-8 Sep 10, 2023	23105849-9 Sep 11, 2023	23105849-10 Sep 12, 2023	23105849-11 Sep 13, 2023	23105849-12 Sep 14, 2023	23105849-13 Sep 15, 2023	23105849-14 Sep 16, 2023
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.002	0.003	0.002	0.003	0.003
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.003	0.002	0.003	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.003	0.002	0.003	0.002
06:00 PM - 07:00 PM	0.001	0.002	0.002	0.003	0.003	0.003	0.002
07:00 PM - 08:00 PM	0.001	0.002	0.002	0.002	0.003	0.003	0.002
08:00 PM - 09:00 PM	0.001	0.002	0.002	0.001	0.003	0.003	0.003
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.003	0.003	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
02:00 AM - 03:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.003	0.001	0.003
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
Average	0.002	0.002	0.002	0.002	0.003	0.002	0.003
1hr - Maximum	0.002	0.002	0.002	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
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

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Approved by

Orawan R.
Orawan Rakyong
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105849
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2786630-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดเขาพลูดอก (GPS 47P 0730051, 1409676)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105849-15 Sep 10, 2023	23105849-16 Sep 11, 2023	23105849-17 Sep 12, 2023	23105849-18 Sep 13, 2023	23105849-19 Sep 14, 2023	23105849-20 Sep 15, 2023	23105849-21 Sep 16, 2023
01:00 PM - 02:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
02:00 PM - 03:00 PM	0.008	0.008	0.008	0.008	0.004	0.008	0.008
03:00 PM - 04:00 PM	0.008	0.008	0.008	0.008	0.009	0.008	0.008
04:00 PM - 05:00 PM	0.008	0.008	0.008	0.008	0.009	0.008	0.008
05:00 PM - 06:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
06:00 PM - 07:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
07:00 PM - 08:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
08:00 PM - 09:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
09:00 PM - 10:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
10:00 PM - 11:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
11:00 PM - 12:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
12:00 AM - 01:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
01:00 AM - 02:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
02:00 AM - 03:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
03:00 AM - 04:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
04:00 AM - 05:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
05:00 AM - 06:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
06:00 AM - 07:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
07:00 AM - 08:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
08:00 AM - 09:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
09:00 AM - 10:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
10:00 AM - 11:00 AM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
11:00 AM - 12:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
12:00 PM - 01:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
01:00 PM - 02:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
02:00 PM - 03:00 PM	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Average	0.008	0.008	0.008	0.008	0.008	0.008	0.008
1hr - Maximum	0.008	0.008	0.008	0.008	0.009	0.008	0.008
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).							
Reference Method : US EPA Method Part 53 and 58							

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105849
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2786631-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดโสมกวนาราม (GPS 47P 0735037, 1405845)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Sep 10, 2023 - Sep 17, 2023						
Measurement by	Chatchai Sukpia						
Time	23105849-22 Sep 10, 2023	23105849-23 Sep 11, 2023	23105849-24 Sep 12, 2023	23105849-25 Sep 13, 2023	23105849-26 Sep 14, 2023	23105849-27 Sep 15, 2023	23105849-28 Sep 16, 2023
10:00 AM - 11:00 AM	0.006	0.003	0.003	0.003	0.002	0.002	0.002
11:00 AM - 12:00 PM	<0.001	0.003	0.003	0.003	0.002	0.002	0.002
12:00 PM - 01:00 PM	<0.001	0.003	0.003	0.003	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.001	0.003	0.003	0.003	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.003	0.003	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.003	0.003	0.002	0.002	0.003	0.002
04:00 PM - 05:00 PM	0.002	0.003	0.003	0.002	0.003	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.003	0.003	0.002	0.003	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.003	0.003	0.003	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.003	0.003	0.003	0.003	0.003	0.002	0.002
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
09:00 PM - 10:00 PM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.003	0.002	0.002	0.003	0.002	0.002
11:00 PM - 12:00 AM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.003	0.003	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.003	0.002	0.002	0.003	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.003	0.003	0.002	0.003	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.003	0.003	0.002	0.002	0.003	0.002	0.002
04:00 AM - 05:00 AM	0.003	0.003	0.002	0.003	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.003	0.002	0.003	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
07:00 AM - 08:00 AM	0.003	0.002	0.003	0.002	0.003	0.002	0.002
08:00 AM - 09:00 AM	0.003	0.003	0.003	0.002	0.003	0.002	0.002
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.002	0.002	0.002	0.002
Average	0.002	0.003	0.003	0.003	0.003	0.002	0.002
1hr - Maximum	0.006	0.003	0.003	0.003	0.003	0.003	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).							
Reference Method : US EPA Method Part 53 and 58							

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Analysis / Test Report



TESTING
No.0042

Lot ID: 23105851

Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2771024-1

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Description Air Quality
Location วัดหนองพูน (GPS 47P 0729834, 1403304)
Date Analysis Commenced Sep 19, 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)
23105851-1	Sep 10 - Sep 11, 2023	0.028	0.009	755	31
23105851-2	Sep 11 - Sep 12, 2023	0.029	0.011	755	30
23105851-3	Sep 12 - Sep 13, 2023	0.028	0.012	755	32
23105851-4	Sep 13 - Sep 14, 2023	0.038	0.018	755	32
23105851-5	Sep 14 - Sep 15, 2023	0.024	0.013	755	30
23105851-6	Sep 15 - Sep 16, 2023	0.020	0.012	755	30
23105851-7	Sep 16 - Sep 17, 2023	0.017	0.010	755	30
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 : Chatchai Sukpia

Remark :

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

Approved by

Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 23105851

Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2771024-2

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Description Air Quality
Location วัดนาบึงอู (GPS 47P 0730821, 1407371)
Date Analysis Commenced Sep 19, 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)
23105851-8	Sep 10 - Sep 11, 2023	0.084	0.032	755	31
23105851-9	Sep 11 - Sep 12, 2023	0.097	0.026	755	30
23105851-10	Sep 12 - Sep 13, 2023	0.091	0.026	755	32
23105851-11	Sep 13 - Sep 14, 2023	0.070	0.024	755	32
23105851-12	Sep 14 - Sep 15, 2023	0.051	0.017	755	30
23105851-13	Sep 15 - Sep 16, 2023	0.096	0.031	755	30
23105851-14	Sep 16 - Sep 17, 2023	0.070	0.023	755	30
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 : Chatchai Sukpia

Remark :

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

Approved by

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Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105851
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2771024-3

Page 1 of 1

Sample Description Air Quality
Location วัดท่ากุดใหญ่ (GPS 47P 0730051, 1409676)
Date Analysis Commenced Sep 19, 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)
23105851-15	Sep 10 - Sep 11, 2023	0.126	0.032	755	31
23105851-16	Sep 11 - Sep 12, 2023	0.080	0.024	755	30
23105851-17	Sep 12 - Sep 13, 2023	0.075	0.025	755	32
23105851-18	Sep 13 - Sep 14, 2023	0.106	0.032	755	32
23105851-19	Sep 14 - Sep 15, 2023	0.065	0.021	755	30
23105851-20	Sep 15 - Sep 16, 2023	0.078	0.040	755	30
23105851-21	Sep 16 - Sep 17, 2023	0.037	0.018	755	30
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 : Chatchai Sukpia

Remark :

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

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105851
Date Received : Sep 18, 2023
Date Reported : Sep 22, 2023
Report Number: 2771024-4

Page 1 of 1

Sample Description Air Quality
Location วัดท่ากุดใหญ่ (GPS 47P 0735037, 1405845)
Date Analysis Commenced Sep 19, 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)
23105851-22	Sep 10 - Sep 11, 2023	0.031	0.015	755	31
23105851-23	Sep 11 - Sep 12, 2023	0.028	0.014	755	30
23105851-24	Sep 12 - Sep 13, 2023	0.024	0.013	755	32
23105851-25	Sep 13 - Sep 14, 2023	0.032	0.020	755	32
23105851-26	Sep 14 - Sep 15, 2023	0.025	0.013	755	30
23105851-27	Sep 15 - Sep 16, 2023	0.024	0.011	755	30
23105851-28	Sep 16 - Sep 17, 2023	0.025	0.011	755	30
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 : Chatchai Sukpia

Remark :

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105852
Date Received : Sep 18, 2023
Date Reported : Sep 27, 2023
Report Number : 2771025-1

Page 1 of 2

Sample Number : 23105852-1 to 7
Parameter : Wind Speed / Wind Direction
Location : วัดหนองนา (GPS 47P 0729830, 1403321)
Sampling Date : Sep 10 - Sep 17, 2023
Sampling by : Chatchai Sukpia

Time	Sep 10 - Sep 11, 2023			Sep 11 - Sep 12, 2023			Sep 12 - Sep 13, 2023			Sep 13 - Sep 14, 2023			Sep 14 - Sep 15, 2023			Sep 15 - Sep 16, 2023			Sep 16 - Sep 17, 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	2.4	146.0	SE	3.0	210.0	SSW	2.4	287.0	WNW	2.6	296.0	WNW	2.0	274.0	W	2.2	305.0	NW	1.1	258.0	WSW
12:00 PM - 01:00 PM	2.9	289.0	WNW	2.4	273.0	W	3.0	284.0	WNW	3.0	258.0	WSW	2.4	286.0	WNW	2.3	287.0	WNW	2.3	317.0	NW
01:00 PM - 02:00 PM	3.2	256.0	WSW	2.6	261.0	W	2.4	286.0	WNW	2.4	310.0	NW	2.6	287.0	WNW	2.4	238.0	WSW	0.8	288.0	WNW
02:00 PM - 03:00 PM	3.5	312.0	NW	3.0	216.0	SW	3.2	251.0	WSW	3.0	206.0	SSW	2.8	275.0	W	2.8	259.0	W	0.8	230.0	SW
03:00 PM - 04:00 PM	3.4	229.0	SW	2.4	254.0	WSW	3.0	280.0	W	2.8	265.0	W	3.0	239.0	WSW	3.2	191.0	S	0.9	279.0	W
04:00 PM - 05:00 PM	3.2	241.0	WSW	3.1	220.0	SW	2.3	258.0	WSW	2.8	283.0	WNW	3.0	233.0	SW	3.0	270.0	W	1.4	223.0	SW
05:00 PM - 06:00 PM	2.9	277.0	W	3.2	299.0	WNW	3.0	292.0	WNW	2.3	271.0	W	3.2	285.0	WNW	3.1	272.0	W	0.6	236.0	SW
06:00 PM - 07:00 PM	2.2	301.0	WNW	3.2	272.0	W	2.8	287.0	WNW	3.0	285.0	WNW	2.6	301.0	WNW	3.3	301.0	WNW	1.1	301.0	WNW
07:00 PM - 08:00 PM	3.0	289.0	WNW	2.3	248.0	WSW	2.6	294.0	WNW	2.2	276.0	W	2.0	287.0	WNW	3.3	328.0	NNW	1.5	314.0	NW
08:00 PM - 09:00 PM	3.3	287.0	WNW	2.0	258.0	WSW	2.8	307.0	NW	2.2	228.0	SW	1.6	339.0	NNW	2.2	288.0	WNW	0.5	311.0	NW
09:00 PM - 10:00 PM	2.3	303.0	WNW	3.0	288.0	WNW	2.2	306.0	NW	1.6	240.0	WSW	2.6	356.0	N	2.4	288.0	WNW	0.9	320.0	NW
10:00 PM - 11:00 PM	3.2	277.0	W	3.0	271.0	W	1.8	306.0	NW	1.4	299.0	WNW	1.5	343.0	NNW	2.2	293.0	WNW	2.0	299.0	WNW
11:00 PM - 12:00 AM	3.2	313.0	NW	2.2	313.0	NW	2.0	308.0	NW	1.6	312.0	NW	0.3	348.0	NNW	2.4	290.0	WNW	2.8	258.0	WSW
12:00 AM - 01:00 AM	3.0	289.0	WNW	2.0	334.0	NNW	2.4	298.0	WNW	1.2	294.0	WNW	0.6	315.0	NW	2.2	313.0	NW	1.3	293.0	WNW
01:00 AM - 02:00 AM	2.8	289.0	WNW	2.6	318.0	NW	1.6	304.0	NW	8.0	298.0	WNW	0.4	312.0	NW	1.5	314.0	NW	0.3	292.0	WNW
02:00 AM - 03:00 AM	2.5	295.0	WNW	2.4	281.0	W	1.4	275.0	W	0.3	296.0	WNW	0.5	305.0	NW	1.2	299.0	WNW	0.7	278.0	W
03:00 AM - 04:00 AM	2.4	311.0	NW	2.8	294.0	WNW	1.9	281.0	W	0.1	-	-	0.3	316.0	NW	0.7	301.0	WNW	1.4	284.0	WNW
04:00 AM - 05:00 AM	1.2	358.0	N	3.0	288.0	WNW	2.0	270.0	W	0.5	326.0	NW	1.6	222.0	SW	0.7	261.0	W	0.4	288.0	WNW
05:00 AM - 06:00 AM	0.8	329.0	NNW	2.6	348.0	NNW	2.0	311.0	NW	0.8	296.0	WNW	1.8	307.0	NW	0.2	-	-	1.6	294.0	WNW
06:00 AM - 07:00 AM	0.8	317.0	NW	2.8	298.0	WNW	1.6	292.0	WNW	0.4	312.0	NW	1.2	287.0	WNW	0.6	327.0	NNW	1.5	326.0	NW
07:00 AM - 08:00 AM	0.6	353.0	N	3.0	303.0	WNW	1.4	307.0	NW	0.6	320.0	NW	1.4	314.0	NW	1.5	277.0	W	3.1	319.0	NW
08:00 AM - 09:00 AM	1.5	257.0	WSW	2.2	287.0	WNW	2.0	267.0	W	1.4	290.0	WNW	1.8	301.0	WNW	1.2	281.0	W	2.2	291.0	WNW
09:00 AM - 10:00 AM	2.2	270.0	W	2.5	291.0	WNW	2.4	283.0	WNW	1.8	302.0	WNW	2.0	277.0	W	0.9	246.0	WSW	2.0	280.0	W
10:00 AM - 11:00 AM	2.6	294.0	WNW	3.0	273.0	W	2.2	267.0	W	1.8	287.0	WNW	2.4	315.0	NW	0.6	264.0	W	0.8	268.0	W

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittrant
Assistant General Manager

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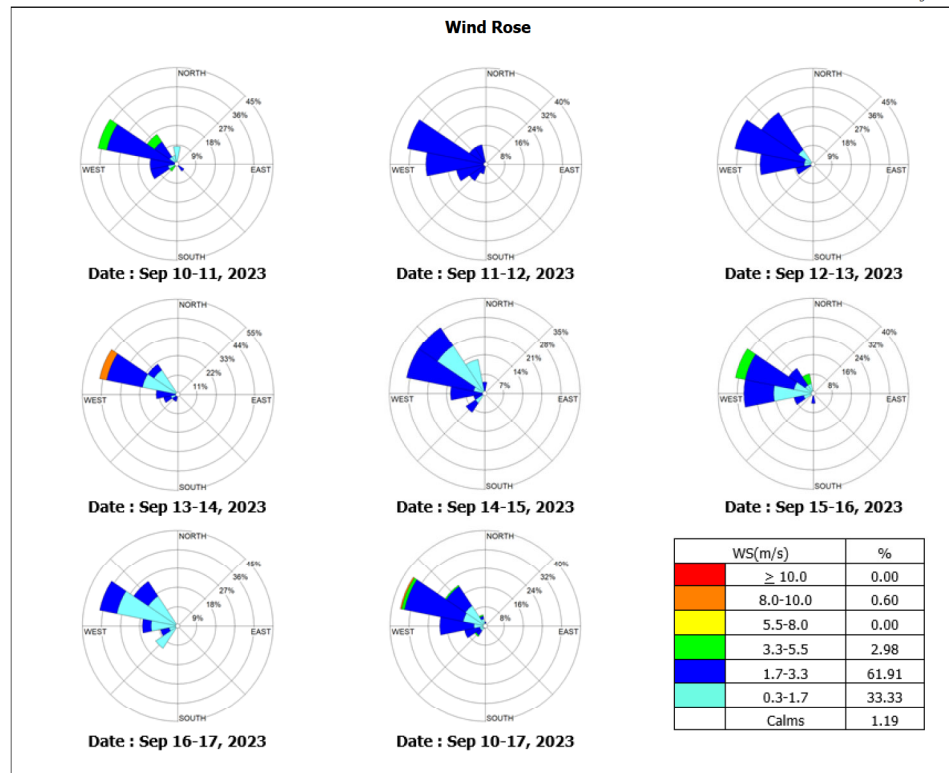


Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105852
Date Received : Sep 18, 2023
Date Reported : Sep 27, 2023
Report Number : 2771025-1

Page 2 of 2



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Sarayuth Jittrant
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ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบาย



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105880
Date Received : Sep 14, 2023
Date Reported : Sep 21, 2023
Report Number : 2771059-1

Page 1 of 1

Sample Number 23105880-1
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#1 (GPS 47P 0730550, 1404135)
Measurement Date Sep 14, 2023

Stack Description							
Ambient Temperature	32	°C	Diameter	1.80	m	Oxygen	4.93 %
Ambient Pressure	756	mmHg	Shape	Circle		Carbon dioxide	9.06 %
Type of Process	Combustion		Stack Temperature	127	°C	Gas Velocity	4.78 m/s
Type of Fuel	Natural Gas		Moisture	12.99	%	Flow Rate	28222 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	10:30 AM - 10:50 AM	4.85	9.09	37.20	32.23	0.20	0.18
2	10:51 AM - 11:11 AM	4.98	9.04	37.84	33.02	0.22	0.19
3	11:12 AM - 11:32 AM	4.95	9.05	37.59	32.76	0.21	0.18
Average (ppm)		4.93	9.06	37.54	32.67	0.21	0.18
Guideline ^{1/} (ppm)				-	50	-	2
Guideline ^{2/} (ppm)				-	120	-	20
Guideline ^{3/} (ppm)				-	120	-	20
Result (mg/Nm ³)				70.63	61.47	0.55	0.48
Emission Rate at Actual O ₂ (g/s)				0.5537		0.0043	
Guideline ^{1/} (g/s)				1.56		0.087	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Sathaporn Thakarn

Guideline : ^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 3)

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

^{3/} Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Wichan Choonharat
Wichan Choonharat
Manager
ทะเบียนเลขที่ ว-204-ก-6113

Approved by

Sarayuth Jittranoit
Sarayuth Jittranoit
Assistant General Manager
ทะเบียนเลขที่ ว-204-ก-4702

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105903
Date Received : Sep 14, 2023
Date Reported : Sep 20, 2023
Report Number : 2771086-1

Page 1 of 2

Sample Number 23105903-1
Sampled Date Sep 14, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#1 (GPS 47P 0730550, 1404135)
Date Analysis Commenced Sep 15, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	4.9 %
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	9.1 %
Type of Process	Combustion		Stack Temperature	127	°C	Gas Velocity	4.8 m/s
Type of Fuel	Natural Gas		Moisture	12.94	%	Flow Rate (Actual O ₂)	28203 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 % O ₂	at 4.9 % O ₂				
Air Testing										
Total Suspended Particulate	10:30 AM - 11:18 AM	mg/m3	-	0.5	<0.5	<0.5	60	6	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Technical Management

Thanita Kulsuriwong
Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-ก-9447

Approved by

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

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S:\Reports_Air Stack_O2_2GL.rpt (10:36AM)



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105903
Date Received : Sep 14, 2023
Date Reported : Sep 20, 2023
Report Number: 2771086-1

Page 2 of 2

Sample Number 23105903-1
Sampled Date Sep 14, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#1 (GPS 47P 0730550, 1404135)
Date Analysis Commenced Sep 15, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description

Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	4.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	9.1	%
Type of Process	Combustion		Stack Temperature	127	°C	Gas Velocity	4.8	m/s
Type of Fuel	Natural Gas		Moisture	12.94	%	Flow Rate (Actual O2)	28203	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate *	10:30 AM - 11:18 AM	g/s	-	-	<0.004	-	0.100	Calculated	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Sampled By : Tinnakorn Kulchart , Saknarin Jaraskay

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

Thanitak.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. Chonchon

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105881
Date Received : Sep 12, 2023
Date Reported : Sep 21, 2023
Report Number : 2771057-1

Page 1 of 1

Sample Number 23105881-1
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#2 (GPS 47P 0730557, 1404139)
Measurement Date Sep 12, 2023

Stack Description

Ambient Temperature	31	°C	Diameter	1.80	m	Oxygen	3.84	%
Ambient Pressure	756	mmHg	Shape	Circle		Carbon dioxide	9.74	%
Type of Process	Combustion		Stack Temperature	121	°C	Gas Velocity	4.36	m/s
Type of Fuel	Natural Gas		Moisture	10.65	%	Flow Rate	26895	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	10:20 AM - 10:40 AM	3.86	9.73	30.38	24.78	0.22	0.18
2	10:41 AM - 11:01 AM	3.84	9.74	30.31	24.69	0.18	0.14
3	11:02 AM - 11:22 AM	3.83	9.74	30.56	24.89	0.17	0.13
Average (ppm)		3.84	9.74	30.42	24.79	0.19	0.15
Guideline ^{1/} (ppm)				-	50	-	2
Guideline ^{2/} (ppm)				-	120	-	20
Guideline ^{3/} (ppm)				-	120	-	20
Result (mg/Nm ³)				57.23	46.63	0.49	0.40
Emission Rate at Actual O ₂ (g/s)				0.4275		0.0037	
Guideline ^{1/} (g/s)				1.56		0.087	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Sathaporn Thakarn

Guideline : ^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 3)

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

^{3/} Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Wichan Choonharat

Wichan Choonharat
Manager
ทะเบียนเลขที่ ว-204-ก-6113

Approved by

Sarayuth Jittrantont

Sarayuth Jittrantont
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Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042

Lot ID: 23105904
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number: 2771087-1

Page 1 of 2

Sample Number 23105904-1
Sampled Date Sep 12, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#2 (GPS 47P 730557, 1404139)
Date Analysis Commenced Sep 14, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description

Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	3.8	%
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	9.7	%
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	4.4	m/s
Type of Fuel	Natural Gas		Moisture	10.61	%	Flow Rate (Actual O2)	26874	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂ at 3.8 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate	10:20 AM - 11:20 AM	mg/m3	-	0.5	<0.5	60	6	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. J. J.

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042

Lot ID: 23105904
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number: 2771087-1

Page 2 of 2

Sample Number 23105904-1
Sampled Date Sep 12, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 70Ton#2 (GPS 47P 730557, 1404139)
Date Analysis Commenced Sep 14, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description

Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	3.8	%
Ambient Temperature	31.0	°C	Shape	Circle		Carbon Dioxide	9.7	%
Type of Process	Combustion		Stack Temperature	120	°C	Gas Velocity	4.4	m/s
Type of Fuel	Natural Gas		Moisture	10.61	%	Flow Rate (Actual O2)	26874	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate *	10:20 AM - 11:20 AM	g/s	-	-	<0.004	-	0.100	Calculated	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Sampled By : Tinnakorn Kulchart , Saknarin Jaraskay

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

Thanitak.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. J. J.

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

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S:\Reports\Air Stack_O2_2GL.rpt (10:00AM)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105879
Date Received : Sep 13, 2023
Date Reported : Sep 21, 2023
Report Number : 2771061-1

Page 1 of 1

Sample Number 23105879-1
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 140 (GPS 47P 0730506, 1404118)
Measurement Date Sep 13, 2023

Stack Description							
Ambient Temperature	30	°C	Diameter	1.80	m	Oxygen	7.97 %
Ambient Pressure	756	mmHg	Shape	Circle		Carbon dioxide	6.92 %
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	5.96 m/s
Type of Fuel	Natural Gas		Moisture	12.29	%	Flow Rate	32746 Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	10:00 AM - 10:20 AM	7.99	6.90	34.28	36.92	0.03	0.03
2	10:21 AM - 10:41 AM	7.97	6.92	34.38	36.95	0.03	0.03
3	10:42 AM - 11:02 AM	7.94	6.94	34.67	37.20	0.04	0.04
Average (ppm)		7.97	6.92	34.45	37.02	0.03	0.03
Guideline ^{1/} (ppm)				-	60	-	2
Guideline ^{2/} (ppm)				-	120	-	20
Guideline ^{3/} (ppm)				-	120	-	20
Result (mg/Nm ³)				64.81	69.66	0.08	0.09
Emission Rate at Actual O ₂ (g/s)				0.5895		0.0008	
Guideline ^{1/} (g/s)				3.80		0.210	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Sathaporn Thakarn

Guideline : ^{1/} Environmental Impact Assessment Report of Global Power Synergy Public Company Limited (CUP 3)

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

^{3/} Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Wichan Choonharat

Wichan Choonharat
Manager
ทะเบียนเลขที่ ว-204-ก-6113

Approved by

Sarayuth Jittranoit

Sarayuth Jittranoit
Assistant General Manager
ทะเบียนเลขที่ ว-204-ก-4702

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105902
Date Received : Sep 13, 2023
Date Reported : Sep 20, 2023
Report Number : 2771085-1

Page 1 of 2

Sample Number 23105902-1
Sampled Date Sep 13, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 140 (GPS 47P 730506, 1404118)
Date Analysis Commenced Sep 14, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description							
Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	8.0 %
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	6.9 %
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	6.0 m/s
Type of Fuel	Natural Gas		Moisture	12.29	%	Flow Rate (Actual O ₂)	32706 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result		Guideline (1)	Guideline (2)	Method	Testing Location
					at 7 % O ₂	at 8.0 % O ₂				
Air Testing										
Total Suspended Particulate	10:00 AM - 10:48 AM	mg/m3	-	0.5	<0.5	<0.5	60	6	United States Environmental Protection Agency, EPA Method 5	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Technical Management

Thanita Kulsuriwong

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-ก-9447

Approved by

Dej Changchon

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

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105902
Date Received : Sep 13, 2023
Date Reported : Sep 20, 2023
Report Number: 2771085-1

Page 2 of 2

Sample Number 23105902-1
Sampled Date Sep 13, 2023
Sample Description Emission from Stationary Source
Location Auxiliary Boiler 140 (GPS 47P 730506, 1404118)
Date Analysis Commenced Sep 14, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish and one plastic bottle

Stack Description

Ambient Pressure	756	mmHg	Diameter	1.80	m	Oxygen	8.0	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	6.9	%
Type of Process	Combustion		Stack Temperature	160	°C	Gas Velocity	6.0	m/s
Type of Fuel	Natural Gas		Moisture	12.29	%	Flow Rate (Actual O2)	32706	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate *	10:00 AM - 10:48 AM	g/s	-	-	<0.005	-	0.241	Calculated	Rayong

Guideline :

Guideline (1) : Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
: Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Guideline (2) : Environmental Impact Assessment Report of Global Power Synergy Public Company Limited. (CUP 3)

Sampled By : Tinnakorn Kulchart , Saknarin Jaraskay

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

Thanita K.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ๖-323-๖-9447

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ๖-323-๖-9442

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ภาคผนวก ค-3

คุณภาพอากาศในสถานประกอบการ



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105854
Date Received : Sep 19, 2023
Date Reported : Oct 02, 2023
Report Number : 2771044-1

Page 1 of 5

Sample Number 23105854-3
Sampled Date Sep 19, 2023
Sample Description Air Quality
Location Cooling Tower # 1
Date Analysis Commenced Sep 22, 2023
Condition of Sample Drawn into one amber plastic bottle, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
Scientist (4)

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105854
Date Received : Sep 19, 2023
Date Reported : Oct 02, 2023
Report Number : 2771044-1

Page 2 of 5

Sample Number 23105854-4
Sampled Date Sep 19, 2023
Sample Description Air Quality
Location Cooling Tower # 2
Date Analysis Commenced Sep 22, 2023
Condition of Sample Drawn into one amber plastic bottle, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
Scientist (4)

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105854
Date Received : Sep 19, 2023
Date Reported : Oct 02, 2023
Report Number : 2771044-1

Page 3 of 5

Sample Number 23105854-5
Sampled Date Sep 19, 2023
Sample Description Air Quality
Location RO Plant
Date Analysis Commenced Sep 22, 2023
Condition of Sample Drawn into one amber plastic bottle, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Chlorine	10:00 AM - 12:00 PM	ppm	-	0.10	<0.10	1(C)	Based on OSHA, ID 101	MOL	Bangkok

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
Scientist (4)

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Analysis / Test Report

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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105854
Date Received : Sep 19, 2023
Date Reported : Oct 02, 2023
Report Number : 2771044-1

Page 4 of 5

Sample Number 23105854-6
Sampled Date Sep 19, 2023
Sample Description Air Quality
Location Demin Plant run A (NaOH & HCl Tank)
Date Analysis Commenced Sep 20, 2023
Condition of Sample Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Hydrogen chloride	10:00 AM - 12:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	MOL	Bangkok
Sodium hydroxide as NaOH	10:00 AM - 12:00 PM	mg/m3	-	0.05	<0.05	2	NIOSH (1994), 7401	MOL	Rayong

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by

Saranya C.

Saranya Chalermtamrong
Scientist (4)

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105854
Date Received : Sep 19, 2023
Date Reported : Oct 02, 2023
Report Number : 2771044-1

Page 5 of 5

Sample Number 23105854-7
Sampled Date Sep 19, 2023
Sample Description Air Quality
Location Demin Plant run B (NaOH & HCl Tank)
Date Analysis Commenced Sep 20, 2023
Condition of Sample Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated
Barometric Pressure 757 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Hydrogen chloride	10:00 AM - 12:00 PM	ppm	-	0.05	<0.05	5(C)	Based on OSHA, ID-174-SG	MOL	Bangkok
Sodium hydroxide as NaOH	09:30 AM - 11:30 AM	mg/m3	-	0.05	<0.05	2	NIOSH (1994), 7401	MOL	Rayong

Guideline :

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

Sampled By : Nattakarn Vonginyoo

Remark :

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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ภาคผนวก ค-4

ระดับเสียงทั่วไป



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 245918

Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889877-1

P/O :
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Number 245918-1
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 20 - Dec 21, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.0	81.9	64.0
10:00 AM - 11:00 AM	64.9	75.3	64.0
11:00 AM - 12:00 PM	64.9	76.3	63.9
12:00 PM - 01:00 PM	65.0	78.2	64.1
01:00 PM - 02:00 PM	65.0	73.5	64.0
02:00 PM - 03:00 PM	64.9	79.0	64.0
03:00 PM - 04:00 PM	65.0	72.4	64.0
04:00 PM - 05:00 PM	65.5	84.5	64.2
05:00 PM - 06:00 PM	65.4	82.0	64.4
06:00 PM - 07:00 PM	65.1	81.9	64.2
07:00 PM - 08:00 PM	65.0	76.3	64.1
08:00 PM - 09:00 PM	65.0	72.7	64.2
09:00 PM - 10:00 PM	65.0	74.5	64.2
10:00 PM - 11:00 PM	65.0	72.1	64.2
11:00 PM - 12:00 AM	64.9	73.7	64.1
12:00 AM - 01:00 AM	65.1	75.9	64.2
01:00 AM - 02:00 AM	65.2	72.5	64.3
02:00 AM - 03:00 AM	65.2	72.1	64.4
03:00 AM - 04:00 AM	65.0	71.9	64.2
04:00 AM - 05:00 AM	65.1	72.4	64.3
05:00 AM - 06:00 AM	65.9	87.1	64.5
06:00 AM - 07:00 AM	66.1	86.4	64.6
07:00 AM - 08:00 AM	65.6	82.7	64.4
08:00 AM - 09:00 AM	65.0	80.6	64.0

Leq Average 24 hrs. (dB(A)) 65.2
Lmax (dB(A)) 87.1
L90 (dB(A)) 64.2
Ldn (dB(A)) 71.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salamteh
Section Head

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S:\Reports\Air Noise.rpt (9:27AM)



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 245918

Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889878-1

P/O :
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Number 245918-2
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 21 - Dec 22, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.3	89.0	64.5
10:00 AM - 11:00 AM	65.5	72.3	64.6
11:00 AM - 12:00 PM	65.7	75.2	64.5
12:00 PM - 01:00 PM	65.3	73.0	64.4
01:00 PM - 02:00 PM	65.2	74.5	64.3
02:00 PM - 03:00 PM	65.4	74.4	64.4
03:00 PM - 04:00 PM	65.4	73.6	64.4
04:00 PM - 05:00 PM	65.7	74.7	64.7
05:00 PM - 06:00 PM	65.8	84.2	64.7
06:00 PM - 07:00 PM	65.5	78.7	64.5
07:00 PM - 08:00 PM	65.3	73.6	64.4
08:00 PM - 09:00 PM	65.2	74.0	64.3
09:00 PM - 10:00 PM	65.2	80.0	64.2
10:00 PM - 11:00 PM	65.2	83.0	64.2
11:00 PM - 12:00 AM	65.0	79.2	64.1
12:00 AM - 01:00 AM	65.0	71.6	64.2
01:00 AM - 02:00 AM	65.1	72.2	64.3
02:00 AM - 03:00 AM	65.2	74.0	64.3
03:00 AM - 04:00 AM	65.3	79.6	64.4
04:00 AM - 05:00 AM	65.2	73.4	64.3
05:00 AM - 06:00 AM	65.4	74.2	64.5
06:00 AM - 07:00 AM	66.2	85.2	64.8
07:00 AM - 08:00 AM	65.8	79.2	64.6
08:00 AM - 09:00 AM	65.3	76.9	64.3

Leq Average 24 hrs. (dB(A)) 65.4
Lmax (dB(A)) 89.0
L90 (dB(A)) 64.4
Ldn (dB(A)) 71.7
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salamteh
Section Head

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S:\Reports\Air Noise.rpt (9:27AM)



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O :
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 245918
Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889879-1

Page 1 of 1

Sample Number 245918-3
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 22 - Dec 23, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.1	76.5	64.2
10:00 AM - 11:00 AM	64.8	73.8	64.0
11:00 AM - 12:00 PM	64.9	72.6	64.0
12:00 PM - 01:00 PM	64.8	72.2	63.9
01:00 PM - 02:00 PM	64.8	72.6	63.8
02:00 PM - 03:00 PM	64.7	72.8	63.8
03:00 PM - 04:00 PM	65.1	77.2	64.0
04:00 PM - 05:00 PM	65.3	77.2	64.2
05:00 PM - 06:00 PM	65.3	81.4	64.2
06:00 PM - 07:00 PM	65.0	77.2	63.9
07:00 PM - 08:00 PM	65.0	73.2	64.0
08:00 PM - 09:00 PM	65.0	76.6	64.1
09:00 PM - 10:00 PM	64.9	71.7	64.2
10:00 PM - 11:00 PM	65.0	72.5	64.2
11:00 PM - 12:00 AM	65.0	80.5	64.1
12:00 AM - 01:00 AM	64.9	71.8	64.1
01:00 AM - 02:00 AM	65.0	71.9	64.2
02:00 AM - 03:00 AM	64.9	72.2	64.1
03:00 AM - 04:00 AM	65.1	72.8	64.2
04:00 AM - 05:00 AM	65.1	73.0	64.3
05:00 AM - 06:00 AM	65.4	79.1	64.4
06:00 AM - 07:00 AM	65.9	83.5	64.5
07:00 AM - 08:00 AM	66.8	79.7	65.4
08:00 AM - 09:00 AM	65.9	74.4	65.0

Leq Average 24 hrs. (dB(A)) 65.2
Lmax (dB(A)) 83.5
L90 (dB(A)) 64.1
Ldn (dB(A)) 71.6
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
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S:\Reports\Air Noise.rpt (9:27AM)



Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O :
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 245918
Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889880-1

Page 1 of 1

Sample Number 245918-4
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 23 - Dec 24, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	65.7	80.6	64.7
10:00 AM - 11:00 AM	65.4	75.5	64.4
11:00 AM - 12:00 PM	65.4	73.2	64.5
12:00 PM - 01:00 PM	65.3	76.0	64.4
01:00 PM - 02:00 PM	65.1	71.8	64.2
02:00 PM - 03:00 PM	65.1	74.3	64.3
03:00 PM - 04:00 PM	65.4	73.2	64.3
04:00 PM - 05:00 PM	65.5	77.2	64.4
05:00 PM - 06:00 PM	65.5	72.6	64.5
06:00 PM - 07:00 PM	65.1	74.0	64.2
07:00 PM - 08:00 PM	65.2	82.2	64.2
08:00 PM - 09:00 PM	64.8	71.9	64.2
09:00 PM - 10:00 PM	64.7	74.8	64.1
10:00 PM - 11:00 PM	64.7	73.6	64.1
11:00 PM - 12:00 AM	64.8	69.3	64.3
12:00 AM - 01:00 AM	64.6	68.9	64.0
01:00 AM - 02:00 AM	64.6	68.6	64.1
02:00 AM - 03:00 AM	64.7	71.8	64.1
03:00 AM - 04:00 AM	64.7	69.1	64.2
04:00 AM - 05:00 AM	64.8	69.9	64.2
05:00 AM - 06:00 AM	65.0	74.1	64.3
06:00 AM - 07:00 AM	65.4	76.5	64.5
07:00 AM - 08:00 AM	65.4	79.6	64.6
08:00 AM - 09:00 AM	65.0	76.7	64.2

Leq Average 24 hrs. (dB(A)) 65.1
Lmax (dB(A)) 82.2
L90 (dB(A)) 64.2
Ldn (dB(A)) 71.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 245918
Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889881-1

P/O :
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Number 245918-5
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 24 - Dec 25, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	66.4	72.3	65.7
10:00 AM - 11:00 AM	65.4	73.9	64.7
11:00 AM - 12:00 PM	65.2	80.6	64.5
12:00 PM - 01:00 PM	64.7	73.0	64.0
01:00 PM - 02:00 PM	64.8	71.9	64.1
02:00 PM - 03:00 PM	64.7	80.8	64.0
03:00 PM - 04:00 PM	64.9	73.8	64.2
04:00 PM - 05:00 PM	65.1	74.4	64.3
05:00 PM - 06:00 PM	65.3	79.9	64.4
06:00 PM - 07:00 PM	65.0	81.0	64.0
07:00 PM - 08:00 PM	64.8	82.2	64.0
08:00 PM - 09:00 PM	64.6	76.0	63.9
09:00 PM - 10:00 PM	64.7	77.7	64.0
10:00 PM - 11:00 PM	64.8	80.9	63.9
11:00 PM - 12:00 AM	64.6	68.4	64.0
12:00 AM - 01:00 AM	64.5	68.7	64.0
01:00 AM - 02:00 AM	64.6	69.1	64.0
02:00 AM - 03:00 AM	64.5	68.6	63.9
03:00 AM - 04:00 AM	64.6	68.9	64.0
04:00 AM - 05:00 AM	64.7	68.3	64.1
05:00 AM - 06:00 AM	65.2	76.3	64.5
06:00 AM - 07:00 AM	65.8	77.0	64.9
07:00 AM - 08:00 AM	65.7	77.2	64.9
08:00 AM - 09:00 AM	64.8	73.7	64.1

Leq Average 24 hrs. (dB(A)) 65.0
Lmax (dB(A)) 82.2
L90 (dB(A)) 64.0
Ldn (dB(A)) 71.3
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 245918
Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889882-1

P/O :
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Number 245918-6
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแฟบ
Measurement Date Dec 25 - Dec 26, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.4	71.4	63.7
10:00 AM - 11:00 AM	64.4	70.9	63.6
11:00 AM - 12:00 PM	64.2	76.2	63.4
12:00 PM - 01:00 PM	64.4	73.9	63.7
01:00 PM - 02:00 PM	64.5	72.8	63.7
02:00 PM - 03:00 PM	64.6	76.2	63.7
03:00 PM - 04:00 PM	64.7	72.6	63.8
04:00 PM - 05:00 PM	64.7	78.2	63.8
05:00 PM - 06:00 PM	64.8	79.2	64.0
06:00 PM - 07:00 PM	64.7	76.7	64.0
07:00 PM - 08:00 PM	64.6	75.6	63.8
08:00 PM - 09:00 PM	64.5	70.6	63.9
09:00 PM - 10:00 PM	64.6	74.2	64.0
10:00 PM - 11:00 PM	64.7	71.2	64.0
11:00 PM - 12:00 AM	64.7	71.3	64.0
12:00 AM - 01:00 AM	64.9	71.6	64.2
01:00 AM - 02:00 AM	65.0	68.7	64.4
02:00 AM - 03:00 AM	65.3	69.7	64.7
03:00 AM - 04:00 AM	65.3	78.4	64.7
04:00 AM - 05:00 AM	65.0	72.0	64.4
05:00 AM - 06:00 AM	65.3	72.0	64.6
06:00 AM - 07:00 AM	66.0	80.3	65.0
07:00 AM - 08:00 AM	66.0	84.0	64.9
08:00 AM - 09:00 AM	64.9	74.4	64.2

Leq Average 24 hrs. (dB(A)) 64.9
Lmax (dB(A)) 84.0
L90 (dB(A)) 64.0
Ldn (dB(A)) 71.5
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

Lot ID: 245918
Date Received : Jan 17, 2024
Date Reported : Jan 23, 2024
Report Number: 2889883-1

P/O :
Project Name : Monitoring
Project Location : CUP 3

Page 1 of 1

Sample Number 245918-7
Parameter Noise (Leq 24 hrs.)
Location ริมรั้วโรงงานด้านทิศเหนือฝั่งติดชุมชนหนองแปน
Measurement Date Dec 26 - Dec 27, 2023
Measurement by Norranon Tathongkham
Sound Level meter Serial No. 597167

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	64.6	74.4	63.9
10:00 AM - 11:00 AM	64.4	76.8	63.6
11:00 AM - 12:00 PM	64.3	74.4	63.6
12:00 PM - 01:00 PM	64.6	80.4	63.8
01:00 PM - 02:00 PM	64.5	74.9	63.8
02:00 PM - 03:00 PM	64.5	71.6	63.8
03:00 PM - 04:00 PM	64.7	78.3	64.0
04:00 PM - 05:00 PM	64.9	76.3	64.1
05:00 PM - 06:00 PM	65.0	75.0	64.3
06:00 PM - 07:00 PM	64.8	74.5	64.1
07:00 PM - 08:00 PM	64.7	71.1	64.1
08:00 PM - 09:00 PM	64.8	79.3	64.2
09:00 PM - 10:00 PM	64.8	74.8	64.1
10:00 PM - 11:00 PM	64.8	72.1	64.2
11:00 PM - 12:00 AM	64.8	71.4	64.2
12:00 AM - 01:00 AM	64.8	69.3	64.1
01:00 AM - 02:00 AM	65.0	72.2	64.4
02:00 AM - 03:00 AM	64.9	68.4	64.3
03:00 AM - 04:00 AM	65.0	68.0	64.4
04:00 AM - 05:00 AM	65.2	69.1	64.6
05:00 AM - 06:00 AM	65.6	71.8	64.9
06:00 AM - 07:00 AM	66.1	80.0	65.1
07:00 AM - 08:00 AM	65.9	80.6	64.9
08:00 AM - 09:00 AM	65.2	78.4	64.3

Leq Average 24 hrs. (dB(A)) 64.9
Lmax (dB(A)) 80.6
L90 (dB(A)) 64.1
Ldn (dB(A)) 71.5
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
Section Head

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ภาคผนวก ค-5

ระดับเสียงในสถานประกอบการ



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105867
Date Received : Oct 05, 2023
Date Reported : Oct 10, 2023
Report Number: 2803164-1

Page 1 of 1

Sample Number 23105867-1
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 140
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:55 AM - 11:55 AM	85.3	87.0	84.8
11:55 AM - 12:55 PM	85.6	87.2	85.1
12:55 PM - 01:55 PM	85.7	87.3	85.2
01:55 PM - 02:55 PM	85.6	87.2	85.2
02:55 PM - 03:55 PM	85.7	87.2	85.3
03:55 PM - 04:55 PM	85.5	86.9	85.1
04:55 PM - 05:55 PM	85.4	87.0	84.9
05:55 PM - 06:55 PM	85.3	87.0	84.8

Leq Average 8 hrs. (dB(A))

85.5

Lmax (dB(A))

87.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

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Scientist (4)

Approved by

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Supot Salamteh
Section Head

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105867
Date Received : Oct 05, 2023
Date Reported : Oct 10, 2023
Report Number: 2803165-1

Page 1 of 1

Sample Number 23105867-2
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 70Ton#1
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	85.0	86.7	84.5
12:00 PM - 01:00 PM	85.1	86.9	84.6
01:00 PM - 02:00 PM	85.2	87.0	84.6
02:00 PM - 03:00 PM	85.1	87.0	84.6
03:00 PM - 04:00 PM	85.2	86.9	84.6
04:00 PM - 05:00 PM	85.2	86.8	84.7
05:00 PM - 06:00 PM	85.2	86.9	84.7
06:00 PM - 07:00 PM	85.1	86.8	84.6

Leq Average 8 hrs. (dB(A))

85.1

Lmax (dB(A))

87.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23105867

Date Received : Oct 05, 2023

Date Reported : Oct 10, 2023

Report Number: 2803166-1

Page 1 of 1

Sample Number 23105867-3
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 70Ton#2
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:58 AM - 11:58 AM	85.4	87.5	84.8
11:58 AM - 12:58 PM	86.6	89.1	85.4
12:58 PM - 01:58 PM	85.2	87.1	84.6
01:58 PM - 02:58 PM	85.0	86.7	84.5
02:58 PM - 03:58 PM	85.2	86.9	84.7
03:58 PM - 04:58 PM	85.1	86.8	84.6
04:58 PM - 05:58 PM	85.5	86.9	85.1
05:58 PM - 06:58 PM	85.4	87.0	84.9

Leq Average 8 hrs. (dB(A))

85.5

Lmax (dB(A))

89.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23105867

Date Received : Oct 05, 2023

Date Reported : Oct 10, 2023

Report Number: 2803167-1

Page 1 of 1

Sample Number 23105867-4
Parameter Noise (Leq 8 hrs.)
Location Cooling Tower #1
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:19 AM - 12:19 PM	74.9	88.6	74.7
12:19 PM - 01:19 PM	74.7	75.4	74.5
01:19 PM - 02:19 PM	75.1	76.0	74.8
02:19 PM - 03:19 PM	75.8	77.5	75.6
03:19 PM - 04:19 PM	75.7	76.3	75.6
04:19 PM - 05:19 PM	75.9	76.4	75.8
05:19 PM - 06:19 PM	76.0	77.2	75.8
06:19 PM - 07:19 PM	76.1	76.9	76.0

Leq Average 8 hrs. (dB(A))

75.6

Lmax (dB(A))

88.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Supot Salamteh
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105867
Date Received : Oct 05, 2023
Date Reported : Oct 10, 2023
Report Number: 2803168-1

Page 1 of 1

Sample Number 23105867-5
Parameter Noise (Leq 8 hrs.)
Location Cooling Tower #2
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:45 AM - 11:45 AM	83.1	84.7	82.8
11:45 AM - 12:45 PM	83.1	84.2	82.7
12:45 PM - 01:45 PM	83.1	84.0	82.9
01:45 PM - 02:45 PM	83.3	84.3	82.8
02:45 PM - 03:45 PM	83.1	84.7	82.8
03:45 PM - 04:45 PM	83.1	84.2	82.8
04:45 PM - 05:45 PM	83.2	83.9	82.8
05:45 PM - 06:45 PM	83.2	84.4	82.8

Leq Average 8 hrs. (dB(A))

83.2

Lmax (dB(A))

84.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105867
Date Received : Oct 05, 2023
Date Reported : Oct 10, 2023
Report Number: 2803173-1

Page 1 of 1

Sample Number 23105867-10
Parameter Noise (Leq 8 hrs.)
Location STG
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:51 AM - 11:51 AM	81.4	82.4	81.3
11:51 AM - 12:51 PM	81.4	82.1	81.0
12:51 PM - 01:51 PM	81.4	82.4	81.1
01:51 PM - 02:51 PM	81.4	82.2	81.1
02:51 PM - 03:51 PM	81.4	82.1	81.2
03:51 PM - 04:51 PM	81.1	82.0	80.8
04:51 PM - 05:51 PM	81.4	82.1	81.2
05:51 PM - 06:51 PM	81.6	82.6	81.3

Leq Average 8 hrs. (dB(A))

81.4

Lmax (dB(A))

82.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23105867

Date Received : Oct 05, 2023

Date Reported : Oct 10, 2023

Report Number: 2803174-1

Page 1 of 1

Sample Number 23105867-11
Parameter Noise (Leq 8 hrs.)
Location Air Compressor
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:10 AM - 12:10 PM	79.5	87.8	78.5
12:10 PM - 01:10 PM	79.5	82.4	78.7
01:10 PM - 02:10 PM	82.2	84.4	79.4
02:10 PM - 03:10 PM	79.1	83.1	76.3
03:10 PM - 04:10 PM	77.8	81.7	76.2
04:10 PM - 05:10 PM	77.9	81.6	76.8
05:10 PM - 06:10 PM	78.1	82.2	76.5
06:10 PM - 07:10 PM	78.0	82.4	76.5

Leq Average 8 hrs. (dB(A))

79.3

Lmax (dB(A))

87.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Supot Salamteh
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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882272-1

Page 1 of 1

Sample Number 23116725-1
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 140
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:15 AM - 10:15 AM	84.3	88.9	83.9
10:15 AM - 11:15 AM	84.4	85.4	84.0
11:15 AM - 12:15 PM	84.6	85.5	84.3
12:15 PM - 01:15 PM	84.6	85.7	84.4
01:15 PM - 02:15 PM	84.6	85.6	84.2
02:15 PM - 03:15 PM	84.6	86.2	84.2
03:15 PM - 04:15 PM	84.1	85.5	83.7
04:15 PM - 05:15 PM	83.7	84.4	83.5

Leq Average 8 hrs. (dB(A))

84.4

Lmax (dB(A))

88.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Note : This Analysis test report is issued to supersede report No.2832532-1, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882273-1

Page 1 of 1

Sample Number 23116725-2
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 70Ton#1
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 PM - 10:05 PM	80.9	81.6	80.7
10:05 PM - 11:05 PM	80.9	81.6	80.7
11:05 PM - 12:05 AM	81.0	81.8	80.8
12:05 AM - 01:05 AM	81.1	82.4	80.8
01:05 AM - 02:05 AM	81.2	82.9	80.8
02:05 AM - 03:05 AM	81.2	82.2	80.9
03:05 AM - 04:05 AM	81.2	82.7	80.8
04:05 AM - 05:05 AM	81.0	82.0	80.7

Leq Average 8 hrs. (dB(A))

81.1

Lmax (dB(A))

82.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.2832533-1, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882274-1

Page 1 of 1

Sample Number 23116725-3
Parameter Noise (Leq 8 hrs.)
Location Auxiliary Boiler 70Ton#2
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:05 AM - 10:05 AM	82.7	83.5	82.4
10:05 AM - 11:05 AM	82.4	83.4	82.1
11:05 AM - 12:05 PM	82.6	83.6	82.4
12:05 PM - 01:05 PM	83.3	84.5	82.8
01:05 PM - 02:05 PM	82.9	84.1	82.6
02:05 PM - 03:05 PM	83.5	84.4	83.3
03:05 PM - 04:05 PM	83.5	84.5	83.2
04:05 PM - 05:05 PM	83.1	84.2	82.8

Leq Average 8 hrs. (dB(A))

83.0

Lmax (dB(A))

84.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.2832534-1, Date Reported : Nov 10, 2023 due to revise analytical information.

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P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882275-1

Page 1 of 1

Sample Number 23116725-4
Parameter Noise (Leq 8 hrs.)
Location Cooling Tower #1
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:02 AM - 10:02 AM	75.8	86.0	75.4
10:02 AM - 11:02 AM	76.2	77.0	76.0
11:02 AM - 12:02 PM	76.4	77.2	76.3
12:02 PM - 01:02 PM	76.4	81.1	76.2
01:02 PM - 02:02 PM	76.6	77.6	76.4
02:02 PM - 03:02 PM	77.0	86.2	76.5
03:02 PM - 04:02 PM	76.6	83.1	76.4
04:02 PM - 05:02 PM	76.5	77.4	76.3

Leq Average 8 hrs. (dB(A))

76.4

Lmax (dB(A))

86.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.283253251, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882276-1

Page 1 of 1

Sample Number 23116725-5
Parameter Noise (Leq 8 hrs.)
Location Cooling Tower #2
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:29 AM - 10:29 AM	82.6	89.7	82.3
10:29 AM - 11:29 AM	82.5	83.8	82.3
11:29 AM - 12:29 PM	82.9	83.7	82.2
12:29 PM - 01:29 PM	82.6	83.7	82.1
01:29 PM - 02:29 PM	82.7	83.7	82.2
02:29 PM - 03:29 PM	82.8	83.5	82.7
03:29 PM - 04:29 PM	82.7	84.8	82.4
04:29 PM - 05:29 PM	83.1	83.9	82.7

Leq Average 8 hrs. (dB(A))

82.7

Lmax (dB(A))

89.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.2832536-1, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882281-1

Page 1 of 1

Sample Number 23116725-10
Parameter Noise (Leq 8 hrs.)
Location STG
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:29 PM - 10:29 PM	81.9	82.5	81.7
10:29 PM - 11:29 PM	81.8	83.1	81.6
11:29 PM - 12:29 AM	81.9	82.6	81.6
12:29 AM - 01:29 AM	82.3	83.0	82.1
01:29 AM - 02:29 AM	82.3	83.0	82.0
02:29 AM - 03:29 AM	82.2	83.5	82.0
03:29 AM - 04:29 AM	82.1	82.9	81.8
04:29 AM - 05:29 AM	82.2	83.3	81.9

Leq Average 8 hrs. (dB(A))

82.1

Lmax (dB(A))

83.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.2832541-1, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150

P/O : DA41002956

Project Name : Monitoring

Project Location : CUP 3

Lot ID: 23116725

Date Received : Nov 07, 2023

Date Reported : Jan 10, 2024

Report Number: 2882282-1

Page 1 of 1

Sample Number 23116725-11
Parameter Noise (Leq 8 hrs.)
Location Air Compressor
Measurement Date Nov 06, 2023
Measurement by Prasannit Kueanpet

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:22 AM - 10:22 AM	79.3	87.5	77.3
10:22 AM - 11:22 AM	81.4	90.5	79.9
11:22 AM - 12:22 PM	83.7	85.1	83.4
12:22 PM - 01:22 PM	83.7	87.8	81.4
01:22 PM - 02:22 PM	84.9	107.5	77.6
02:22 PM - 03:22 PM	80.1	85.8	78.5
03:22 PM - 04:22 PM	79.8	85.5	78.2
04:22 PM - 05:22 PM	80.2	85.7	78.2

Leq Average 8 hrs. (dB(A))

82.1

Lmax (dB(A))

107.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Note : This Analysis test report is issued to supersede report No.2832542-1, Date Reported : Nov 10, 2023 due to revise analytical information.

Technical Management

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ภาคผนวก ค-6

คุณภาพน้ำ



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-1

Page 1 of 2

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine 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
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤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
Cyanide as HCN *	mg/L	0.001	0.005	0.006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤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 *	-	-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

Technical Management *N. Bangmit*
Narumon Banchoangkit
Supervisor
เบอร์โทรแจ้ง 3-323-9-9445

Approved by *D. Chanchon*
Dej Chanchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-1

Page 2 of 2

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	33.4	≤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	792	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NHI3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤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 : Samson Khuyokul เบอร์โทรแจ้ง 3-323-9-0005, Samart Khumplee เบอร์โทรแจ้ง 3-204-7-7830

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

Technical Management *N. Bangmit*
Narumon Banchoangkit
Supervisor
เบอร์โทรแจ้ง 3-323-9-9445

Approved by *D. Chanchon*
Dej Chanchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 1 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.009	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.22	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.29	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management *Sawitree N.*
Sawitree Nonsiam
Manager
เบอร์โทรแจ้ง 3-204-9-4709

Approved by *Kankorn Anek*
Kankorn Anek
Senior Manager
เบอร์โทรแจ้ง 3-204-9-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 2 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.009	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0007	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.16	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Carbamate Group							
3-Hydroxy Carbifuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfone *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfoxide *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok

Technical Management *Sawitree N.*
Sawitree Nonsiam
Manager
เบอร์โทรแจ้ง 3-204-9-4709

Approved by *Kankorn Anek*
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Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 3 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Carbamate Group							
Carbaryl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methiocarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methomyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Oxamyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Propoxur *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Pesticides - Organochlorine Group							
2,4-DDO	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.
Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-3-4709

Approved by

Kanokorn A.
Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-3-6111

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 4 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDT	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin and Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.
Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-3-4709

Approved by

Kanokorn A.
Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-3-6111

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51/Report/AL_01_rpt (6/2019)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 5 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Chlordane	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
gamma-BHC (Lindane)	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.
Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-3-4709

Approved by

Kanokorn A.
Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-3-6111

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51/Report/AL_01_rpt (6/2019)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-2

Page 6 of 6

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location บ่อระดมของเสียจากท่อ (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Heptachlor	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoide	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC)	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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 : Samson Khuyosai โทรศัพท์มือถือ : 323-3-0005, Samart Khumphee โทรศัพท์มือถือ : 204-3-7830

Remark :

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

Technical Management

Savitree N.
Savitree Naisangiam
Manager
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Senior Manager
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51/Report/AL_01_rpt (6/2019)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-3

Page 1 of 4

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^(A) Iron	mg/L	0.003	0.005	0.13	≤10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
^(A) Silver	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
Pesticides - Organochlorine Group							
^(A) DDT *	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Mirex *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Pesticides - Organophosphate Group							
^(A) Azinphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Chlorpyrifos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) DDVP	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Diazinon	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Dicrotophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok

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Siriluk Puengpang
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SI/Report/AE_01_pt (5/5096)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-3

Page 2 of 4

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Dimethoate	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) EPN	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Ethion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Fenitrothion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Malathion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Methamidophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Methidathion *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Mevinphos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Monocrotophos *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Omethoate *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Parathion *	ug/L	0.06	0.2	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Parathion-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok

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SI/Report/AE_01_pt (5/5096)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-3

Page 3 of 4

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Parathion-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Phosalone	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Pirimiphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Pirimiphos-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Profenofos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Prothiophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
^(A) Trisnapthos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Pesticides - Pyrethroid Group							
^(A) Cypermethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Deltamethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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SI/Report/AE_01_pt (5/5096)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2371868
Date Received : Jul 11, 2023
Date Reported : Jul 19, 2023
Report Number : 2692054-3

Page 4 of 4

Sample Number 2371868-1
Sampled Date Jul 11, 2023 11:25 AM
Sample Description Wastewater
Location โรงงานอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Jul 12, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Pyrethroid Group							
^(A) Fenvalerate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Permethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Water Testing							
^(A) Ammonia Nitrogen *	mg/L	0.02	0.05	0.76	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
^(A) Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.07	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
^(A) Fluoride	mg/L	0.05	0.2	1.7	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
^(A) Odour *	-	-	-	Odourless	Non Objectionable	TIS, 257-2549	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 : Sansorn Khuyoksuai , Samart Khumplilee

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.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DSS Accreditation No.0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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SI/Report/AE_01_pt (5/5096)



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-1

Page 1 of 2

Sample Number 2389215-1
Sampled Date Aug 08, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine 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
COD	mg/L	1.5	25	27	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	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	11	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Cyanide as HCN *	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤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 *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

Technical Management

N. Bangmit

Narumon Banchoangkit
Supervisor
เบอร์โทรแจ้ง 3-323-9-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
เบอร์โทรแจ้ง 3-323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-1

Page 2 of 2

Sample Number 2389215-1
Sampled Date Aug 08, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Aug 08, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	33.5	≤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	808	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NHD (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤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 : Paramet Sattayakun เบอร์โทรแจ้ง 3-323-9-9476, Thanasson Namakuna เบอร์โทรแจ้ง 3-204-8-8592

Remark :

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

Technical Management

N. Bangmit

Narumon Banchoangkit
Supervisor
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Approved by

D. Chanchon

Dej Chanchon
Senior Manager
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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 1 of 6

Sample Number 2389215-1
Sampled Date Aug 08, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.23	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.008	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-C B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.11	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Technical Management

Sawitree N.

Sawitree Nonsiamgam
Manager
เบอร์โทรแจ้ง 3-204-8-4709

Approved by

Kankorn Anek

Kankorn Anek
Senior Manager
เบอร์โทรแจ้ง 3-204-8-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 2 of 6

Sample Number 2389215-1
Sampled Date Aug 08, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Aug 09, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.007	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.28	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Carbamate Group							
3-Hydroxy Carbosulfuron *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfone *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfoxide *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok

Technical Management

Sawitree N.

Sawitree Nonsiamgam
Manager
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Approved by

Kankorn Anek

Kankorn Anek
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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 3 of 6

Sample Number : 2389215-1
Sampled Date : Aug 08, 2023 2:10 PM
Sample Description : Wastewater
Location : บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced : Aug 09, 2023
Condition of Sample : Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Carbamate Group							
Carbaryl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methiocarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methomyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Oxamyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Propoxur *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Pesticides - Organochlorine Group							
2,4-DDO *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.

Savitree Naisangiam
Manager
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Approved by

Kankorn A.

Kankorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-8-6111

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 4 of 6

Sample Number : 2389215-1
Sampled Date : Aug 08, 2023 2:10 PM
Sample Description : Wastewater
Location : บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced : Aug 09, 2023
Condition of Sample : Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.

Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-8-4709

Approved by

Kankorn A.

Kankorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-8-6111

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 5 of 6

Sample Number : 2389215-1
Sampled Date : Aug 08, 2023 2:10 PM
Sample Description : Wastewater
Location : บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced : Aug 09, 2023
Condition of Sample : Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
gamma-BHC (Lindane) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Savitree N.

Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-8-4709

Approved by

Kankorn A.

Kankorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-8-6111

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 17, 2023
Report Number : 2732913-2

Page 6 of 6

Sample Number : 2389215-1
Sampled Date : Aug 08, 2023 2:10 PM
Sample Description : Wastewater
Location : บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced : Aug 09, 2023
Condition of Sample : Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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 : Paramet Sattayakunam โทรศัพท์มือถือ : 323-8-9476, Thanasson Namakunna โทรศัพท์มือถือ : 204-8-8592

Remark :

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

Technical Management

Savitree N.

Savitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-8-4709

Approved by

Kankorn A.

Kankorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-8-6111

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 18, 2023
Report Number : 2732913-3

Page 1 of 5

Sample Number	2389215-1					
Sampled Date	Aug 08, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำระยองตามแนวท่อ (Inspection Manhole)					
Date Analysis Commenced	Aug 09, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method Testing Location
Metals Testing						
(A) Iron						
	mg/L	0.003	0.005	0.11	≤10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
(A) Silver						
	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Pesticides - Organochlorine Group						
Aldrin and Dieldrin *						
	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
DDT *						
	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
Methoxychlor *						
	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
Mirex *						
	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
Pesticides - Organophosphate Group						
(A) Azinphos-ethyl						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Chlorpyrifos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok

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SI/Report_AE_RL_rpt (8/03/00)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 18, 2023
Report Number : 2732913-3

Page 2 of 5

Sample Number	2389215-1					
Sampled Date	Aug 08, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำระยองตามแนวท่อ (Inspection Manhole)					
Date Analysis Commenced	Aug 09, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method Testing Location
Pesticides - Organophosphate Group						
(A) DDP						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Diazinon						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Dicrotophos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Dimethoate						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) EPN						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Ethion						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Fenitrothion						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Malathion						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Methamidophos *						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Methidathion						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Mevinphos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Monocrotophos *						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 18, 2023
Report Number : 2732913-3

Page 3 of 5

Sample Number	2389215-1					
Sampled Date	Aug 08, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำระยองตามแนวท่อ (Inspection Manhole)					
Date Analysis Commenced	Aug 09, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method Testing Location
Pesticides - Organophosphate Group						
Omethoate *						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
Parathion *						
	ug/L	0.06	0.2	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Parathion-ethyl						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Parathion-methyl						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Phosalone						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Pirimiphos-ethyl						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Disiniphos-methyl						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Profenofos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Prothiophos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
(A) Triazophos						
	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A Bangkok
Pesticides - Pyrethroid Group						
(A) Cypermethrin						
	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 18, 2023
Report Number : 2732913-3

Page 4 of 5

Sample Number	2389215-1					
Sampled Date	Aug 08, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำระยองตามแนวท่อ (Inspection Manhole)					
Date Analysis Commenced	Aug 09, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method Testing Location
Pesticides - Pyrethroid Group						
(A) Deltamethrin						
	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
(A) Fenvalerate						
	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
(A) Permethrin						
	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B Bangkok
Water Testing						
Ammonia Nitrogen *						
	mg/L	0.02	0.05	0.82	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D) Rayong
Anionic Surfactant as MBAS *						
	mg/L	0.015	0.05	0.06	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C Bangkok
Fluoride						
	mg/L	0.05	0.2	1.0	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C) Rayong
Oxides *						
	-	-	-	Objactionable	Not	TTS, 257-2549 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 : Paramet Sattayakun , Thanassou Namakulnua

Remark :
- LOD : Limit of Detection

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 2389215
Date Received : Aug 08, 2023
Date Reported : Aug 18, 2023
Report Number : 272913-3

Page 5 of 5

- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

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6403-02/02AL

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-1

Page 1 of 2

Analyte	Unit	LOQ	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
COD	mg/L	1.5	25	30	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤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
Cyanide as HCN *	mg/L	0.001	0.005	0.006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease	mg/L	-	3	<3	≤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	-	-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-1

Page 2 of 2

Analyte	Unit	LOQ	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, I)	Rayong
Temperature *	Degree C	-	-	33.3	≤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	720	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.3	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part N H3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤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 : Chaisorn Lertthanakulchai โทรศัพท์ +323-9-9461, Thanassorn Namakunna โทรศัพท์ +204-8-8592

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

Technical Management

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-2

Page 1 of 6

Analyte	Unit	LOQ	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.25	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-C B	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.13	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-2

Page 2 of 6

Sample Number 23105913-1
Sampled Date Sep 12, 2023 10:40 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Sep 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.008	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.21	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 31.25 B, 3030 F	Bangkok
Pesticides - Carbamate Group							
3-Hydroxy Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfone *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfonide *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok

Technical Management

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Sawitree Naisangiam
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Approved by

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Senior Manager
โทรศัพท์มือถือ : 204-4-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-2

Page 3 of 6

Sample Number 23105913-1
Sampled Date Sep 12, 2023 10:40 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Sep 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Carbamate Group							
Carbaryl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methiocarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methomyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Oxamyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Propoxur *	ug/L	0.15	0.5	Not Detected	Not Detected	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Sawitree N.

Sawitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-4-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-4-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
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Page 4 of 6

Sample Number 23105913-1
Sampled Date Sep 12, 2023 10:40 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Sep 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin and Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Sawitree N.

Sawitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-4-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-4-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
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Lot ID: 23105913
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Page 5 of 6

Sample Number 23105913-1
Sampled Date Sep 12, 2023 10:40 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Sep 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
DDT *	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Sawitree N.

Sawitree Naisangiam
Manager
โทรศัพท์มือถือ : 204-4-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ : 204-4-6111

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-2

Page 6 of 6

Sample Number	23105913-1						
Sampled Date	Sep 12, 2023 10:40 AM						
Sample Description	Wastewater						
Location	อาคารชลประทานท่าช้าง (Inspection Manhole)						
Date Analysis Commenced	Sep 13, 2023						
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
gamma-BHC (Lindane) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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 : Chansorn Lertnathakunchai รหัสสมาชิก 3-323-9-9461, Thanasson Namakunna รหัสสมาชิก 3-204-8-8592

- Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit 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.

Technical Management Sawitree N. Sawitree Noisangiam Manager รหัสสมาชิก 3-204-8-4709
Approved by Kanokkorn Anek Kanokkorn Anek Senior Manager รหัสสมาชิก 3-204-8-6111
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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-3

Page 1 of 4

Sample Number	23105913-1						
Sampled Date	Sep 12, 2023 10:40 AM						
Sample Description	Wastewater						
Location	น้ำประปาจากท่อระบายน้ำ (Inspection Manhole)						
Date Analysis Commenced	Sep 13, 2023						
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.12	≤10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Organochlorine Group							
Mirex *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Pesticides - Organophosphate Group							
Azinphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Chlorpyrifos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
DDVP	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Diazinon	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Dicofthophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Dimethoate	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
EPN	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-3

Page 2 of 4

Sample Number	23105913-1						
Sampled Date	Sep 12, 2023 10:40 AM						
Sample Description	Wastewater						
Location	น้ำประปาจากท่อระบายน้ำ (Inspection Manhole)						
Date Analysis Commenced	Sep 13, 2023						
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
Ethion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Fenitrothion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Malathion	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Methamidophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Methidathion *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Mevinphos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Monocrotophos *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Omethoate *	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Parathion *	ug/L	0.06	0.2	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Parathion-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Parathion-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Phosalone	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok

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Analysis / Test Report



TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-3

Page 3 of 4

Sample Number	23105913-1						
Sampled Date	Sep 12, 2023 10:40 AM						
Sample Description	Wastewater						
Location	บริเวณสายระบายน้ำ (Inspection Manhole)						
Date Analysis Commenced	Sep 13, 2023						
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
Pintriphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Pintriphos-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Profenofos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Prothiophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Triazophos	ug/L	0.03	0.1	Not Detected	Not Detected	United States Environmental Protection Agency, EPA Method 3510 C and 8141 A	Bangkok
Pesticides - Pyrethroid Group							
Cypermethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Deltamethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Fenvalerate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23105913
Date Received : Sep 12, 2023
Date Reported : Sep 20, 2023
Report Number : 2771100-3

Page 4 of 4

Sample Number 23105913-1
Sampled Date Sep 12, 2023 10:40 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Sep 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Pyrethroid Group							
Permethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.33	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.07	≤30	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Fluoride *	mg/L	0.05	0.2	1.1	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Odour *	-	-	-	Odourless	Non Objectionable	TIS, 257-2549	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 : Chaisoum Lerthanakunchai , Thanassou Namakunna

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.

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51/Report_LAL_EL_rpt (6/20/2016)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-1

Page 1 of 2

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 10, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine 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
COD	mg/L	1.5	25	36	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤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	11	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Cyanide as HCN *	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤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 *	-	-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

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51/Report_LAL_EL_rpt (2/20/2016)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-1

Page 2 of 2

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 10, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, I)	Rayong
Temperature *	Degree C	-	-	33.4	≤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	844	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.5	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Nitrog (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤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 : Chaisoum Lerthanakunchai โทรศัพท์ +323-9-9461, Samart Khumplinee โทรศัพท์ +204-9-7830

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

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51/Report_LAL_EL_rpt (2/20/2016)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 1 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.19	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.006	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.08	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

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51/Report_LAL_EL_rpt (5/3/2016)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0009

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 2 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บ่อระดมของเสียอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.008	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.22	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Carbamate Group							
3-Hydroxy Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfone *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfonide *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0009

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 3 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บ่อระดมของเสียอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Carbamate Group							
Carbaryl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methiocarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methomyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Oxamyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Propoxur *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0009

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 4 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บ่อระดมของเสียอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0009

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 5 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บ่อระดมของเสียอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
gamma-BHC (Lindane) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0049

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 19, 2023
Report Number : 2777734-2

Page 6 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Heptachlor-Epoide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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 : Chaisorn Lertnankhunkhai รับผิดชอบ 323-9461, Samart Khumplinee รับผิดชอบ 204-6111

Remark :

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

Technical Management

Chanatt L.
Chanattagorn Imchom
Section Head
รับผิดชอบ 204-6170

Approved by

Kanokorn Anek
Kanokorn Anek
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0042

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 1 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
(A) Iron	mg/L	0.003	0.005	0.10	≤10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Silver	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Organochlorine Group							
Aldrin and Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
DDT *	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Mirex *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Pesticides - Organophosphate Group							
(A) Azinphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

Technical Management

N. Bangmit
Narumon Bangchokit
Supervisor
รับผิดชอบ 323-9445

Approved by

Dej Changchon
Dej Changchon
Senior Manager
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0042

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 2 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
(A) Chlorpyrifos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) DDVP	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Diazinon	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Dicrotophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Dimethoate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) EPN	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Ethion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Fenitrothion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

Technical Management

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Narumon Bangchokit
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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3

TESTING
No.0042

Lot ID: **23108341**
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 3 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
(A) Malathion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Methamidophos *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Methidathion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Mevinphos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Monocrotophos *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Omethoate *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Parathion *	ug/L	0.06	0.2	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
(A) Parathion-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 4 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Parathion-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Phosalone	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Pirimiphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Pirimiphos-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Profenofos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Prothiophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Triazophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

Pesticides - Pyrethroid Group

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 5 of 6

Sample Number 23108341-1
Sampled Date Oct 10, 2023 11:00 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Oct 11, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Pyrethroid Group							
^(A) Cypermethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Deltamethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Fenvalerate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Permethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.10	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.09	≤30	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5540 B, C	Bangkok
Fluoride	mg/L	0.05	0.2	1.2	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Odour *				Odourless	Non Objectionable	TDS, 257 25-99	Rayong

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23108341
Date Received : Oct 10, 2023
Date Reported : Oct 20, 2023
Report Number : 2777734-3

Page 6 of 6

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 : Chainorn Lertranthakunchai โทรศัพท์มือถือ +323-9-9461 , Samart Khumplee โทรศัพท์มือถือ +204-9-7830

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report



TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2797236-1

Page 1 of 2

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Nov 14, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine 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 ₆	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5410 U	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	7	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Cyanide as HCN *	mg/L	0.001	0.005	0.008	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004	Rayong
Oil & Grease *	mg/L	-	3	<3	≤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
Phenol	mg/L	0.005	0.01	Not Detected	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: **23116727**
Date Received : Nov 14, 2023
Date Reported : Nov 22, 2023
Report Number : 2797236-1

Page 2 of 2

Sample Number	23116727-1					
Sampled Date	Nov 14, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Nov 14, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method / Testing Location
Water Testing						
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F) Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F) Rayong
Temperature *	Degree C	-	-	33.7	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540-B Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1230	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540-C Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.6	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NfH3 (D) Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤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 : Saroson Khuyikong วัฒนะธนากร >323-4-0005, Samart Khumplee วัฒนะธนากร >204-4-7830

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.

Technical Management

Narumon Banchoangkit
Supervisor
วัฒนะธนากร >323-4-9445

Approved by

Dej Changchon
Senior Manager
วัฒนะธนากร >323-4-9442

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: **23116727**
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-2

Page 1 of 6

Sample Number	23116727-1					
Sampled Date	Nov 14, 2023 2:10 PM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Nov 15, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method / Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Barium	mg/L	0.0003	0.0005	0.17	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3540-C-B Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Manganese	mg/L	0.0003	0.0005	0.13	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3113 Bangkok

Technical Management

Nantawadee Sombon
Specialist 1
วัฒนะธนากร >204-4-4716

Approved by

Kanokkorn Anek
Senior Manager
วัฒนะธนากร >204-4-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-2

Page 4 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Nant Somb

Nanthawadee Somboon
Specialist 1
โทรศัพท์ 09-204-4716

Approved by

Kankorn Anek

Kankorn Anek
Senior Manager
โทรศัพท์ 09-204-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-2

Page 5 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Technical Management

Nant Somb

Nanthawadee Somboon
Specialist 1
โทรศัพท์ 09-204-4716

Approved by

Kankorn Anek

Kankorn Anek
Senior Manager
โทรศัพท์ 09-204-6111

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Analysis / Test Report

TESTING
No.0009

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-2

Page 6 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
gamma-BHC (Lindane) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor-Epoide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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 : Samson Khuyosik 2323-4005, Samart Khumphee 2323-4780

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantification) / LOQ (Limit of Reporting)
- Analyte(s) marked "N" 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

Nant Somb

Nanthawadee Somboon
Specialist 1
โทรศัพท์ 09-204-4716

Approved by

Kankorn Anek

Kankorn Anek
Senior Manager
โทรศัพท์ 09-204-6111

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 1 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรม (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Iron	mg/L	0.003	0.005	0.26	≤10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Organochlorine Group							
Aldrin and Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
DDT *	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Mirex *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Pesticide - Organophosphate Group							
[A] Azinphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

Technical Management

Nant Somb

Nanthawadee Somboon
Specialist 1
โทรศัพท์ 09-204-4716

Approved by

N. Banjongkit

Nannorn Banjongkit
Supervisor

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 2 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Chlorpyrifos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) DDVP	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Diazinon	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Dicrotophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Dimethoate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) EPN	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Ethion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

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Approved by

N. Bangnit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 3 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Fenitrothion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Malathion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Methamidophos *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Methidathion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Mevinphos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Monocrotophos *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Omethoate *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

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Approved by

N. Bangnit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 4 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
Parathion *	ug/L	0.06	0.2	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Parathion-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Parathion-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Phosalone	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Pirimiphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Pirimiphos-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Profenofos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

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S:\Report\AL_01_rpt (3/2009)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 5 of 6

Sample Number 23116727-1
Sampled Date Nov 14, 2023 2:10 PM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Nov 15, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Prothiophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Triazophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Pesticides - Pyrethroid Group							
^(A) Cypermethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Deltamethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Fenvalerate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Permethrin	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-101 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

Water Testing

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23116727
Date Received : Nov 14, 2023
Date Reported : Nov 23, 2023
Report Number : 2797236-3

Page 6 of 6

Sample Number	23116727-1					
Sampled Date	Nov 14, 2023 2:10 PM					
Sample Description	Wastewater					
Location	บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)					
Date Analysis Commenced	Nov 15, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing						
Ammonia Nitrogen *	mg/L	0.02	0.05	0.87	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)
Anionic Surfactant as MBAS *	mg/L	0.015	0.05	0.07	≤30	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6540-B, C
Fluoride	mg/L	0.05	0.2	1.0	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)
Odour *	-	-	-	Odourless	Non Objectionable	TIS, 257-2549

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 : Sansoen Khuyoksai , Samart Khumphlee

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analyses conducted by ALS Laboratory Group (Thailand) Co., Ltd., Bangkok Branch, DSS Accreditation No. 0009.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-1

Page 1 of 2

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)					
Date Analysis Commenced	Dec 12, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
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
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D
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
Color (at pH 7.0)	ADMI	-	5	15	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F
Cyanide as HCN *	mg/L	0.001	0.005	0.006	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed., 2004
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
pH at 25 degree C *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)
Phenol	mg/L	0.005	0.01	Not Detected	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D

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51/Report/AL_01_01 (3/2019)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-1

Page 2 of 2

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)					
Date Analysis Commenced	Dec 12, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing						
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, I)
Temperature *	Degree C	-	-	34.3	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	804	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.7	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)
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

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 : Tanasit Wongsachai วัฒนะชาติ +323-4-9960, Pattarapol Sawangjakarn ภัฏฐาภรณ์ +204-4-0002

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 1 of 7

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)					
Date Analysis Commenced	Dec 13, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Barium	mg/L	0.0003	0.0005	0.21	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Copper	mg/L	0.0003	0.0005	0.008	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3300-C B
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Manganese	mg/L	0.0003	0.0005	0.08	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3112

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 2 of 7

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.007	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	≤0.75	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.38	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Pesticides - Carbamate Group							
3-Hydroxy Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Aldicarb Sulfone *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok

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51/Report/AL_EL_rpt (4-0009)



Analysis / Test Report

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P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 3 of 7

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Carbamate Group							
Aldicarb Sulfonate *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbaryl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Carbofuran *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methiocarb *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Methomyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Oxamyl *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Propoxur *	ug/L	0.15	0.5	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6610 B	Bangkok
Pesticides - Organochlorine Group							
2,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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Analysis / Test Report

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P/O : DA11002956
Project Name : Monitoring
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TESTING
No.0009
Lot ID: 23131562
Date Received : Dec 12, 2023
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Report Number : 2832224-2

Page 4 of 7

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
2,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
2,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDD *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDE *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
4,4-DDT *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Aldrin and Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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6403-EL/ ENAL

51/Report/AL_EL_rpt (4-0009)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DA11002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009
Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 5 of 7

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organochlorine Group							
alpha-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
beta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Chlordane *	ug/L	0.02	0.04	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
DDT *	ug/L	0.06	0.12	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
delta-BHC *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Dieldrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
Endosulfan *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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6403-EL/ ENAL

51/Report/AL_EL_rpt (4-0009)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 6 of 7

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Dec 13, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Pesticides - Organochlorine Group						
Endosulfan I *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Endosulfan II *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Endrin *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
gamma-BHC (Lindane) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Heptachlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Heptachlor and Heptachlor epoxide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Heptachlor-Epoide *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B

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51/Report_AE_01.pdf (4/20/2019)



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0009

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-2

Page 7 of 7

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Dec 13, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Pesticides - Organochlorine Group						
Lindane (gamma-BHC) *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Methoxychlor *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B

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 : Tanasit Wongsachai โทรศัพท์ 2-323-9-9460 , Pattarapol Sawangjantam โทรศัพท์ 2-204-4-0002

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
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P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-3

Page 1 of 5

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Dec 13, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Metals Testing						
Iron	mg/L	0.003	0.005	0.05	≤10.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F
Pesticides - Organochlorine Group						
Mirex *	ug/L	0.01	0.02	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B
Pesticides - Organophosphate Group						
Azinphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Chlorpyrifos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
DDVP	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Diazinon	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Dicrotophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3



TESTING
No.0042

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-3

Page 2 of 5

Sample Number	23131562-1					
Sampled Date	Dec 12, 2023 11:10 AM					
Sample Description	Wastewater					
Location	น้ำทิ้งจากกระบวนการผลิต (Inspection Manhole)					
Date Analysis Commenced	Dec 13, 2023					
Condition of Sample	Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Pesticides - Organophosphate Group						
Dimethoate	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
EPN	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Ethion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Fenitrothion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Malathion	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Methamidophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A
Methidathion *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A

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Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-3

Page 3 of 5

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Mevinphos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Monocrotophos *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Omethoate *	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Parathion *	ug/L	0.06	0.2	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Parathion-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Parathion-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Phosalone	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok

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S:\Report\AL_01_rpt (6-23PM)



Analysis / Test Report

TESTING
No.0042

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand 21150
P/O : DM1002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23131562
Date Received : Dec 12, 2023
Date Reported : Dec 20, 2023
Report Number : 2832224-3

Page 4 of 5

Sample Number 23131562-1
Sampled Date Dec 12, 2023 11:10 AM
Sample Description Wastewater
Location บึงระยองอุตสาหกรรมไฟฟ้า (Inspection Manhole)
Date Analysis Commenced Dec 13, 2023
Condition of Sample Contained in two glass vials, three amber glass bottles and nine plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Pesticides - Organophosphate Group							
^(A) Pirimiphos-ethyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Pirimiphos-methyl	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Profenofos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Prothiophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
^(A) Triazophos	ug/L	0.03	0.1	Not Detected	Not Detected	In-house method : STM 04-067 based on United States Environmental Protection Agency, 1996, Method 3510 and 1994, Method 8141 A	Bangkok
Pesticides - Pyrethroid Group							
^(A) Cypermethrin	ug/L	0.03	0.1	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok
^(A) Deltamethrin	ug/L	0.03	0.1	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 6630 D, part 6410 B	Bangkok

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ภาคผนวก ค-7

ความร้อนในสถานประกอบการ



Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105869
Date Received : Oct 05, 2023
Date Reported : Oct 09, 2023
Report Number: 2771049-1

Page 1 of 4

Sample Number 23105869-1
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee
Location ปรังคังงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Auxiliary Boiler 140	120	28.9	26.7	34.3	33.8
Average (WBGT)		28.9			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management


Supot Salamteh
Section Head

Approved by


Wichan Choonharat
Assistant Manager

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

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Analysis / Test Report

Client : Global Power Synergy Public Company Limited
92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
Project Name : Monitoring
Project Location : CUP 3

Lot ID: 23105869
Date Received : Oct 05, 2023
Date Reported : Oct 09, 2023
Report Number: 2771049-1

Page 2 of 4

Sample Number 23105869-2
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee
Location ปรังคังงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Auxiliary Boiler 70 Ton #1	120	31.1	27.5	40.3	37.4
Average (WBGT)		31.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

Technical Management


Supot Salamteh
Section Head

Approved by


Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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92/9, Rayong Highway Road 3191, Map Ta Phut, Mueang, Rayong Thailand
21150
P/O : DA41002956
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Project Location : CUP 3

Lot ID: 23105869
Date Received : Oct 05, 2023
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Page 3 of 4

Sample Number 23105869-3
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee
Location ปรังคังงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Auxiliary Boiler 70 Ton #2	120	31.3	27.7	41.0	37.5
Average (WBGT)		31.3			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

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Project Location : CUP 3

Lot ID: 23105869
Date Received : Oct 05, 2023
Date Reported : Oct 09, 2023
Report Number: 2771049-1

Page 4 of 4

Sample Number 23105869-4
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Sep 30, 2023
Measurement by Tinnakorn Kumpasee
Location ปรังคังงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
STG	120	28.7	27.4	31.7	31.6
Average (WBGT)		28.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

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

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