

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์คุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987790-1

Page 1 of 1

Sample Description Air Quality
Location ร่มรั้วโครงการด้านทิศตะวันออก (A1) (GPS 47P 0726247, 1447576)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-1	2438386-2	2438386-3	2438386-4	2438386-5	2438386-6	2438386-7
Time	Apr 26, 2024	Apr 27, 2024	Apr 28, 2024	Apr 29, 2024	Apr 30, 2024	May 01, 2024	May 02, 2024
09:00 AM - 10:00 AM	0.008	0.008	0.006	0.012	0.014	0.010	0.009
10:00 AM - 11:00 AM	0.006	0.007	0.006	0.007	0.010	0.011	0.006
11:00 AM - 12:00 PM	0.004	0.008	0.007	0.005	0.005	0.011	0.006
12:00 PM - 01:00 PM	0.006	0.009	0.010	0.005	0.009	0.009	0.008
01:00 PM - 02:00 PM	0.005	0.009	0.009	0.006	0.007	0.008	0.006
02:00 PM - 03:00 PM	0.005	0.009	0.010	0.007	0.006	0.008	0.008
03:00 PM - 04:00 PM	0.006	0.008	0.011	0.005	0.006	0.008	0.010
04:00 PM - 05:00 PM	0.005	0.008	0.010	0.005	0.004	0.012	0.009
05:00 PM - 06:00 PM	0.006	0.012	0.009	0.005	0.005	0.008	0.008
06:00 PM - 07:00 PM	0.007	0.011	0.011	0.007	0.006	0.007	0.012
07:00 PM - 08:00 PM	0.009	0.016	0.025	0.008	0.006	0.008	0.013
08:00 PM - 09:00 PM	0.007	0.022	0.025	0.011	0.006	0.008	0.014
09:00 PM - 10:00 PM	0.004	0.010	0.015	0.009	0.006	0.008	0.004
10:00 PM - 11:00 PM	0.004	0.010	0.009	0.013	0.007	0.010	0.012
11:00 PM - 12:00 AM	0.004	0.006	0.008	0.021	0.006	0.005	0.008
12:00 AM - 01:00 AM	0.005	0.008	0.007	0.020	0.005	0.007	0.009
01:00 AM - 02:00 AM	0.004	0.009	0.006	0.009	0.009	0.004	0.007
02:00 AM - 03:00 AM	0.006	0.008	0.006	0.007	0.014	0.003	0.012
03:00 AM - 04:00 AM	0.004	0.006	0.008	0.005	0.010	0.003	0.014
04:00 AM - 05:00 AM	0.003	0.006	0.008	0.006	0.008	0.003	0.009
05:00 AM - 06:00 AM	0.003	0.005	0.012	0.005	0.007	0.003	0.013
06:00 AM - 07:00 AM	0.004	0.007	0.012	0.007	0.009	0.005	0.012
07:00 AM - 08:00 AM	0.005	0.008	0.013	0.014	0.013	0.009	0.010
08:00 AM - 09:00 AM	0.006	0.008	0.013	0.013	0.012	0.012	0.013
Average	0.005	0.009	0.011	0.009	0.008	0.007	0.010
1hr - Maximum	0.009	0.022	0.025	0.021	0.014	0.012	0.014
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987798-1

Page 1 of 1

Sample Description Air Quality
Location บริเวณสถานีไฟฟ้าออม (A2) (GPS 47P 0726077, 1447565)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-8	2438386-9	2438386-10	2438386-11	2438386-12	2438386-13	2438386-14
Time	Apr 26, 2024	Apr 27, 2024	Apr 28, 2024	Apr 29, 2024	Apr 30, 2024	May 01, 2024	May 02, 2024
10:00 AM - 11:00 AM	0.008	0.004	0.008	0.006	0.002	0.006	0.006
11:00 AM - 12:00 PM	0.012	0.002	0.006	0.005	0.003	0.003	0.004
12:00 PM - 01:00 PM	0.004	0.005	0.007	0.006	0.003	0.004	0.006
01:00 PM - 02:00 PM	0.006	0.005	0.003	0.006	0.004	0.008	0.005
02:00 PM - 03:00 PM	0.009	0.004	0.004	0.006	0.005	0.010	0.004
03:00 PM - 04:00 PM	0.009	0.003	0.004	0.005	0.002	0.011	0.003
04:00 PM - 05:00 PM	0.006	0.004	0.003	0.005	0.002	0.010	0.002
05:00 PM - 06:00 PM	0.008	0.004	0.002	0.005	0.006	0.019	0.004
06:00 PM - 07:00 PM	0.007	0.005	0.002	0.006	0.013	0.014	0.015
07:00 PM - 08:00 PM	0.006	0.008	0.003	0.006	0.014	0.009	0.008
08:00 PM - 09:00 PM	0.008	0.021	0.003	0.005	0.008	0.021	0.005
09:00 PM - 10:00 PM	0.009	0.022	0.003	0.004	0.008	0.009	0.003
10:00 PM - 11:00 PM	0.008	0.021	0.004	0.004	0.017	0.007	0.002
11:00 PM - 12:00 AM	0.006	0.020	0.004	0.004	0.009	0.008	0.005
12:00 AM - 01:00 AM	0.007	0.014	0.003	0.004	0.004	0.010	0.007
01:00 AM - 02:00 AM	0.008	0.011	0.003	0.003	0.003	0.010	0.005
02:00 AM - 03:00 AM	0.007	0.007	0.003	0.003	0.002	0.010	0.005
03:00 AM - 04:00 AM	0.006	0.005	0.003	0.002	0.004	0.010	0.006
04:00 AM - 05:00 AM	0.007	0.005	0.003	0.002	0.004	0.009	0.006
05:00 AM - 06:00 AM	0.007	0.004	0.004	0.002	0.003	0.007	0.006
06:00 AM - 07:00 AM	0.006	0.003	0.009	0.002	0.003	0.007	0.006
07:00 AM - 08:00 AM	0.007	0.003	0.025	0.002	0.003	0.006	0.005
08:00 AM - 09:00 AM	0.006	0.004	0.002	0.002	0.006	0.007	0.006
09:00 AM - 10:00 AM	0.007	0.007	0.004	0.002	0.007	0.009	0.005
Average	0.007	0.008	0.005	0.004	0.006	0.009	0.005
1hr - Maximum	0.012	0.022	0.025	0.006	0.017	0.021	0.015
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987799-1

Page 1 of 1

Sample Description Air Quality
Location วัดหมอนวนาราม (A3) (GPS 47P 0727879, 1451130)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-15 Apr 26, 2024	2438386-16 Apr 27, 2024	2438386-17 Apr 28, 2024	2438386-18 Apr 29, 2024	2438386-19 Apr 30, 2024	2438386-20 May 01, 2024	2438386-21 May 02, 2024
Time							
11:00 AM - 12:00 PM	0.003	0.006	0.005	0.007	0.012	0.007	0.002
12:00 PM - 01:00 PM	0.005	0.005	0.004	0.005	0.006	0.009	0.003
01:00 PM - 02:00 PM	0.004	0.003	0.003	0.004	0.006	0.009	0.007
02:00 PM - 03:00 PM	0.004	0.003	0.002	0.004	0.005	0.008	0.012
03:00 PM - 04:00 PM	0.004	0.002	0.002	0.003	0.004	0.006	0.005
04:00 PM - 05:00 PM	0.003	0.004	0.002	0.004	0.008	0.004	0.004
05:00 PM - 06:00 PM	0.003	0.004	0.003	0.008	0.007	0.004	0.003
06:00 PM - 07:00 PM	0.003	0.004	0.004	0.007	0.006	0.003	0.003
07:00 PM - 08:00 PM	0.005	0.004	0.005	0.006	0.005	0.003	0.003
08:00 PM - 09:00 PM	0.008	0.003	0.006	0.006	0.006	0.003	0.003
09:00 PM - 10:00 PM	0.006	0.002	0.006	0.005	0.006	0.003	0.003
10:00 PM - 11:00 PM	0.007	0.002	0.005	0.004	0.004	0.004	0.006
11:00 PM - 12:00 AM	0.010	0.002	0.004	0.003	0.004	0.004	0.007
12:00 AM - 01:00 AM	0.014	0.002	0.003	0.003	0.005	0.004	0.008
01:00 AM - 02:00 AM	0.013	0.005	0.003	0.003	0.006	0.003	0.006
02:00 AM - 03:00 AM	0.008	0.006	0.004	0.006	0.008	0.004	0.005
03:00 AM - 04:00 AM	0.005	0.004	0.005	0.003	0.006	0.004	0.004
04:00 AM - 05:00 AM	0.005	0.006	0.005	0.004	0.004	0.005	0.003
05:00 AM - 06:00 AM	0.006	0.014	0.009	0.003	0.005	0.006	0.003
06:00 AM - 07:00 AM	0.007	0.013	0.004	0.003	0.006	0.005	0.004
07:00 AM - 08:00 AM	0.007	0.006	0.002	0.003	0.009	0.006	0.005
08:00 AM - 09:00 AM	0.007	0.004	0.002	0.004	0.007	0.006	0.005
09:00 AM - 10:00 AM	0.005	0.004	0.006	0.016	0.004	0.004	0.006
10:00 AM - 11:00 AM	0.005	0.004	0.014	0.027	0.010	0.003	0.005
Average	0.006	0.005	0.004	0.006	0.006	0.005	0.005
1hr - Maximum	0.014	0.014	0.014	0.027	0.012	0.009	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 EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987822-1

Page 1 of 1

Sample Description Air Quality
Location วัดบ่อวิน (A4) (GPS 47P 0723647, 1444280)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-22 Apr 26, 2024	2438386-23 Apr 27, 2024	2438386-24 Apr 28, 2024	2438386-25 Apr 29, 2024	2438386-26 Apr 30, 2024	2438386-27 May 01, 2024	2438386-28 May 02, 2024
Time							
12:00 PM - 01:00 PM	0.013	0.010	0.005	0.001	0.002	0.003	0.002
01:00 PM - 02:00 PM	0.012	0.012	0.004	0.001	0.009	0.012	0.003
02:00 PM - 03:00 PM	0.012	0.011	0.005	0.002	0.011	0.009	0.005
03:00 PM - 04:00 PM	0.010	0.013	0.004	0.011	0.006	0.006	0.006
04:00 PM - 05:00 PM	0.007	0.010	0.004	0.005	0.007	0.006	0.005
05:00 PM - 06:00 PM	0.006	0.007	0.005	0.004	0.008	0.004	<0.001
06:00 PM - 07:00 PM	0.006	0.005	0.004	0.003	0.007	0.004	<0.001
07:00 PM - 08:00 PM	0.005	0.003	0.005	0.003	0.006	0.005	0.001
08:00 PM - 09:00 PM	0.004	0.003	0.004	0.003	0.005	0.005	0.002
09:00 PM - 10:00 PM	0.005	0.005	0.005	0.002	0.005	0.004	0.003
10:00 PM - 11:00 PM	0.006	0.004	0.006	0.002	0.004	0.005	0.003
11:00 PM - 12:00 AM	0.007	0.002	0.004	0.002	0.004	0.005	0.002
12:00 AM - 01:00 AM	0.005	0.003	0.006	0.003	0.004	0.006	0.003
01:00 AM - 02:00 AM	0.005	0.003	0.002	0.003	0.004	0.006	0.002
02:00 AM - 03:00 AM	0.005	0.004	0.002	0.004	0.005	0.005	0.003
03:00 AM - 04:00 AM	0.002	0.005	0.002	0.004	0.006	0.005	0.004
04:00 AM - 05:00 AM	0.002	0.008	0.002	0.003	0.003	0.004	0.003
05:00 AM - 06:00 AM	0.002	0.010	0.002	0.003	0.003	0.002	0.003
06:00 AM - 07:00 AM	0.003	0.008	0.002	0.002	0.002	0.002	0.003
07:00 AM - 08:00 AM	0.003	0.006	0.003	0.002	0.002	0.001	0.002
08:00 AM - 09:00 AM	0.003	0.005	0.002	0.002	0.007	0.004	0.003
09:00 AM - 10:00 AM	0.003	0.004	0.002	0.001	0.006	0.002	0.004
10:00 AM - 11:00 AM	0.006	0.006	0.002	<0.001	0.002	0.001	0.003
11:00 AM - 12:00 PM	0.009	0.005	0.001	0.001	0.002	0.002	0.002
Average	0.006	0.006	0.004	0.003	0.005	0.004	0.003
1hr - Maximum	0.013	0.013	0.006	0.011	0.011	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)

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987848-1

Page 1 of 1

Sample Description Air Quality
Location วัดพันเสด็จนอก (A5) (GPS 47P 0729688, 1447669)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-29 Apr 26, 2024	2438386-30 Apr 27, 2024	2438386-31 Apr 28, 2024	2438386-32 Apr 29, 2024	2438386-33 Apr 30, 2024	2438386-34 May 01, 2024	2438386-35 May 02, 2024
Time							
01:00 PM - 02:00 PM	0.010	0.010	0.013	0.008	0.011	0.011	0.015
02:00 PM - 03:00 PM	0.006	0.007	0.010	0.004	0.008	0.009	0.014
03:00 PM - 04:00 PM	0.006	0.006	0.008	0.004	0.006	0.006	0.011
04:00 PM - 05:00 PM	0.004	0.004	0.005	0.006	0.007	0.006	0.008
05:00 PM - 06:00 PM	0.008	0.007	0.007	0.005	0.007	0.006	0.008
06:00 PM - 07:00 PM	0.014	0.008	0.007	0.003	0.004	0.006	0.008
07:00 PM - 08:00 PM	0.013	0.007	0.006	0.003	0.005	0.006	0.008
08:00 PM - 09:00 PM	0.010	0.009	0.004	0.004	0.005	0.008	0.007
09:00 PM - 10:00 PM	0.014	0.011	0.003	0.009	0.005	0.009	0.007
10:00 PM - 11:00 PM	0.011	0.013	0.003	0.006	0.003	0.010	0.007
11:00 PM - 12:00 AM	0.008	0.012	0.004	0.004	0.003	0.012	0.009
12:00 AM - 01:00 AM	0.011	0.009	0.005	0.005	0.005	0.009	0.010
01:00 AM - 02:00 AM	0.011	0.008	0.008	0.008	0.006	0.016	0.009
02:00 AM - 03:00 AM	0.010	0.007	0.006	0.007	0.008	0.017	0.009
03:00 AM - 04:00 AM	0.009	0.006	0.008	0.007	0.007	0.014	0.007
04:00 AM - 05:00 AM	0.008	0.005	0.008	0.008	0.007	0.012	0.005
05:00 AM - 06:00 AM	0.008	0.007	0.008	0.007	0.008	0.012	0.010
06:00 AM - 07:00 AM	0.007	0.008	0.007	0.006	0.007	0.013	0.011
07:00 AM - 08:00 AM	0.008	0.008	0.007	0.006	0.006	0.012	0.010
08:00 AM - 09:00 AM	0.010	0.010	0.007	0.006	0.008	0.011	0.007
09:00 AM - 10:00 AM	0.011	0.013	0.006	0.005	0.006	0.011	0.007
10:00 AM - 11:00 AM	0.012	0.014	0.006	0.005	0.007	0.011	0.007
11:00 AM - 12:00 PM	0.012	0.015	0.005	0.006	0.010	0.015	0.012
12:00 PM - 01:00 PM	0.013	0.015	0.005	0.009	0.011	0.016	0.015
Average	0.010	0.009	0.007	0.006	0.007	0.011	0.009
1hr - Maximum	0.014	0.015	0.013	0.009	0.011	0.017	0.015
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987851-1

Page 1 of 1

Sample Description Air Quality
Location ชุมชนห้วยเหียน (A6) (GPS 47P 0723088, 1444745)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-36 Apr 26, 2024	2438386-37 Apr 27, 2024	2438386-38 Apr 28, 2024	2438386-39 Apr 29, 2024	2438386-40 Apr 30, 2024	2438386-41 May 01, 2024	2438386-42 May 02, 2024
Time							
02:00 PM - 03:00 PM	0.009	0.010	0.006	0.010	0.005	0.010	0.006
03:00 PM - 04:00 PM	0.007	0.008	0.006	0.006	0.006	0.010	0.006
04:00 PM - 05:00 PM	0.009	0.012	0.007	0.006	0.006	0.008	0.006
05:00 PM - 06:00 PM	0.010	0.006	0.010	0.009	0.015	0.008	0.009
06:00 PM - 07:00 PM	0.005	0.004	0.008	0.008	0.005	0.005	0.010
07:00 PM - 08:00 PM	0.005	0.004	0.005	0.004	0.005	0.004	0.009
08:00 PM - 09:00 PM	0.007	0.006	0.005	0.012	0.004	0.007	0.009
09:00 PM - 10:00 PM	0.006	0.006	0.006	0.005	0.004	0.007	0.008
10:00 PM - 11:00 PM	0.007	0.006	0.005	0.005	0.004	0.006	0.010
11:00 PM - 12:00 AM	0.011	0.007	0.005	0.005	0.004	0.006	0.010
12:00 AM - 01:00 AM	0.008	0.006	0.005	0.006	0.007	0.006	0.012
01:00 AM - 02:00 AM	0.009	0.006	0.005	0.006	0.007	0.008	0.010
02:00 AM - 03:00 AM	0.007	0.007	0.006	0.006	0.004	0.006	0.009
03:00 AM - 04:00 AM	0.008	0.007	0.006	0.006	0.004	0.009	0.009
04:00 AM - 05:00 AM	0.008	0.006	0.005	0.005	0.005	0.005	0.009
05:00 AM - 06:00 AM	0.007	0.005	0.005	0.005	0.005	0.004	0.009
06:00 AM - 07:00 AM	0.006	0.007	0.005	0.004	0.007	0.006	0.009
07:00 AM - 08:00 AM	0.012	0.011	0.009	0.007	0.007	0.009	0.012
08:00 AM - 09:00 AM	0.014	0.012	0.010	0.008	0.011	0.010	0.013
09:00 AM - 10:00 AM	0.012	0.016	0.010	0.007	0.007	0.008	0.010
10:00 AM - 11:00 AM	0.010	0.010	0.008	0.006	0.004	0.005	0.008
11:00 AM - 12:00 PM	0.006	0.008	0.006	0.006	0.004	0.007	0.010
12:00 PM - 01:00 PM	0.006	0.006	0.005	0.005	0.005	0.006	0.009
01:00 PM - 02:00 PM	0.011	0.008	0.008	0.006	0.007	0.005	0.008
Average	0.008	0.008	0.006	0.006	0.006	0.007	0.009
1hr - Maximum	0.014	0.016	0.010	0.012	0.015	0.010	0.013
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438386

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2956706-1

Page 1 of 1

Sample Description Air Quality
Location บ้านนาบอน (A7) (GPS 47P 0727425, 1448026)
Parameter Nitrogen dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438386-43 Apr 26, 2024	2438386-44 Apr 27, 2024	2438386-45 Apr 28, 2024	2438386-46 Apr 29, 2024	2438386-47 Apr 30, 2024	2438386-48 May 01, 2024	2438386-49 May 02, 2024
Time							
03:00 PM - 04:00 PM	0.007	0.011	0.007	0.009	0.003	0.002	0.003
04:00 PM - 05:00 PM	0.007	0.014	0.005	0.005	0.003	0.002	0.002
05:00 PM - 06:00 PM	0.009	0.011	0.006	0.010	0.003	0.002	0.002
06:00 PM - 07:00 PM	0.009	0.011	0.007	0.007	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.005	0.012	0.007	0.006	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.004	0.008	0.006	0.006	0.003	0.002	0.001
09:00 PM - 10:00 PM	0.005	0.009	0.006	0.003	0.002	0.001	0.002
10:00 PM - 11:00 PM	0.010	0.007	0.007	0.003	0.002	0.002	0.001
11:00 PM - 12:00 AM	0.001	0.007	0.006	0.002	0.001	0.001	0.002
12:00 AM - 01:00 AM	0.008	0.006	0.006	0.002	0.001	0.002	0.002
01:00 AM - 02:00 AM	0.007	0.007	0.005	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.005	0.006	0.004	0.002	0.001	0.002	0.001
03:00 AM - 04:00 AM	0.008	0.007	0.006	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.005	0.009	0.005	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.008	0.009	0.009	0.002	0.002	0.002	0.004
06:00 AM - 07:00 AM	0.010	0.009	0.011	0.002	0.002	0.003	0.003
07:00 AM - 08:00 AM	0.010	0.007	0.014	0.002	0.001	0.003	0.003
08:00 AM - 09:00 AM	0.012	0.008	0.007	0.002	0.002	0.003	0.003
09:00 AM - 10:00 AM	0.012	0.014	0.005	0.001	0.002	0.004	0.004
10:00 AM - 11:00 AM	0.013	0.012	0.005	0.002	0.002	0.002	0.003
11:00 AM - 12:00 PM	0.012	0.012	0.009	0.002	0.002	0.003	0.002
12:00 PM - 01:00 PM	0.016	0.013	0.009	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.011	0.013	0.009	0.002	0.003	0.002	0.002
02:00 PM - 03:00 PM	0.008	0.007	0.008	0.003	0.002	0.003	0.003
Average	0.008	0.010	0.007	0.003	0.002	0.002	0.002
1hr - Maximum	0.016	0.014	0.014	0.010	0.003	0.004	0.004
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987888-1

Page 1 of 1

Sample Description Air Quality
Location ร่มรั้วโครงการด้านทิศตะวันออก (A1) (GPS 47P 0726247, 1447576)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-1	2438393-2	2438393-3	2438393-4	2438393-5	2438393-6	2438393-7
Time	Apr 26, 2024	Apr 27, 2024	Apr 28, 2024	Apr 29, 2024	Apr 30, 2024	May 01, 2024	May 02, 2024
09:00 AM - 10:00 AM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
10:00 AM - 11:00 AM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
11:00 AM - 12:00 PM	0.001	0.001	0.001	0.001	0.002	0.002	0.001
12:00 PM - 01:00 PM	0.001	0.001	0.002	0.002	0.001	0.001	0.001
01:00 PM - 02:00 PM	0.001	0.001	0.001	0.002	0.002	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
Average	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
1hr - Maximum	0.001	0.001	0.002	0.002	0.002	0.002	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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987889-1

Page 1 of 1

Sample Description Air Quality
Location บริเวณสถานีไฟฟ้ายม (A2) (GPS 47P 0726077, 1447565)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-8	2438393-9	2438393-10	2438393-11	2438393-12	2438393-13	2438393-14
Time	Apr 26, 2024	Apr 27, 2024	Apr 28, 2024	Apr 29, 2024	Apr 30, 2024	May 01, 2024	May 02, 2024
10:00 AM - 11:00 AM	0.003	0.003	0.006	0.008	0.003	0.006	0.006
11:00 AM - 12:00 PM	0.003	0.002	0.007	0.008	0.005	0.004	0.006
12:00 PM - 01:00 PM	0.003	0.003	0.005	0.008	0.007	0.005	0.007
01:00 PM - 02:00 PM	0.002	0.002	0.008	0.005	0.007	0.005	0.007
02:00 PM - 03:00 PM	0.002	0.001	0.004	0.005	0.007	0.004	0.008
03:00 PM - 04:00 PM	0.002	0.001	0.006	0.005	0.007	0.006	0.006
04:00 PM - 05:00 PM	0.002	<0.001	0.007	0.003	0.008	0.003	0.005
05:00 PM - 06:00 PM	0.001	0.002	0.007	0.003	0.008	0.002	0.005
06:00 PM - 07:00 PM	0.002	0.004	0.004	0.005	0.007	0.002	0.004
07:00 PM - 08:00 PM	0.004	0.006	0.004	0.006	0.006	0.003	0.006
08:00 PM - 09:00 PM	0.004	0.003	0.004	0.008	0.006	0.008	0.007
09:00 PM - 10:00 PM	0.003	0.004	0.003	0.008	0.007	0.005	0.004
10:00 PM - 11:00 PM	0.004	0.004	0.002	0.008	0.008	0.006	0.005
11:00 PM - 12:00 AM	0.002	0.002	0.004	0.006	0.007	0.006	0.002
12:00 AM - 01:00 AM	0.002	0.004	0.004	0.006	0.007	0.007	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.004	0.006	0.005	0.006	0.002
02:00 AM - 03:00 AM	0.003	0.002	0.003	0.005	0.004	0.004	0.002
03:00 AM - 04:00 AM	0.005	0.003	0.004	0.005	0.002	0.003	0.002
04:00 AM - 05:00 AM	0.003	<0.001	0.005	0.005	0.003	0.004	0.004
05:00 AM - 06:00 AM	0.002	0.006	0.006	0.004	<0.001	0.005	0.004
06:00 AM - 07:00 AM	0.003	0.007	0.005	0.005	0.003	0.007	0.005
07:00 AM - 08:00 AM	0.002	0.007	0.005	0.004	0.003	0.007	0.006
08:00 AM - 09:00 AM	0.001	0.008	0.007	0.004	0.003	0.007	0.007
09:00 AM - 10:00 AM	0.002	0.007	0.008	0.004	0.005	0.006	0.003
Average	0.003	0.004	0.005	0.005	0.005	0.005	0.005
1hr - Maximum	0.005	0.008	0.008	0.008	0.008	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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987893-1

Page 1 of 1

Sample Description Air Quality
Location วัดหมบฉนวนวาม (A3) (GPS 47P 0727879, 1451130)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-15 Apr 26, 2024	2438393-16 Apr 27, 2024	2438393-17 Apr 28, 2024	2438393-18 Apr 29, 2024	2438393-19 Apr 30, 2024	2438393-20 May 01, 2024	2438393-21 May 02, 2024
Time							
11:00 AM - 12:00 PM	0.005	0.008	0.004	0.004	0.007	0.004	<0.001
12:00 PM - 01:00 PM	0.005	0.008	0.006	0.007	0.005	0.002	0.002
01:00 PM - 02:00 PM	0.006	0.008	0.007	0.004	0.006	0.003	0.005
02:00 PM - 03:00 PM	0.006	0.008	0.006	0.006	0.004	0.004	0.003
03:00 PM - 04:00 PM	0.006	0.008	0.006	0.006	0.003	0.002	0.006
04:00 PM - 05:00 PM	0.006	0.007	0.006	0.008	0.003	0.003	0.004
05:00 PM - 06:00 PM	0.004	0.008	0.006	0.005	0.003	0.003	0.005
06:00 PM - 07:00 PM	0.005	0.008	0.006	0.003	0.003	0.002	0.003
07:00 PM - 08:00 PM	0.004	0.007	0.006	0.003	0.005	0.006	<0.001
08:00 PM - 09:00 PM	0.004	0.007	0.006	0.004	0.005	0.002	0.005
09:00 PM - 10:00 PM	0.004	0.008	0.006	0.005	0.006	<0.001	0.003
10:00 PM - 11:00 PM	0.004	0.008	0.006	0.007	0.006	<0.001	<0.001
11:00 PM - 12:00 AM	0.003	0.008	0.005	0.007	0.005	<0.001	<0.001
12:00 AM - 01:00 AM	0.004	0.006	0.005	0.007	0.005	<0.001	<0.001
01:00 AM - 02:00 AM	0.006	0.006	0.006	0.004	0.004	<0.001	<0.001
02:00 AM - 03:00 AM	0.005	0.008	0.005	0.004	0.005	0.001	0.002
03:00 AM - 04:00 AM	0.006	0.006	0.005	0.006	0.008	0.002	0.001
04:00 AM - 05:00 AM	0.007	0.006	<0.001	0.005	0.003	0.002	0.001
05:00 AM - 06:00 AM	0.008	0.007	0.008	0.005	0.001	0.003	0.002
06:00 AM - 07:00 AM	0.008	0.007	0.007	0.005	0.001	0.002	0.002
07:00 AM - 08:00 AM	0.008	0.008	0.006	0.004	0.005	0.005	0.002
08:00 AM - 09:00 AM	0.006	0.008	0.006	0.003	0.008	0.005	0.005
09:00 AM - 10:00 AM	0.004	0.007	0.008	0.003	0.004	0.003	0.003
10:00 AM - 11:00 AM	0.006	0.005	0.007	0.006	0.003	0.001	0.003
Average	0.005	0.007	0.006	0.005	0.004	0.002	0.002
1hr - Maximum	0.008	0.008	0.008	0.008	0.008	0.006	0.006
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987894-1

Page 1 of 1

Sample Description Air Quality
Location วัดบ่อวิน (A4) (GPS 47P 0723647, 1444280)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-22 Apr 26, 2024	2438393-23 Apr 27, 2024	2438393-24 Apr 28, 2024	2438393-25 Apr 29, 2024	2438393-26 Apr 30, 2024	2438393-27 May 01, 2024	2438393-28 May 02, 2024
Time							
12:00 PM - 01:00 PM	0.002	0.001	0.001	0.001	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.001	0.002	0.001	0.002	0.001	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.001	0.002	0.002	0.003	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.001	0.002	0.002	0.003	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.002	0.003	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.001	0.001	0.001	0.001	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
Average	0.001	0.001	0.001	0.002	0.002	0.002	0.002
1hr - Maximum	0.002	0.003	0.002	0.002	0.002	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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987898-1

Page 1 of 1

Sample Description Air Quality
Location วัดพันเสด็จนอก (A5) (GPS 47P 0729688, 1447669)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-29 Apr 26, 2024	2438393-30 Apr 27, 2024	2438393-31 Apr 28, 2024	2438393-32 Apr 29, 2024	2438393-33 Apr 30, 2024	2438393-34 May 01, 2024	2438393-35 May 02, 2024
Time							
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.004	0.003	0.004	0.004
03:00 PM - 04:00 PM	0.004	0.004	0.003	0.004	0.004	0.005	0.004
04:00 PM - 05:00 PM	0.003	0.004	0.003	0.004	0.004	0.005	0.004
05:00 PM - 06:00 PM	0.003	0.004	0.004	0.004	0.004	0.005	0.004
06:00 PM - 07:00 PM	0.004	0.004	0.004	0.004	0.004	0.005	0.004
07:00 PM - 08:00 PM	0.003	0.003	0.004	0.004	0.004	0.005	0.004
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
09:00 PM - 10:00 PM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
11:00 PM - 12:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
05:00 AM - 06:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
07:00 AM - 08:00 AM	0.003	0.003	0.004	0.004	0.005	0.004	0.004
08:00 AM - 09:00 AM	0.003	0.003	0.004	0.003	0.004	0.004	0.004
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
10:00 AM - 11:00 AM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.003	0.004	0.004	0.004
12:00 PM - 01:00 PM	0.003	0.003	0.003	0.004	0.004	0.004	0.004
Average	0.003	0.003	0.003	0.004	0.004	0.004	0.004
1hr - Maximum	0.004	0.004	0.004	0.004	0.005	0.005	0.004
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987899-1

Page 1 of 1

Sample Description Air Quality
Location ชุมชนห้วยเหียน (A6) (GPS 47P 0723088, 1444745)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-36 Apr 26, 2024	2438393-37 Apr 27, 2024	2438393-38 Apr 28, 2024	2438393-39 Apr 29, 2024	2438393-40 Apr 30, 2024	2438393-41 May 01, 2024	2438393-42 May 02, 2024
Time							
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.001
08:00 PM - 09:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.001	0.001	0.001	0.002	0.002	0.002	0.001
10:00 PM - 11:00 PM	0.001	0.001	0.001	0.002	0.002	0.001	0.001
11:00 PM - 12:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.001
12:00 AM - 01:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.001
01:00 AM - 02:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.001
02:00 AM - 03:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.001
03:00 AM - 04:00 AM	0.001	0.001	0.001	0.002	0.001	0.002	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	0.002	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	0.002	0.001	0.001	0.002	0.001
09:00 AM - 10:00 AM	0.001	0.002	0.002	0.001	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.001	0.001	0.002	0.001	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.001	0.001	0.002	0.002	0.001	0.001
12:00 PM - 01:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.001	0.002	0.002	0.002	0.002	0.002	0.001
1hr - Maximum	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438393

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2987901-1

Page 1 of 1

Sample Description Air Quality
Location บ้านนาบอน (A7) (GPS 47P 0727425, 1448026)
Parameter Sulfur Dioxide (ppm)
Measurement Date Apr 26, 2024 - May 03, 2024
Measurement by Satcha Phetsawaeng

	2438393-43 Apr 26, 2024	2438393-44 Apr 27, 2024	2438393-45 Apr 28, 2024	2438393-46 Apr 29, 2024	2438393-47 Apr 30, 2024	2438393-48 May 01, 2024	2438393-49 May 02, 2024
Time							
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 PM - 05:00 PM	0.003	0.003	0.002	0.003	0.003	0.003	0.003
05:00 PM - 06:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
07:00 PM - 08:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
09:00 PM - 10:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 PM - 12:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
10:00 AM - 11:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
11:00 AM - 12:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
12:00 PM - 01:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Average	0.003	0.003	0.003	0.003	0.003	0.003	0.003
1hr - Maximum	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-1

Page 1 of 1

Sample Description	Air Quality
Location	ริมรั้วโครงการด้านทิศตะวันออก (A1) (GPS 47P 0726247, 1447576)
Date Analysis Commenced	May 07, 2024
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-1	Apr 26 - Apr 27, 2024	0.061	0.019	755	37
2438398-2	Apr 27 - Apr 28, 2024	0.060	0.021	755	36
2438398-3	Apr 28 - Apr 29, 2024	0.038	0.011	755	35
2438398-4	Apr 29 - Apr 30, 2024	0.047	0.015	755	35
2438398-5	Apr 30 - May 01, 2024	0.058	0.022	755	35
2438398-6	May 01 - May 02, 2024	0.071	0.038	755	36
2438398-7	May 02 - May 03, 2024	0.054	0.022	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-2

Page 1 of 1

Sample Description	Air Quality
Location	บริเวณสถานีไฟฟ้าอ้อย (A2) (GPS 47P 0726077, 1447565)
Date Analysis Commenced	May 07, 2024
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-8	Apr 26 - Apr 27, 2024	0.069	0.028	755	37
2438398-9	Apr 27 - Apr 28, 2024	0.076	0.028	755	36
2438398-10	Apr 28 - Apr 29, 2024	0.052	0.019	755	35
2438398-11	Apr 29 - Apr 30, 2024	0.059	0.021	755	35
2438398-12	Apr 30 - May 01, 2024	0.071	0.031	755	35
2438398-13	May 01 - May 02, 2024	0.085	0.048	755	36
2438398-14	May 02 - May 03, 2024	0.065	0.032	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-3

Page 1 of 1

Sample Description	Air Quality
Location	วัดหนองนาราม (A3) (GPS 47P 0727879, 1451130)
Date Analysis Commenced	May 07, 2024
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-15	Apr 26 - Apr 27, 2024	0.039	0.017	755	37
2438398-16	Apr 27 - Apr 28, 2024	0.049	0.015	755	36
2438398-17	Apr 28 - Apr 29, 2024	0.059	0.019	755	35
2438398-18	Apr 29 - Apr 30, 2024	0.052	0.017	755	35
2438398-19	Apr 30 - May 01, 2024	0.073	0.024	755	35
2438398-20	May 01 - May 02, 2024	0.067	0.043	755	36
2438398-21	May 02 - May 03, 2024	0.056	0.025	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-4

Page 1 of 1

Sample Description Air Quality
Location วัดบวร (A4) (GPS 47P 0723647, 1444280)
Date Analysis Commenced May 07, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-22	Apr 26 - Apr 27, 2024	0.503	0.116	755	37
2438398-23	Apr 27 - Apr 28, 2024	0.397	0.076	755	36
2438398-24	Apr 28 - Apr 29, 2024	0.425	0.084	755	35
2438398-25	Apr 29 - Apr 30, 2024	0.368	0.077	755	35
2438398-26	Apr 30 - May 01, 2024	0.354	0.074	755	35
2438398-27	May 01 - May 02, 2024	0.378	0.088	755	36
2438398-28	May 02 - May 03, 2024	0.304	0.066	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-5

Page 1 of 1

Sample Description	Air Quality
Location	วัดพันเสด็จนอก (A5) (GPS 47P 0729688, 1447669)
Date Analysis Commenced	May 07, 2024
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-29	Apr 26 - Apr 27, 2024	0.057	0.023	755	37
2438398-30	Apr 27 - Apr 28, 2024	0.047	0.018	755	36
2438398-31	Apr 28 - Apr 29, 2024	0.044	0.016	755	35
2438398-32	Apr 29 - Apr 30, 2024	0.055	0.018	755	35
2438398-33	Apr 30 - May 01, 2024	0.063	0.027	755	35
2438398-34	May 01 - May 02, 2024	0.060	0.038	755	36
2438398-35	May 02 - May 03, 2024	0.063	0.035	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-6

Page 1 of 1

Sample Description Air Quality
Location กรุงเทพมหานคร (A6) (GPS 47P 0723088, 1444745)
Date Analysis Commenced May 07, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-36	Apr 26 - Apr 27, 2024	0.041	0.016	755	37
2438398-37	Apr 27 - Apr 28, 2024	0.041	0.017	755	36
2438398-38	Apr 28 - Apr 29, 2024	0.037	0.015	755	35
2438398-39	Apr 29 - Apr 30, 2024	0.043	0.017	755	35
2438398-40	Apr 30 - May 01, 2024	0.059	0.030	755	35
2438398-41	May 01 - May 02, 2024	0.072	0.033	755	36
2438398-42	May 02 - May 03, 2024	0.051	0.022	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438398

Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number: 2955407-7

Page 1 of 1

Sample Description	Air Quality
Location	เมืองระยอง (A7) (GPS 47P 0727425, 1448026)
Date Analysis Commenced	May 07, 2024
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2438398-43	Apr 26 - Apr 27, 2024	0.038	0.017	755	37
2438398-44	Apr 27 - Apr 28, 2024	0.047	0.016	755	36
2438398-45	Apr 28 - Apr 29, 2024	0.040	0.012	755	35
2438398-46	Apr 29 - Apr 30, 2024	0.049	0.034	755	35
2438398-47	Apr 30 - May 01, 2024	0.055	0.023	755	35
2438398-48	May 01 - May 02, 2024	0.054	0.038	755	36
2438398-49	May 02 - May 03, 2024	0.058	0.028	755	34
Guideline		0.33	0.12	-	-

Reference Method

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

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

Sampled By : Satcha Phetsawaeng

Remark :

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

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396
Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number : 2438396-1 to 7
Parameter : Wind Speed / Wind Direction
Location : ร่มรั้วโครงการด้านทิศตะวันออก (A1) (GPS 47P 0726247, 1447576)
Sampling Date : Apr 26 - May 03, 2024
Sampling by : Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	2.3	185.0	S	1.1	149.0	SSE	2.4	136.0	SE	0.9	154.0	SSE	1.1	210.0	SSW	2.1	153.0	SSE	2.5	117.0	ESE
10:00 AM - 11:00 AM	2.0	181.0	S	3.0	230.0	SW	1.4	203.0	SSW	3.2	147.0	SSE	1.6	226.0	SW	1.7	139.0	SE	1.6	157.0	SSE
11:00 AM - 12:00 PM	2.9	153.0	SSE	3.3	152.0	SSE	2.5	158.0	SSE	3.0	155.0	SSE	2.3	156.0	SSE	2.4	222.0	SW	2.1	82.0	E
12:00 PM - 01:00 PM	2.4	139.0	SE	1.7	247.0	WSW	3.2	174.0	S	2.6	158.0	SSE	2.3	150.0	SSE	3.7	169.0	S	2.3	159.0	SSE
01:00 PM - 02:00 PM	3.8	125.0	SE	3.3	120.0	ESE	3.1	141.0	SE	2.4	162.0	SSE	3.0	185.0	S	2.6	203.0	SSW	3.2	133.0	SE
02:00 PM - 03:00 PM	2.6	169.0	S	1.6	174.0	S	2.3	149.0	SSE	1.4	163.0	SSE	2.4	166.0	SSE	2.1	193.0	SSW	1.9	173.0	S
03:00 PM - 04:00 PM	3.0	153.0	SSE	2.4	168.0	SSE	3.5	174.0	S	3.3	155.0	SSE	0.8	183.0	S	2.9	160.0	SSE	1.3	161.0	SSE
04:00 PM - 05:00 PM	3.6	120.0	ESE	2.3	187.0	S	3.3	132.0	SE	4.1	156.0	SSE	1.8	164.0	SSE	2.4	180.0	S	3.7	194.0	SSW
05:00 PM - 06:00 PM	2.8	158.0	SSE	2.1	132.0	SE	2.1	133.0	SE	3.6	144.0	SE	2.3	153.0	SSE	3.6	142.0	SE	1.9	164.0	SSE
06:00 PM - 07:00 PM	3.0	152.0	SSE	2.3	154.0	SSE	2.4	139.0	SE	2.1	130.0	SE	2.8	131.0	SE	2.0	123.0	ESE	2.8	138.0	SE
07:00 PM - 08:00 PM	2.2	133.0	SE	1.2	172.0	S	1.3	114.0	ESE	1.2	99.0	E	3.5	81.0	E	2.1	159.0	SSE	3.4	166.0	SSE
08:00 PM - 09:00 PM	2.4	122.0	ESE	3.2	130.0	SE	1.3	129.0	SE	1.0	115.0	ESE	3.6	147.0	SSE	2.9	122.0	ESE	2.1	113.0	ESE
09:00 PM - 10:00 PM	3.4	129.0	SE	2.3	152.0	SSE	2.1	132.0	SE	1.7	162.0	SSE	2.3	132.0	SE	1.3	139.0	SE	3.6	135.0	SE
10:00 PM - 11:00 PM	2.4	140.0	SE	1.5	171.0	S	1.1	177.0	S	1.5	156.0	SSE	3.8	184.0	S	1.5	167.0	SSE	2.8	144.0	SE
11:00 PM - 12:00 AM	1.9	164.0	SSE	1.6	170.0	S	0.7	185.0	S	1.4	180.0	S	1.1	147.0	SSE	0.7	143.0	SE	2.8	144.0	SE
12:00 AM - 01:00 AM	1.0	164.0	SSE	1.1	168.0	SSE	2.3	196.0	SSW	1.8	188.0	S	2.6	175.0	S	1.6	169.0	S	2.2	142.0	SE
01:00 AM - 02:00 AM	1.2	128.0	SE	1.4	153.0	SSE	0.8	186.0	S	2.0	144.0	SE	1.3	149.0	SSE	0.8	133.0	SE	0.6	197.0	SSW
02:00 AM - 03:00 AM	0.5	196.0	SSW	1.7	156.0	SSE	2.9	165.0	SSE	1.6	193.0	SSW	2.2	185.0	S	1.0	158.0	SSE	1.3	164.0	SSE
03:00 AM - 04:00 AM	0.5	124.0	SE	0.8	124.0	SE	1.5	154.0	SSE	1.0	187.0	S	2.6	133.0	SE	1.6	181.0	S	1.2	179.0	S
04:00 AM - 05:00 AM	0.7	130.0	SE	0.0	-	-	1.1	130.0	SE	0.8	152.0	SSE	1.3	164.0	SSE	0.7	206.0	SSW	0.8	154.0	SSE
05:00 AM - 06:00 AM	0.9	0.0	N	0.5	61.0	ENE	1.1	110.0	ESE	0.9	181.0	S	1.0	160.0	SSE	1.2	125.0	SE	1.8	164.0	SSE
06:00 AM - 07:00 AM	1.5	182.0	S	3.5	135.0	SE	2.7	255.0	WSW	1.9	188.0	S	1.5	185.0	S	2.4	152.0	SSE	2.0	185.0	S
07:00 AM - 08:00 AM	1.6	149.0	SSE	2.2	162.0	SSE	1.6	120.0	ESE	2.4	159.0	SSE	1.0	211.0	SSW	2.1	172.0	S	1.1	178.0	S
08:00 AM - 09:00 AM	0.7	207.0	SSW	1.9	139.0	SE	0.9	155.0	SSE	2.0	222.0	SW	1.5	211.0	SSW	1.8	177.0	S	1.2	180.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

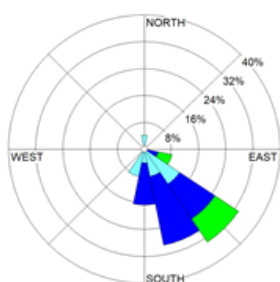
Date Received :May 06, 2024

Date Reported :May 10, 2024

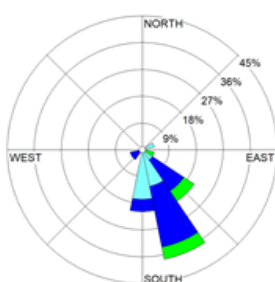
Report Number :2955404-1

Page 2 of 2

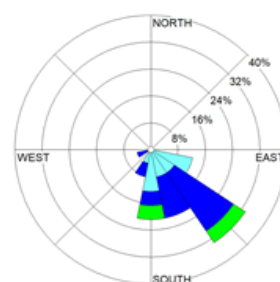
Wind Rose



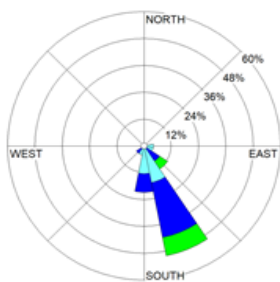
Date : Apr 26-27, 2024



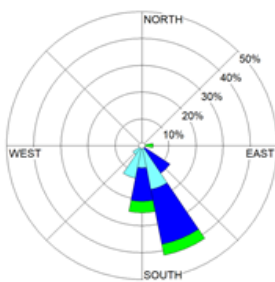
Date : Apr 27-28, 2024



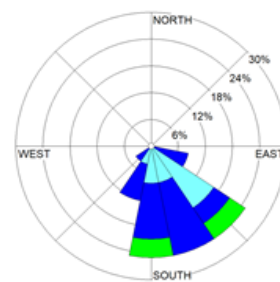
Date : Apr 28-29, 2024



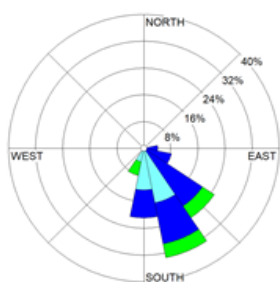
Date : Apr 29-30, 2024



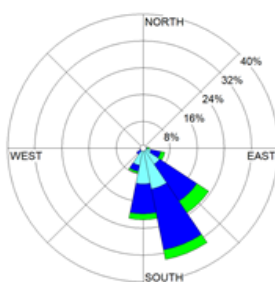
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)		%
	≥ 10.0	0.00
	8.0-10.0	0.00
	5.5-8.0	0.00
	3.3-5.5	11.31
	1.7-3.3	48.81
	0.3-1.7	39.29
	Calms	0.60

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

Approved by

Sarayuth Jitranont
Assistant General Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396

Date Received : May 06, 2024

Date Reported : May 10, 2024

Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number 2438396-8 to 14
Parameter Wind Speed / Wind Direction
Location บริเวณสถานีไฟฟ้าย่อย (A2) (GPS 47P 0726077, 1447565)
Sampling Date Apr 26 - May 03, 2024
Sampling by Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	1.3	226.0	SW	2.0	241.0	WSW	0.0	-	-	1.5	169.0	S	0.8	269.0	W	2.3	274.0	W	2.3	155.0	SSE
11:00 AM - 12:00 PM	0.0	-	-	1.4	176.0	S	2.0	157.0	SSE	1.3	265.0	W	0.0	-	-	2.1	261.0	W	3.0	153.0	SSE
12:00 PM - 01:00 PM	1.5	204.0	SSW	2.1	197.0	SSW	2.4	234.0	SW	3.8	147.0	SSE	1.7	230.0	SW	0.5	153.0	SSE	0.9	204.0	SSW
01:00 PM - 02:00 PM	3.9	242.0	WSW	4.6	232.0	SW	2.9	271.0	W	2.1	206.0	SSW	3.4	293.0	WNW	2.0	231.0	SW	3.4	170.0	S
02:00 PM - 03:00 PM	1.5	279.0	W	1.9	243.0	WSW	0.9	207.0	SSW	2.1	214.0	SW	3.1	227.0	SW	2.6	229.0	SW	3.4	239.0	WSW
03:00 PM - 04:00 PM	1.0	259.0	W	3.2	209.0	SSW	2.0	183.0	S	2.8	242.0	WSW	2.5	224.0	SW	3.2	236.0	SW	4.6	244.0	WSW
04:00 PM - 05:00 PM	2.3	240.0	WSW	1.5	208.0	SSW	0.7	255.0	WSW	2.7	259.0	W	2.6	154.0	SSE	0.2	-	-	2.5	155.0	SSE
05:00 PM - 06:00 PM	4.6	254.0	WSW	2.8	160.0	SSE	3.1	193.0	SSW	2.2	238.0	WSW	2.7	208.0	SSW	2.2	157.0	SSE	3.0	254.0	WSW
06:00 PM - 07:00 PM	1.5	263.0	W	1.2	253.0	WSW	1.1	177.0	S	1.9	174.0	S	3.9	239.0	WSW	0.8	211.0	SSW	2.0	277.0	W
07:00 PM - 08:00 PM	1.5	31.0	NNE	2.5	273.0	W	1.7	163.0	SSE	3.5	157.0	SSE	3.9	262.0	W	0.9	190.0	S	1.2	240.0	WSW
08:00 PM - 09:00 PM	0.6	356.0	N	2.4	274.0	W	1.4	194.0	SSW	2.2	149.0	SSE	1.2	282.0	WNW	2.5	174.0	S	3.3	267.0	W
09:00 PM - 10:00 PM	0.9	302.0	WNW	2.7	247.0	WSW	1.3	148.0	SSE	1.4	271.0	W	2.9	248.0	WSW	2.2	232.0	SW	2.7	272.0	W
10:00 PM - 11:00 PM	0.9	272.0	W	2.8	279.0	W	0.6	168.0	SSE	1.5	292.0	WNW	1.8	250.0	WSW	1.1	180.0	S	2.8	268.0	W
11:00 PM - 12:00 AM	2.0	186.0	S	0.0	-	-	0.0	-	-	1.6	280.0	W	1.5	255.0	WSW	0.0	-	-	3.1	258.0	WSW
12:00 AM - 01:00 AM	0.0	-	-	1.9	256.0	WSW	0.0	-	-	0.0	-	-	2.4	269.0	W	0.0	-	-	3.1	261.0	W
01:00 AM - 02:00 AM	0.0	-	-	1.5	177.0	S	1.2	237.0	WSW	2.5	243.0	WSW	0.0	-	-	1.9	190.0	S	1.7	298.0	WNW
02:00 AM - 03:00 AM	0.8	225.0	SW	0.6	155.0	SSE	0.0	-	-	0.9	286.0	WNW	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	1.3	243.0	WSW	1.5	166.0	SSE	0.0	-	-	1.5	250.0	WSW	1.8	196.0	SSW	0.0	-	-	1.2	257.0	WSW
04:00 AM - 05:00 AM	2.4	193.0	SSW	0.0	-	-	1.3	267.0	W	0.0	-	-	0.5	245.0	WSW	1.6	202.0	SSW	1.4	205.0	SSW
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	1.7	174.0	S	0.0	-	-	0.0	-	-	2.4	232.0	SW	0.0	-	-
06:00 AM - 07:00 AM	0.0	-	-	0.5	188.0	S	0.0	-	-	0.0	-	-	1.6	262.0	W	0.0	-	-	1.3	262.0	W
07:00 AM - 08:00 AM	0.9	146.0	SE	3.4	193.0	SSW	0.9	242.0	WSW	1.5	264.0	W	1.0	185.0	S	1.7	264.0	W	1.8	247.0	WSW
08:00 AM - 09:00 AM	0.0	-	-	0.5	244.0	WSW	3.3	227.0	SW	0.5	264.0	W	1.6	156.0	SSE	2.4	172.0	S	2.4	271.0	W
09:00 AM - 10:00 AM	0.0	-	-	2.6	228.0	SW	2.0	265.0	W	1.5	267.0	W	2.5	206.0	SSW	3.2	236.0	SW	1.9	180.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

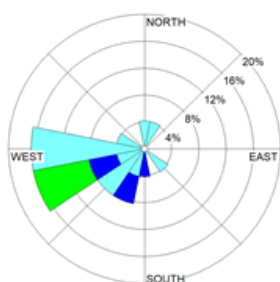
Date Received :May 06, 2024

Date Reported :May 10, 2024

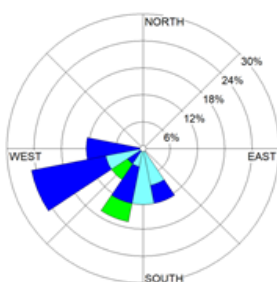
Report Number :2955404-1

Page 2 of 2

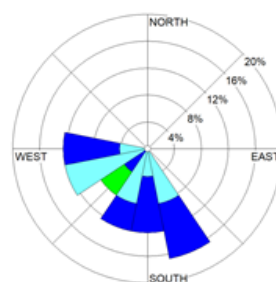
Wind Rose



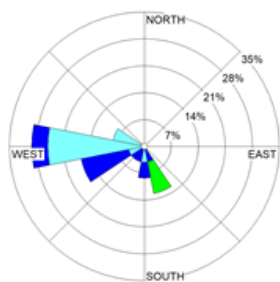
Date : Apr 26-27, 2024



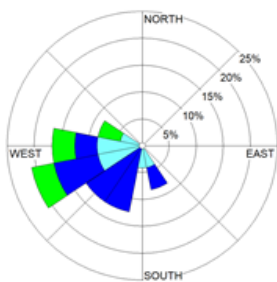
Date : Apr 27-28, 2024



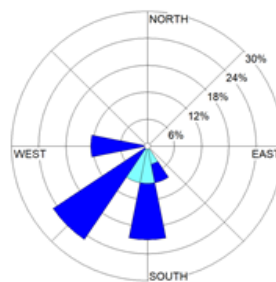
Date : Apr 28-29, 2024



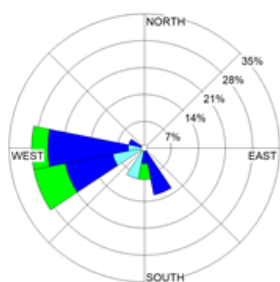
Date : Apr 29-30, 2024



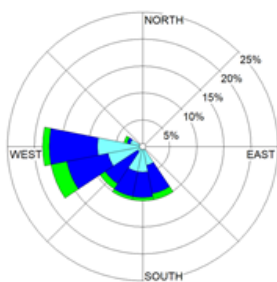
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	8.33
1.7-3.3	39.29
0.3-1.7	33.33
Calms	19.05

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

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396

Date Received : May 06, 2024

Date Reported : May 10, 2024

Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number 2438396-15 to 21
Parameter Wind Speed / Wind Direction
Location วัดหีบหมากวนาราม (A3) (GPS 47P 0727879, 1451130)
Sampling Date Apr 26 - May 03, 2024
Sampling by Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	1.2	158.0	SSE	1.3	117.0	ESE	0.0	-	-	0.3	150.0	SSE	3.3	173.0	S	1.5	86.0	E	3.2	179.0	S
12:00 PM - 01:00 PM	2.3	117.0	ESE	0.5	270.0	W	0.0	-	-	0.4	163.0	SSE	1.2	214.0	SW	0.6	207.0	SSW	2.5	184.0	S
01:00 PM - 02:00 PM	0.1	-	-	0.6	110.0	ESE	2.3	181.0	S	2.1	168.0	SSE	4.0	138.0	SE	3.3	198.0	SSW	1.6	126.0	SE
02:00 PM - 03:00 PM	1.8	145.0	SE	2.1	144.0	SE	0.0	-	-	1.2	142.0	SE	1.2	146.0	SE	1.6	152.0	SSE	0.7	204.0	SSW
03:00 PM - 04:00 PM	1.0	181.0	S	0.5	161.0	SSE	2.6	110.0	ESE	0.9	156.0	SSE	1.9	193.0	SSW	1.3	205.0	SSW	0.0	-	-
04:00 PM - 05:00 PM	0.2	-	-	0.0	-	-	0.0	-	-	0.3	184.0	S	2.9	136.0	SE	1.8	139.0	SE	1.4	116.0	ESE
05:00 PM - 06:00 PM	0.4	97.0	E	0.0	-	-	0.5	267.0	W	1.9	186.0	S	0.4	235.0	SW	1.3	159.0	SSE	0.1	-	-
06:00 PM - 07:00 PM	0.9	80.0	E	0.6	211.0	SSW	0.0	-	-	1.4	174.0	S	0.3	159.0	SSE	0.7	214.0	SW	1.6	197.0	SSW
07:00 PM - 08:00 PM	0.5	134.0	SE	1.2	188.0	S	0.9	132.0	SE	0.6	150.0	SSE	0.7	153.0	SSE	0.7	210.0	SSW	1.1	156.0	SSE
08:00 PM - 09:00 PM	1.8	86.0	E	0.0	-	-	0.2	-	-	1.5	140.0	SE	2.0	90.0	E	0.9	115.0	ESE	0.8	137.0	SE
09:00 PM - 10:00 PM	0.3	111.0	ESE	0.3	182.0	S	1.2	175.0	S	0.0	-	-	1.4	120.0	ESE	1.3	115.0	ESE	0.6	206.0	SSW
10:00 PM - 11:00 PM	0.8	125.0	SE	0.5	172.0	S	1.0	180.0	S	0.1	-	-	2.6	174.0	S	0.7	139.0	SE	0.9	126.0	SE
11:00 PM - 12:00 AM	1.2	277.0	W	1.0	122.0	ESE	0.0	-	-	0.3	140.0	SE	0.0	-	-	0.8	93.0	E	0.4	173.0	S
12:00 AM - 01:00 AM	1.2	49.0	NE	0.4	140.0	SE	1.6	137.0	SE	0.0	-	-	0.2	-	-	0.4	156.0	SSE	0.0	-	-
01:00 AM - 02:00 AM	2.1	286.0	WNW	0.0	-	-	0.0	-	-	0.0	-	-	0.3	137.0	SE	0.5	128.0	SE	1.2	178.0	S
02:00 AM - 03:00 AM	1.2	288.0	WNW	1.2	148.0	SSE	1.2	154.0	SSE	0.4	164.0	SSE	1.1	150.0	SSE	0.0	-	-	1.4	187.0	S
03:00 AM - 04:00 AM	1.3	273.0	W	1.3	139.0	SE	0.3	162.0	SSE	1.2	185.0	S	0.0	-	-	0.3	156.0	SSE	2.1	276.0	W
04:00 AM - 05:00 AM	0.0	-	-	0.5	169.0	S	0.0	-	-	1.6	147.0	SSE	1.2	217.0	SW	1.2	135.0	SE	1.3	279.0	W
05:00 AM - 06:00 AM	1.1	65.0	ENE	0.2	-	-	1.2	169.0	S	0.0	-	-	1.4	271.0	W	1.3	159.0	SSE	0.0	-	-
06:00 AM - 07:00 AM	1.1	71.0	ENE	0.0	-	-	1.5	157.0	SSE	1.2	287.0	WNW	1.3	281.0	W	0.0	-	-	1.1	116.0	ESE
07:00 AM - 08:00 AM	1.8	176.0	S	1.6	143.0	SE	0.0	-	-	0.6	229.0	SW	0.4	117.0	ESE	2.0	114.0	ESE	0.0	-	-
08:00 AM - 09:00 AM	0.4	184.0	S	1.7	129.0	SE	1.4	127.0	SE	3.2	147.0	SSE	1.7	89.0	E	1.0	188.0	S	0.9	145.0	SE
09:00 AM - 10:00 AM	0.0	-	-	0.5	136.0	SE	0.0	-	-	1.2	255.0	WSW	3.9	164.0	SSE	1.5	138.0	SE	1.2	106.0	ESE
10:00 AM - 11:00 AM	0.9	203.0	SSW	2.6	128.0	SE	2.0	187.0	S	0.2	-	-	0.7	168.0	SSE	0.6	199.0	SSW	2.3	219.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

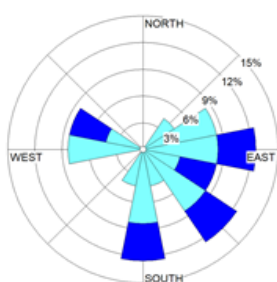
Date Received :May 06, 2024

Date Reported :May 10, 2024

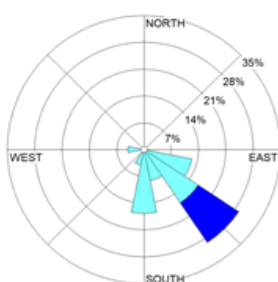
Report Number :2955404-1

Page 2 of 2

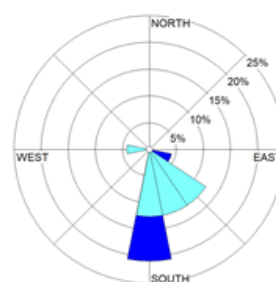
Wind Rose



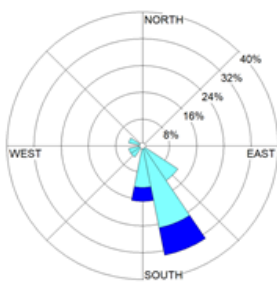
Date : Apr 26-27, 2024



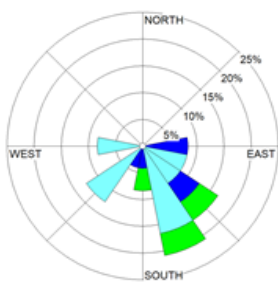
Date : Apr 27-28, 2024



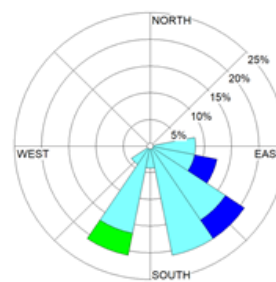
Date : Apr 28-29, 2024



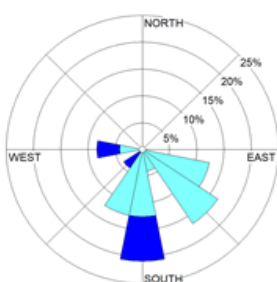
Date : Apr 29-30, 2024



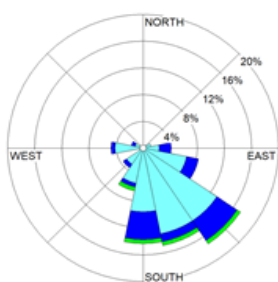
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	2.38
1.7-3.3	14.88
0.3-1.7	60.71
Calms	22.02

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

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396

Date Received : May 06, 2024

Date Reported : May 10, 2024

Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number : 2438396-22 to 28
Parameter : Wind Speed / Wind Direction
Location : วัดปลาวิน (A4) (GPS 47P 0723647, 1444280)
Sampling Date : Apr 26 - May 03, 2024
Sampling by : Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	0.9	267.0	W	0.2	-	-	0.6	344.0	NNW	2.2	240.0	WSW	1.9	288.0	WNW	2.4	252.0	WSW	2.1	255.0	WSW
01:00 PM - 02:00 PM	0.3	234.0	SW	0.2	-	-	2.6	280.0	W	0.8	277.0	W	2.0	236.0	SW	1.6	75.0	ENE	1.0	283.0	WNW
02:00 PM - 03:00 PM	0.8	255.0	WSW	1.5	262.0	W	2.9	260.0	W	1.8	261.0	W	0.8	243.0	WSW	0.3	214.0	SW	2.5	283.0	WNW
03:00 PM - 04:00 PM	1.4	257.0	WSW	0.5	145.0	SE	2.1	228.0	SW	1.2	256.0	WSW	0.6	215.0	SW	1.5	281.0	W	1.4	291.0	WNW
04:00 PM - 05:00 PM	2.0	212.0	SSW	0.3	195.0	SSW	2.5	238.0	WSW	1.7	260.0	W	2.2	248.0	WSW	1.7	243.0	WSW	1.0	286.0	WNW
05:00 PM - 06:00 PM	1.1	284.0	WNW	0.3	198.0	SSW	0.9	184.0	S	0.6	211.0	SSW	1.1	103.0	ESE	3.2	271.0	W	0.3	165.0	SSE
06:00 PM - 07:00 PM	0.9	147.0	SSE	0.1	-	-	1.2	36.0	NE	0.8	242.0	WSW	0.7	241.0	WSW	2.8	160.0	SSE	1.9	278.0	W
07:00 PM - 08:00 PM	2.1	151.0	SSE	1.5	207.0	SSW	2.7	260.0	W	2.0	229.0	SW	0.6	253.0	WSW	3.2	286.0	WNW	1.2	221.0	SW
08:00 PM - 09:00 PM	0.6	264.0	W	0.9	81.0	E	4.3	233.0	SW	0.4	125.0	SE	1.1	223.0	SW	0.9	263.0	W	0.9	220.0	SW
09:00 PM - 10:00 PM	1.2	248.0	WSW	0.5	310.0	NW	2.2	258.0	WSW	1.0	226.0	SW	0.4	268.0	W	2.6	289.0	WNW	0.4	232.0	SW
10:00 PM - 11:00 PM	1.5	109.0	ESE	0.5	261.0	W	0.7	318.0	NW	0.5	230.0	SW	1.4	268.0	W	0.9	271.0	W	2.3	265.0	W
11:00 PM - 12:00 AM	0.8	165.0	SSE	0.9	235.0	SW	0.7	323.0	NW	0.8	292.0	WNW	0.6	269.0	W	2.6	249.0	WSW	1.4	266.0	W
12:00 AM - 01:00 AM	0.6	119.0	ESE	0.4	246.0	WSW	1.1	0.0	N	1.2	233.0	SW	1.1	267.0	W	2.0	275.0	W	1.9	259.0	W
01:00 AM - 02:00 AM	1.6	252.0	WSW	0.8	208.0	SSW	0.9	339.0	NNW	0.6	297.0	WNW	0.9	311.0	NW	1.5	235.0	SW	0.9	275.0	W
02:00 AM - 03:00 AM	0.8	206.0	SSW	0.0	-	-	1.8	346.0	NNW	1.9	219.0	SW	2.9	215.0	SW	2.1	284.0	WNW	1.7	272.0	W
03:00 AM - 04:00 AM	0.5	205.0	SSW	0.8	249.0	WSW	2.5	216.0	SW	1.6	196.0	SSW	1.9	303.0	WNW	1.4	227.0	SW	2.1	228.0	SW
04:00 AM - 05:00 AM	1.1	35.0	NE	0.1	-	-	2.2	246.0	WSW	2.6	281.0	W	1.6	256.0	WSW	2.3	236.0	SW	0.6	33.0	NNE
05:00 AM - 06:00 AM	0.3	201.0	SSW	0.7	236.0	SW	0.4	13.0	NNE	2.8	190.0	S	0.1	-	-	1.5	199.0	SSW	1.3	259.0	W
06:00 AM - 07:00 AM	3.3	270.0	W	0.3	292.0	WNW	2.3	229.0	SW	2.5	249.0	WSW	2.2	225.0	SW	1.0	264.0	W	2.0	240.0	WSW
07:00 AM - 08:00 AM	1.5	95.0	E	1.9	248.0	WSW	2.2	258.0	WSW	1.7	275.0	W	0.5	252.0	WSW	1.7	266.0	W	1.1	169.0	S
08:00 AM - 09:00 AM	0.4	259.0	W	0.6	259.0	W	3.6	257.0	WSW	1.3	225.0	SW	0.8	234.0	SW	2.5	256.0	WSW	0.4	258.0	WSW
09:00 AM - 10:00 AM	0.4	309.0	NW	0.7	141.0	SE	1.4	195.0	SSW	3.1	256.0	WSW	2.2	123.0	ESE	0.7	178.0	S	2.1	261.0	W
10:00 AM - 11:00 AM	0.2	-	-	1.0	303.0	WNW	2.2	249.0	WSW	3.1	233.0	SW	0.7	309.0	NW	0.3	29.0	NNE	0.8	260.0	W
11:00 AM - 12:00 PM	0.4	298.0	WNW	0.6	279.0	W	2.9	233.0	SW	0.8	243.0	WSW	2.2	251.0	WSW	0.6	266.0	W	1.0	261.0	W

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

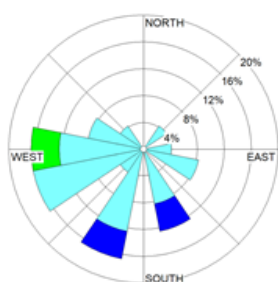
Date Received :May 06, 2024

Date Reported :May 10, 2024

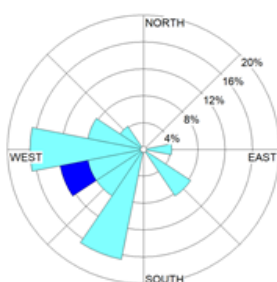
Report Number :2955404-1

Page 2 of 2

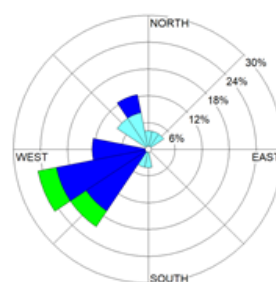
Wind Rose



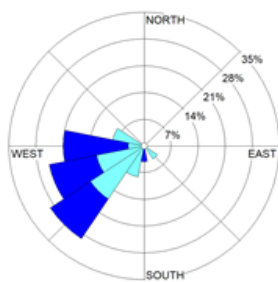
Date : Apr 26-27, 2024



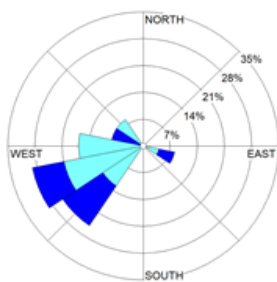
Date : Apr 27-28, 2024



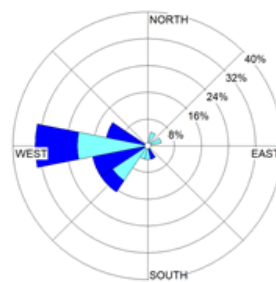
Date : Apr 28-29, 2024



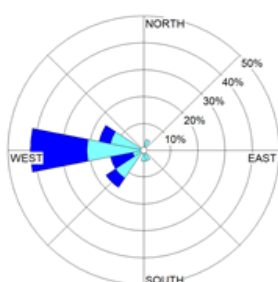
Date : Apr 29-30, 2024



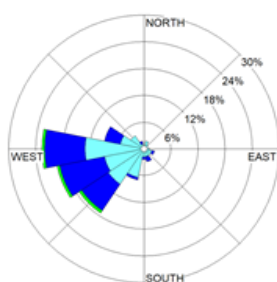
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	1.79
1.7-3.3	33.33
0.3-1.7	60.71
Calms	4.17

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

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396
Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number : 2438396-29 to 35
Parameter : Wind Speed / Wind Direction
Location : วัดพันเสด็จนอก (A5) (GPS 47P 0729688, 1447669)
Sampling Date : Apr 26 - May 03, 2024
Sampling by : Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	2.4	279.0	W	1.4	195.0	SSW	2.6	283.0	WNW	0.8	48.0	NE	1.1	183.0	S	0.9	245.0	WSW	1.2	270.0	W
02:00 PM - 03:00 PM	2.3	263.0	W	1.6	129.0	SE	2.9	282.0	WNW	2.6	12.0	NNE	2.9	283.0	WNW	2.8	305.0	NW	1.0	94.0	E
03:00 PM - 04:00 PM	2.5	238.0	WSW	2.9	232.0	SW	2.6	203.0	SSW	1.2	149.0	SSE	0.7	236.0	SW	0.9	45.0	NE	0.5	135.0	SE
04:00 PM - 05:00 PM	1.8	254.0	WSW	1.9	292.0	WNW	0.9	21.0	NNE	1.2	166.0	SSE	0.9	87.0	E	1.0	236.0	SW	1.3	136.0	SE
05:00 PM - 06:00 PM	1.3	111.0	ESE	2.4	290.0	WNW	1.2	47.0	NE	1.3	230.0	SW	0.6	290.0	WNW	1.6	314.0	NW	2.0	140.0	SE
06:00 PM - 07:00 PM	0.5	294.0	WNW	3.5	249.0	WSW	1.6	78.0	ENE	1.7	317.0	NW	1.3	191.0	S	1.5	194.0	SSW	1.1	211.0	SSW
07:00 PM - 08:00 PM	0.2	-	-	3.0	267.0	W	2.0	284.0	WNW	1.3	243.0	WSW	0.5	149.0	SSE	2.7	254.0	WSW	3.9	230.0	SW
08:00 PM - 09:00 PM	0.4	212.0	SSW	0.7	238.0	WSW	1.1	17.0	NNE	2.1	319.0	NW	0.4	246.0	WSW	0.6	253.0	WSW	2.1	281.0	W
09:00 PM - 10:00 PM	0.6	278.0	W	0.3	240.0	WSW	2.5	234.0	SW	1.8	90.0	E	1.0	258.0	WSW	1.8	255.0	WSW	1.6	230.0	SW
10:00 PM - 11:00 PM	2.0	255.0	WSW	1.2	74.0	ENE	0.8	203.0	SSW	0.8	123.0	ESE	2.2	250.0	WSW	2.6	304.0	NW	0.7	231.0	SW
11:00 PM - 12:00 AM	1.0	255.0	WSW	1.1	287.0	WNW	1.8	72.0	ENE	2.1	275.0	W	2.9	298.0	WNW	2.9	243.0	WSW	1.8	280.0	W
12:00 AM - 01:00 AM	2.3	258.0	WSW	1.3	157.0	SSE	1.2	294.0	WNW	0.7	210.0	SSW	2.5	235.0	SW	1.6	294.0	WNW	1.6	286.0	WNW
01:00 AM - 02:00 AM	1.2	243.0	WSW	1.4	232.0	SW	0.5	274.0	W	0.8	262.0	W	2.7	301.0	WNW	1.4	279.0	W	1.4	298.0	WNW
02:00 AM - 03:00 AM	1.6	281.0	W	0.6	284.0	WNW	0.5	182.0	S	1.0	96.0	E	2.0	249.0	WSW	0.6	306.0	NW	2.0	258.0	WSW
03:00 AM - 04:00 AM	2.1	285.0	WNW	3.5	237.0	WSW	0.9	171.0	S	1.1	278.0	W	1.4	233.0	SW	1.0	26.0	NNE	2.9	273.0	W
04:00 AM - 05:00 AM	0.7	250.0	WSW	0.6	76.0	ENE	4.1	253.0	WSW	1.7	68.0	ENE	1.4	116.0	ESE	0.8	274.0	W	2.2	214.0	SW
05:00 AM - 06:00 AM	0.3	250.0	WSW	0.9	33.0	NNE	1.7	181.0	S	2.6	314.0	NW	0.8	175.0	S	0.4	299.0	WNW	1.2	262.0	W
06:00 AM - 07:00 AM	0.3	180.0	S	1.2	249.0	WSW	1.5	182.0	S	1.5	261.0	W	0.9	233.0	SW	0.8	87.0	E	2.8	254.0	WSW
07:00 AM - 08:00 AM	0.5	170.0	S	1.9	218.0	SW	1.8	185.0	S	1.8	274.0	W	0.9	294.0	WNW	1.8	247.0	WSW	1.7	247.0	WSW
08:00 AM - 09:00 AM	0.8	247.0	WSW	2.5	298.0	WNW	2.2	322.0	NW	1.0	123.0	ESE	4.0	198.0	SSW	0.9	116.0	ESE	0.8	293.0	WNW
09:00 AM - 10:00 AM	0.8	230.0	SW	1.5	303.0	WNW	1.3	114.0	ESE	2.8	273.0	W	1.8	248.0	WSW	2.1	245.0	WSW	2.7	217.0	SW
10:00 AM - 11:00 AM	1.9	201.0	SSW	3.3	201.0	SSW	2.2	283.0	WNW	2.7	113.0	ESE	2.4	282.0	WNW	2.9	250.0	WSW	2.6	289.0	WNW
11:00 AM - 12:00 PM	1.8	184.0	S	2.0	246.0	WSW	4.2	262.0	W	2.3	62.0	ENE	1.8	147.0	SSE	1.2	199.0	SSW	1.5	263.0	W
12:00 PM - 01:00 PM	1.6	241.0	WSW	0.5	279.0	W	2.3	348.0	NNW	1.1	335.0	NNW	1.8	322.0	NW	1.0	170.0	S	2.0	273.0	W

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

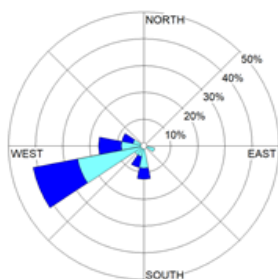
Date Received :May 06, 2024

Date Reported :May 10, 2024

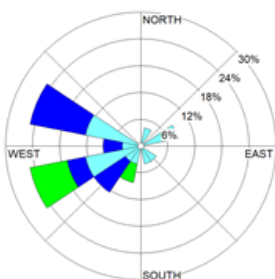
Report Number :2955404-1

Page 2 of 2

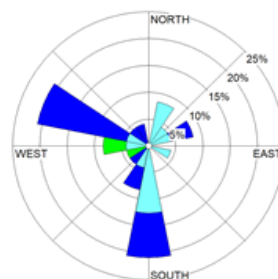
Wind Rose



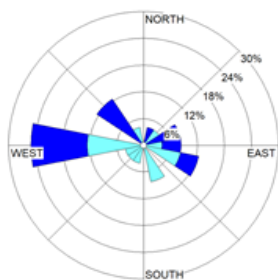
Date : Apr 26-27, 2024



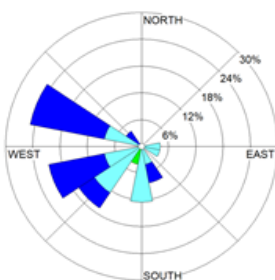
Date : Apr 27-28, 2024



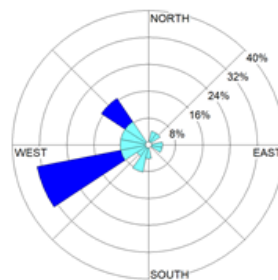
Date : Apr 28-29, 2024



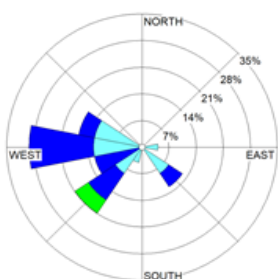
Date : Apr 29-30, 2024



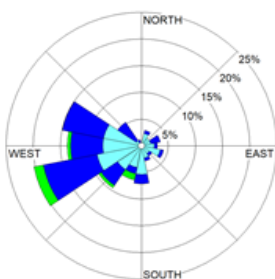
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	4.17
1.7-3.3	39.88
0.3-1.7	55.36
Calms	0.60

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

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2438396

Date Received : May 06, 2024

Date Reported : May 10, 2024

Report Number : 2955404-1

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 2

Sample Number 2438396-36 to 42
Parameter Wind Speed / Wind Direction
Location ชุมชนห้วยเหียน (A6) (GPS 47P 0723088, 1444745)
Sampling Date Apr 26 - May 03, 2024
Sampling by Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
02:00 PM - 03:00 PM	2.1	320.0	NW	2.6	257.0	WSW	2.6	313.0	NW	1.2	315.0	NW	3.8	324.0	NW	2.3	0.0	N	3.1	311.0	NW
03:00 PM - 04:00 PM	2.3	309.0	NW	1.7	257.0	WSW	1.2	311.0	NW	2.7	2.0	N	2.7	303.0	WNW	3.0	279.0	W	2.9	303.0	WNW
04:00 PM - 05:00 PM	0.6	211.0	SSW	1.1	321.0	NW	1.5	318.0	NW	3.8	264.0	W	2.3	318.0	NW	2.9	193.0	SSW	2.2	255.0	WSW
05:00 PM - 06:00 PM	1.8	264.0	W	1.5	247.0	WSW	3.3	288.0	WNW	1.7	312.0	NW	1.8	324.0	NW	2.7	266.0	W	3.7	252.0	WSW
06:00 PM - 07:00 PM	1.7	280.0	W	2.1	290.0	WNW	1.1	230.0	SW	0.4	277.0	W	1.7	297.0	WNW	0.8	294.0	WNW	0.2	-	-
07:00 PM - 08:00 PM	3.3	233.0	SW	1.8	243.0	WSW	0.2	-	-	2.0	233.0	SW	1.6	239.0	WSW	1.6	227.0	SW	0.5	311.0	NW
08:00 PM - 09:00 PM	0.8	284.0	WNW	1.3	293.0	WNW	0.4	253.0	WSW	2.2	288.0	WNW	1.1	200.0	SSW	2.0	267.0	W	1.2	304.0	NW
09:00 PM - 10:00 PM	0.3	288.0	WNW	0.1	-	-	1.8	264.0	W	1.0	267.0	W	2.2	307.0	NW	0.8	344.0	NNW	0.0	-	-
10:00 PM - 11:00 PM	0.4	234.0	SW	1.5	251.0	WSW	0.3	271.0	W	0.0	-	-	1.1	33.0	NNE	0.0	-	-	0.3	231.0	SW
11:00 PM - 12:00 AM	0.2	-	-	1.6	282.0	WNW	2.3	303.0	WNW	0.8	290.0	WNW	2.9	233.0	SW	0.9	245.0	WSW	1.2	311.0	NW
12:00 AM - 01:00 AM	0.0	-	-	0.5	215.0	SW	1.3	307.0	NW	1.9	275.0	W	1.0	251.0	WSW	0.1	-	-	0.2	-	-
01:00 AM - 02:00 AM	1.5	319.0	NW	1.2	244.0	WSW	1.2	313.0	NW	0.3	221.0	SW	0.7	254.0	WSW	0.8	311.0	NW	0.7	297.0	WNW
02:00 AM - 03:00 AM	0.9	329.0	NNW	0.0	-	-	1.1	307.0	NW	1.4	278.0	W	0.2	-	-	0.6	320.0	NW	1.3	270.0	W
03:00 AM - 04:00 AM	1.1	254.0	WSW	0.0	-	-	0.0	-	-	0.7	359.0	N	0.9	251.0	WSW	0.3	261.0	W	0.5	270.0	W
04:00 AM - 05:00 AM	0.0	-	-	0.7	194.0	SSW	0.0	-	-	0.6	245.0	WSW	1.0	237.0	WSW	0.4	300.0	WNW	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.4	257.0	WSW	0.2	-	-	0.7	272.0	W	0.4	250.0	WSW	1.0	252.0	WSW	0.6	245.0	WSW
06:00 AM - 07:00 AM	0.4	207.0	SSW	1.8	280.0	W	0.8	305.0	NW	0.9	247.0	WSW	0.5	306.0	NW	1.3	236.0	SW	1.1	233.0	SW
07:00 AM - 08:00 AM	1.2	16.0	NNE	1.4	313.0	NW	1.2	266.0	W	1.6	328.0	NNW	3.0	318.0	NW	2.2	303.0	WNW	0.7	231.0	SW
08:00 AM - 09:00 AM	1.8	289.0	WNW	2.7	331.0	NNW	1.5	286.0	WNW	2.9	313.0	NW	2.5	320.0	NW	2.4	315.0	NW	1.2	232.0	SW
09:00 AM - 10:00 AM	1.2	284.0	WNW	1.8	317.0	NW	1.6	242.0	WSW	0.6	302.0	WNW	0.9	281.0	W	2.5	10.0	N	0.8	205.0	SSW
10:00 AM - 11:00 AM	0.8	278.0	W	2.0	283.0	WNW	2.0	231.0	SW	3.9	15.0	NNE	2.4	56.0	NE	2.4	299.0	WNW	0.9	203.0	SSW
11:00 AM - 12:00 PM	1.3	163.0	SSE	3.4	303.0	WNW	2.3	334.0	NNW	1.4	205.0	SSW	2.6	351.0	N	1.7	301.0	WNW	1.3	204.0	SSW
12:00 PM - 01:00 PM	1.6	236.0	SW	2.0	318.0	NW	1.0	192.0	SSW	1.6	221.0	SW	3.1	348.0	NNW	3.7	272.0	W	2.1	221.0	SW
01:00 PM - 02:00 PM	2.1	271.0	W	2.5	317.0	NW	1.7	241.0	WSW	1.5	260.0	W	1.1	304.0	NW	3.7	289.0	WNW	1.5	222.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

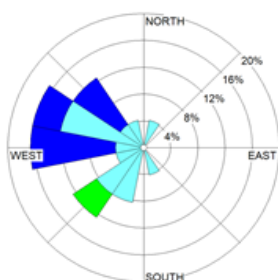
Date Received :May 06, 2024

Date Reported :May 10, 2024

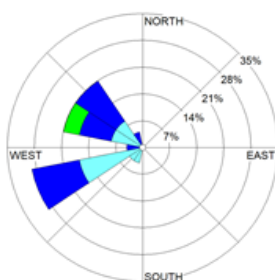
Report Number :2955404-1

Page 2 of 2

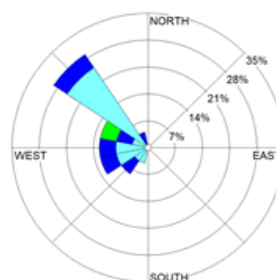
Wind Rose



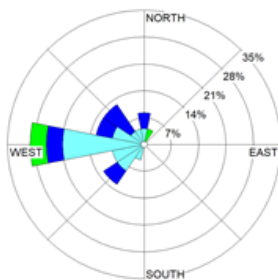
Date : Apr 26-27, 2024



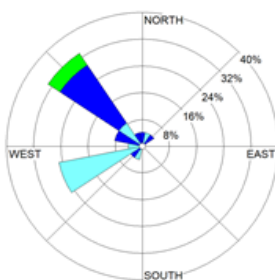
Date : Apr 27-28, 2024



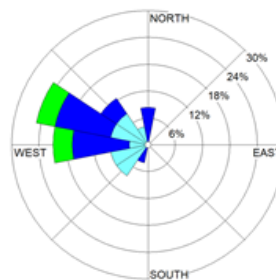
Date : Apr 28-29, 2024



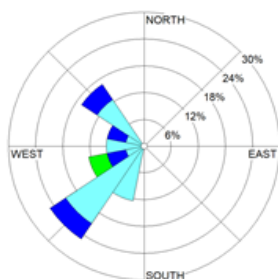
Date : Apr 29-30, 2024



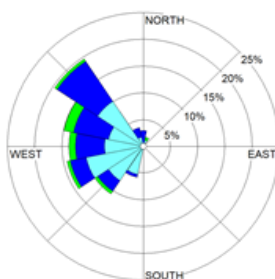
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	5.36
1.7-3.3	31.55
0.3-1.7	51.79
Calms	11.31

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

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

Date Received : May 06, 2024

Date Reported : May 10, 2024

Report Number : 2955404-1

Page 1 of 2

Sample Number 2438396-43 to 49
Parameter Wind Speed / Wind Direction
Location บ้านนาหนอง (A7) (GPS 47P 0727425, 1448026)
Sampling Date Apr 26 - May 03, 2024
Sampling by Satcha Phetsawaeng

Time	Apr 26 - Apr 27, 2024			Apr 27 - Apr 28, 2024			Apr 28 - Apr 29, 2024			Apr 29 - Apr 30, 2024			Apr 30 - May 01, 2024			May 01 - May 02, 2024			May 02 - May 03, 2024		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
03:00 PM - 04:00 PM	0.7	112.0	ESE	0.5	206.0	SSW	0.7	187.0	S	3.2	174.0	S	2.6	162.0	SSE	2.1	170.0	S	2.8	170.0	S
04:00 PM - 05:00 PM	0.2	-	-	0.1	-	-	0.3	169.0	S	2.0	179.0	S	1.8	149.0	SSE	2.2	148.0	SSE	2.3	164.0	SSE
05:00 PM - 06:00 PM	0.1	-	-	0.5	139.0	SE	0.3	151.0	SSE	2.1	139.0	SE	3.8	140.0	SE	2.0	138.0	SE	2.7	142.0	SE
06:00 PM - 07:00 PM	0.4	102.0	ESE	0.5	135.0	SE	0.7	124.0	SE	1.7	133.0	SE	2.6	151.0	SSE	2.4	133.0	SE	3.1	122.0	ESE
07:00 PM - 08:00 PM	0.7	129.0	SE	1.6	119.0	ESE	0.4	136.0	SE	2.1	111.0	ESE	2.5	149.0	SSE	2.9	119.0	ESE	2.3	111.0	ESE
08:00 PM - 09:00 PM	0.7	115.0	ESE	2.1	120.0	ESE	0.2	-	-	3.1	118.0	ESE	2.4	155.0	SSE	2.5	111.0	ESE	2.1	130.0	SE
09:00 PM - 10:00 PM	0.6	125.0	SE	1.5	120.0	ESE	0.6	127.0	SE	1.7	112.0	ESE	2.3	144.0	SE	2.6	115.0	ESE	2.8	121.0	ESE
10:00 PM - 11:00 PM	0.1	-	-	1.6	120.0	ESE	0.1	-	-	0.0	-	-	1.9	139.0	SE	2.0	125.0	SE	1.8	131.0	SE
11:00 PM - 12:00 AM	2.4	114.0	ESE	0.0	-	-	0.6	125.0	SE	1.1	181.0	S	0.6	140.0	SE	1.1	127.0	SE	1.6	132.0	SE
12:00 AM - 01:00 AM	1.6	124.0	SE	0.3	208.0	SSW	0.7	132.0	SE	0.6	183.0	S	2.0	126.0	SE	0.3	128.0	SE	2.3	132.0	SE
01:00 AM - 02:00 AM	2.4	122.0	ESE	0.2	-	-	0.6	171.0	S	0.3	181.0	S	1.2	126.0	SE	0.7	127.0	SE	1.5	132.0	SE
02:00 AM - 03:00 AM	1.6	123.0	ESE	1.3	112.0	ESE	0.9	192.0	SSW	0.6	181.0	S	0.4	128.0	SE	0.6	126.0	SE	1.6	135.0	SE
03:00 AM - 04:00 AM	2.3	123.0	ESE	1.2	112.0	ESE	0.4	190.0	S	0.4	182.0	S	0.9	124.0	SE	0.0	-	-	2.1	136.0	SE
04:00 AM - 05:00 AM	1.6	121.0	ESE	1.5	116.0	ESE	0.3	190.0	S	0.3	182.0	S	0.4	144.0	SE	0.7	140.0	SE	1.4	135.0	SE
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.8	127.0	SE	0.0	-	-	0.0	-	-	0.0	-	-	2.3	133.0	SE
06:00 AM - 07:00 AM	0.0	-	-	0.5	117.0	ESE	1.2	132.0	SE	0.8	182.0	S	1.1	189.0	S	0.9	133.0	SE	1.5	121.0	ESE
07:00 AM - 08:00 AM	0.1	-	-	1.4	102.0	ESE	1.8	201.0	SSW	1.9	145.0	SE	1.8	145.0	SE	1.7	121.0	ESE	1.7	194.0	SSW
08:00 AM - 09:00 AM	0.2	-	-	0.6	160.0	SSE	1.8	97.0	E	1.6	138.0	SE	1.6	118.0	ESE	2.9	161.0	SSE	2.0	114.0	ESE
09:00 AM - 10:00 AM	0.4	191.0	S	0.8	140.0	SE	2.1	210.0	SSW	2.5	89.0	E	2.2	120.0	ESE	3.0	141.0	SE	0.1	-	-
10:00 AM - 11:00 AM	0.4	136.0	SE	0.6	197.0	SSW	2.1	108.0	ESE	2.5	151.0	SSE	2.7	222.0	SW	3.4	160.0	SSE	0.9	187.0	S
11:00 AM - 12:00 PM	0.7	104.0	ESE	0.6	144.0	SE	3.1	202.0	SSW	2.8	113.0	ESE	2.3	195.0	SSW	3.7	116.0	ESE	0.7	149.0	SSE
12:00 PM - 01:00 PM	0.7	119.0	ESE	0.4	162.0	SSE	2.6	157.0	SSE	2.6	156.0	SSE	3.5	184.0	S	2.6	199.0	SSW	0.9	150.0	SSE
01:00 PM - 02:00 PM	0.1	-	-	0.2	-	-	3.2	117.0	ESE	3.3	187.0	S	3.3	200.0	SSW	3.0	191.0	S	1.0	154.0	SSE
02:00 PM - 03:00 PM	0.2	-	-	0.3	159.0	SSE	3.4	184.0	S	2.6	117.0	ESE	2.7	201.0	SSW	2.4	193.0	SSW	1.2	180.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittranont
Assistant General Manager



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Lot ID: 2438396

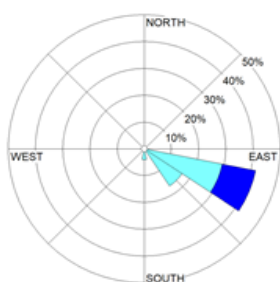
Date Received :May 06, 2024

Date Reported :May 10, 2024

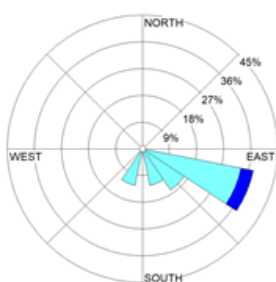
Report Number :2955404-1

Page 2 of 2

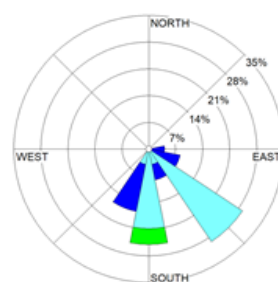
Wind Rose



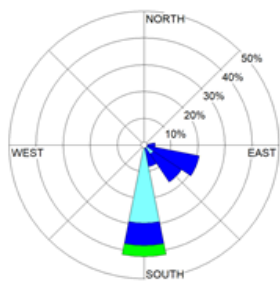
Date : Apr 26-27, 2024



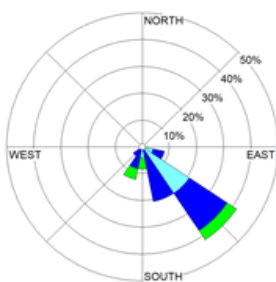
Date : Apr 27-28, 2024



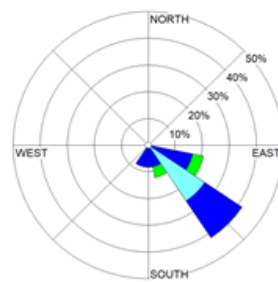
Date : Apr 28-29, 2024



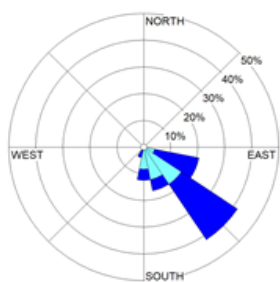
Date : Apr 29-30, 2024



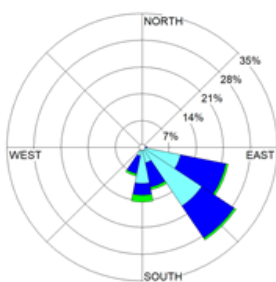
Date : Apr 30-May 01, 2024



Date : May 01-02, 2024



Date : May 02-03, 2024



Date : Apr 26-May 03, 2024

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	4.17
1.7-3.3	38.10
0.3-1.7	44.64
Calms	13.10

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

Approved by

Sarayuth Jitranont
Assistant General Manager

ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบายอากาศ



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2330566
Date Received : Dec 15, 2023
Date Reported : Dec 21, 2023
Report Number : 2598412-1

Page 1 of 1

Sample Number 2330566-1
Sample Description Emission from Stationary Source
Location HRSG 11
Sampled Date Dec 15, 2023

Stack Description

Ambient Temperature	32	°C	Diameter	7.00	m	Oxygen	12.62	%
Ambient Pressure	749	mmHg	Shape	Circle		Carbon dioxide	4.60	%
Type of Process	Combustion		Stack Temperature	106	°C	Gas Velocity	15.86	m/s
Type of Fuel	Natural Gas		Moisture	8.98	%	Flow Rate	1548292	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)		Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	10:30 AM - 10:50 AM	12.62	4.60	1.84	3.09	36.84	61.86	0.26	0.43
2	10:51 AM - 11:11 AM	12.61	4.60	1.73	2.89	37.48	62.86	0.08	0.13
3	11:12 AM - 11:32 AM	12.62	4.60	1.64	2.76	37.57	63.04	0.07	0.12
Average (ppm)		12.62	4.60	1.74	2.91	37.30	62.59	0.13	0.23
Guideline ^{1/} (ppm)				-	250	-	100	-	-
Guideline ^{2/} (ppm)				-	-	-	120	-	20
Guideline ^{3/} (ppm)				-	690	-	-	-	-
Result (mg/Nm ³)				1.99	3.34	70.17	117.75	0.35	0.59
Emission Rate at Actual O ₂ (g/s)				0.855		30.181		0.151	
Guideline ^{1/} (g/s)				78.600		51.600		-	
Method				US EPA Method 10		US EPA Method 7E		US EPA Method 6C	

Sampled By : Worawich Tongpoom

Guideline : ^{1/} Environmental Impact Assessment Report of Glow IPP Co., Ltd.

^{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 Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Technical Management

Wichan Choonharat
Manager
ทะเบียนเลขที่ ว-204-ค-6113

Approved by

Sarayuth Jittrantont
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-4702

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.



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2330985

Date Received : Dec 15, 2023
Date Reported : Dec 23, 2023
Report Number: 2598407-1

Page 1 of 2

Sample Number 2330985-1
Sampled Date Dec 15, 2023
Sample Description Emission from Stationary Source
Location HRSG 11
Date Analysis Commenced Dec 19, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish

Stack Description

Ambient Pressure	749	mmHg	Diameter	7.00	m	Oxygen	12.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	4.6	%
Type of Process	Combustion		Stack Temperature	106	°C	Gas Velocity	15.8	m/s
Type of Fuel	Natural Gas		Moisture	9.00	%	Flow Rate (Actual O2)	1546450	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Result at 12.6 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing										
Total Suspended Particulate	10:30 AM - 11:18 AM	mg/m3	-	0.5	<0.5	<0.5	60	20	United States Environmental Protection Agency, EPA Method 5	Bangkok

Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
Guideline (2) Environmental Impact Assessment Report of Glow IPP Co., Ltd.

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)
ทะเบียนเลขที่ ว-204-จ-4717

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1942-51/ EMAIL

S:\Reports_Air Stack_O2_2GL.rpt (3:10PM)



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2330985

Date Received : Dec 15, 2023
Date Reported : Dec 23, 2023
Report Number: 2598407-1

Page 2 of 2

Sample Number 2330985-1
Sampled Date Dec 15, 2023
Sample Description Emission from Stationary Source
Location HRSG 11
Date Analysis Commenced Dec 19, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish

Stack Description

Ambient Pressure	749	mmHg	Diameter	7.00	m	Oxygen	12.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	4.6	%
Type of Process	Combustion		Stack Temperature	106	°C	Gas Velocity	15.8	m/s
Type of Fuel	Natural Gas		Moisture	9.00	%	Flow Rate (Actual O2)	1546450	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	-	-	<0.21	-	4.67	Calculated	Bangkok

Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
Guideline (2) Environmental Impact Assessment Report of Glow IPP Co., Ltd.

Sampled By : Anuvat Moungpai

Remark :

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

Technical Management

Saranya C.

Saranya Chalermthamrong
Scientist (4)
ทะเบียนเลขที่ ว-204-จ-4717

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ค-6111

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

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



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2392013
Date Received :Aug 07, 2023
Date Reported :Aug 09, 2023
Report Number :2739188-1

Page 1 of 1

Sample Number 2392013-1
Sample Description Emission from Stationary Source
Location HRSG 21
Sampled Date Aug 07, 2023

Stack Description

Ambient Temperature	32	°C	Diameter	7.00	m	Oxygen	11.81	%
Ambient Pressure	747	mmHg	Shape	Circle		Carbon dioxide	5.02	%
Type of Process	Combustion		Stack Temperature	105	°C	Gas Velocity	20.97	m/s
Type of Fuel	Natural Gas		Moisture	9.87	%	Flow Rate	2026629	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)		Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	11:00 AM - 11:20 AM	11.79	5.00	2.75	4.20	18.30	27.92	0.31	0.47
2	11:21 AM - 11:41 AM	11.81	5.03	3.69	5.63	17.80	27.20	0.15	0.23
3	11:42 AM - 12:02 PM	11.83	5.05	3.53	5.41	16.72	25.62	0.14	0.21
Average (ppm)		11.81	5.02	3.32	5.08	17.60	26.92	0.20	0.31
Guideline ^{1/} (ppm)				-	250	-	100	-	-
Guideline ^{2/} (ppm)				-	-	-	120	-	20
Guideline ^{3/} (ppm)				-	690	-	-	-	-
Result (mg/Nm ³)				3.80	5.82	33.12	50.64	0.52	0.80
Emission Rate at Actual O ₂ (g/s)				2.142		18.646		0.295	
Guideline ^{1/} (g/s)				78.600		51.600		-	
Method				US EPA Method 10		US EPA Method 7E		US EPA Method 6C	

Sampled By : Worawich Tongpoom

Guideline : ^{1/} Environmental Impact Assessment Report of Glow IPP Co., Ltd.

^{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 Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Technical Management

Wichan Choonharat
Manager
ทะเบียนเลขที่ ว-204-ค-6113

Approved by

Sarayuth Jittrantont
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-4702

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2330994

Date Received : Aug 07, 2023
Date Reported : Aug 12, 2023
Report Number: 2598406-1

Page 1 of 2

Sample Number 2330994-1
Sampled Date Aug 07, 2023
Sample Description Emission from Stationary Source
Location HRSG 21
Date Analysis Commenced Aug 08, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish

Stack Description

Ambient Pressure	747	mmHg	Diameter	7.00	m	Oxygen	11.8	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.0	%
Type of Process	Combustion		Stack Temperature	105	°C	Gas Velocity	21.0	m/s
Type of Fuel	Natural Gas		Moisture	9.87	%	Flow Rate (Actual O2)	2026680	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Result at 11.8 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing										
Total Suspended Particulate	11:00 AM - 12:00 PM	mg/m3	-	0.5	<0.5	<0.5	120	35	United States Environmental Protection Agency, EPA Method 5	Bangkok

Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
Guideline (2) Environmental Impact Assessment Report of Glow IPP Co., Ltd.

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1942-51/ EMAIL

S:\Reports_Air Stack_O2_2GL.rpt (3:46PM)



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2330994

Date Received : Aug 07, 2023
Date Reported : Aug 12, 2023
Report Number: 2598406-1

Page 2 of 2

Sample Number 2330994-1
Sampled Date Aug 07, 2023
Sample Description Emission from Stationary Source
Location HRSG 21
Date Analysis Commenced Aug 08, 2023
Condition of Sample Extracted into one filter paper placed in plastic petri dish

Stack Description

Ambient Pressure	747	mmHg	Diameter	7.00	m	Oxygen	11.8	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	5.0	%
Type of Process	Combustion		Stack Temperature	105	°C	Gas Velocity	21.0	m/s
Type of Fuel	Natural Gas		Moisture	9.87	%	Flow Rate (Actual O2)	2026680	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate	11:00 AM - 12:00 PM	g/s	-	-	<0.28	-	10.30	Calculated	Bangkok

Guideline :

Guideline (1) Notification of the Ministry of Industry on determining pollutant contents in air emitted from electric power generation, transmission and distribution plant, 2004 (B.E. 2547), dated September, 2004 (B.E. 2547).
Guideline (2) Environmental Impact Assessment Report of Glow IPP Co., Ltd.

Sampled By : Ussaree Namburee

Remark :

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

Technical Management

Orawan R.

Orawan Rakyong
Scientist (3)

ทะเบียนเลขที่ ว-204-จ-6115

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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

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

ภาคผนวก ค-3

ผลการตรวจวัดระดับเสียงโดยทั่วไป



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979644-1

Page 1 of 1

Sample Number 2438437-1
Parameter Noise (Leq 24 hrs.)
Location East of fence (GPS 47P 0726307, 1447633)
Measurement Date Apr 26 - Apr 27, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.9	84.3	51.1
11:00 AM - 12:00 PM	54.3	82.6	51.2
12:00 PM - 01:00 PM	52.4	64.4	50.9
01:00 PM - 02:00 PM	53.1	63.8	51.4
02:00 PM - 03:00 PM	52.6	64.0	51.0
03:00 PM - 04:00 PM	57.6	76.8	52.9
04:00 PM - 05:00 PM	59.8	70.1	58.9
05:00 PM - 06:00 PM	59.1	66.5	58.4
06:00 PM - 07:00 PM	59.4	69.7	58.1
07:00 PM - 08:00 PM	58.3	68.0	57.9
08:00 PM - 09:00 PM	58.9	67.0	58.4
09:00 PM - 10:00 PM	59.0	62.2	58.4
10:00 PM - 11:00 PM	59.8	72.0	58.9
11:00 PM - 12:00 AM	65.7	84.5	57.1
12:00 AM - 01:00 AM	53.7	61.9	52.5
01:00 AM - 02:00 AM	55.0	64.3	52.6
02:00 AM - 03:00 AM	52.9	65.9	51.9
03:00 AM - 04:00 AM	52.6	63.9	51.6
04:00 AM - 05:00 AM	56.1	71.0	52.1
05:00 AM - 06:00 AM	57.6	71.9	52.7
06:00 AM - 07:00 AM	54.4	64.3	53.1
07:00 AM - 08:00 AM	54.9	63.4	53.5
08:00 AM - 09:00 AM	53.5	68.2	51.6
09:00 AM - 10:00 AM	53.1	65.6	50.9

Leq Average 24 hrs. (dB(A)) 57.7
Lmax (dB(A)) 84.5
L90 (dB(A)) 52.6
Ldn (dB(A)) 65.0
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979645-1

Page 1 of 1

Sample Number 2438437-2
Parameter Noise (Leq 24 hrs.)
Location East of fence (GPS 47P 0726307, 1447633)
Measurement Date Apr 27 - Apr 28, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.0	67.2	51.2
11:00 AM - 12:00 PM	52.4	67.6	50.8
12:00 PM - 01:00 PM	51.8	70.3	50.1
01:00 PM - 02:00 PM	52.7	65.0	51.0
02:00 PM - 03:00 PM	53.6	63.7	52.0
03:00 PM - 04:00 PM	53.6	65.0	51.9
04:00 PM - 05:00 PM	55.8	69.6	54.8
05:00 PM - 06:00 PM	56.9	67.4	55.9
06:00 PM - 07:00 PM	58.9	73.5	56.0
07:00 PM - 08:00 PM	56.9	65.2	56.0
08:00 PM - 09:00 PM	56.6	62.9	56.1
09:00 PM - 10:00 PM	56.7	62.7	56.2
10:00 PM - 11:00 PM	57.8	73.3	56.7
11:00 PM - 12:00 AM	55.8	62.0	54.7
12:00 AM - 01:00 AM	55.0	64.6	53.9
01:00 AM - 02:00 AM	54.5	59.9	53.7
02:00 AM - 03:00 AM	54.3	66.6	53.6
03:00 AM - 04:00 AM	54.3	61.7	51.8
04:00 AM - 05:00 AM	52.8	67.5	51.5
05:00 AM - 06:00 AM	54.6	73.2	51.3
06:00 AM - 07:00 AM	53.6	68.7	52.4
07:00 AM - 08:00 AM	53.3	68.2	51.7
08:00 AM - 09:00 AM	53.3	66.7	51.3
09:00 AM - 10:00 AM	54.3	83.5	51.1

Leq Average 24 hrs. (dB(A)) 55.1
Lmax (dB(A)) 83.5
L90 (dB(A)) 52.0
Ldn (dB(A)) 61.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979646-1

Page 1 of 1

Sample Number 2438437-3
Parameter Noise (Leq 24 hrs.)
Location East of fence (GPS 47P 0726307, 1447633)
Measurement Date Apr 28 - Apr 29, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.9	67.8	50.9
11:00 AM - 12:00 PM	52.6	82.3	49.7
12:00 PM - 01:00 PM	52.6	67.2	49.5
01:00 PM - 02:00 PM	54.8	80.8	52.9
02:00 PM - 03:00 PM	54.2	89.2	50.0
03:00 PM - 04:00 PM	52.1	72.3	50.3
04:00 PM - 05:00 PM	52.0	61.8	50.0
05:00 PM - 06:00 PM	53.2	62.1	50.4
06:00 PM - 07:00 PM	56.5	64.8	54.3
07:00 PM - 08:00 PM	55.4	68.3	54.4
08:00 PM - 09:00 PM	55.1	62.2	54.5
09:00 PM - 10:00 PM	55.3	63.2	54.6
10:00 PM - 11:00 PM	55.4	69.0	54.6
11:00 PM - 12:00 AM	54.0	65.5	52.3
12:00 AM - 01:00 AM	51.6	63.9	50.6
01:00 AM - 02:00 AM	51.6	60.5	50.5
02:00 AM - 03:00 AM	51.3	57.8	50.1
03:00 AM - 04:00 AM	51.2	59.9	50.2
04:00 AM - 05:00 AM	51.8	64.7	50.8
05:00 AM - 06:00 AM	53.6	65.7	51.5
06:00 AM - 07:00 AM	53.4	68.8	52.3
07:00 AM - 08:00 AM	52.9	64.1	51.5
08:00 AM - 09:00 AM	53.1	65.0	51.5
09:00 AM - 10:00 AM	54.1	89.1	49.9

Leq Average 24 hrs. (dB(A)) 53.6
Lmax (dB(A)) 89.2
L90 (dB(A)) 50.8
Ldn (dB(A)) 59.5
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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979647-1

Page 1 of 1

Sample Number 2438437-4
Parameter Noise (Leq 24 hrs.)
Location Ban Bowin (GPS 47P 0723626, 1444322)
Measurement Date Apr 26 - Apr 27, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.1	83.7	46.2
11:00 AM - 12:00 PM	57.0	82.1	46.2
12:00 PM - 01:00 PM	58.4	82.3	44.8
01:00 PM - 02:00 PM	55.9	75.1	45.5
02:00 PM - 03:00 PM	56.5	75.4	46.3
03:00 PM - 04:00 PM	58.2	81.6	48.0
04:00 PM - 05:00 PM	58.8	81.0	51.7
05:00 PM - 06:00 PM	65.5	81.8	51.9
06:00 PM - 07:00 PM	59.9	90.6	49.2
07:00 PM - 08:00 PM	57.6	81.1	50.2
08:00 PM - 09:00 PM	55.3	81.8	46.7
09:00 PM - 10:00 PM	52.8	72.6	45.6
10:00 PM - 11:00 PM	53.4	77.1	47.0
11:00 PM - 12:00 AM	52.1	75.3	40.4
12:00 AM - 01:00 AM	48.9	71.8	37.8
01:00 AM - 02:00 AM	47.8	67.8	37.5
02:00 AM - 03:00 AM	47.7	74.9	37.1
03:00 AM - 04:00 AM	51.3	74.6	38.8
04:00 AM - 05:00 AM	64.8	76.2	44.4
05:00 AM - 06:00 AM	58.1	80.1	48.7
06:00 AM - 07:00 AM	61.3	88.2	50.6
07:00 AM - 08:00 AM	57.4	79.0	48.2
08:00 AM - 09:00 AM	58.7	86.5	46.3
09:00 AM - 10:00 AM	58.1	78.0	48.3

Leq Average 24 hrs. (dB(A)) 58.6
Lmax (dB(A)) 90.6
L90 (dB(A)) 46.3
Ldn (dB(A)) 64.6
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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979648-1

Page 1 of 1

Sample Number 2438437-5
Parameter Noise (Leq 24 hrs.)
Location Ban Bowin (GPS 47P 0723626, 1444322)
Measurement Date Apr 27 - Apr 28, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.0	76.0	46.0
11:00 AM - 12:00 PM	57.8	83.8	47.2
12:00 PM - 01:00 PM	57.0	75.8	46.0
01:00 PM - 02:00 PM	57.2	77.0	47.4
02:00 PM - 03:00 PM	56.3	79.7	46.0
03:00 PM - 04:00 PM	58.7	90.9	48.2
04:00 PM - 05:00 PM	58.7	79.3	51.1
05:00 PM - 06:00 PM	60.3	80.0	50.8
06:00 PM - 07:00 PM	55.7	74.5	48.1
07:00 PM - 08:00 PM	57.0	81.4	48.1
08:00 PM - 09:00 PM	55.6	79.6	45.9
09:00 PM - 10:00 PM	58.3	84.7	44.3
10:00 PM - 11:00 PM	51.1	73.9	40.8
11:00 PM - 12:00 AM	51.0	78.4	38.6
12:00 AM - 01:00 AM	47.8	66.7	38.1
01:00 AM - 02:00 AM	49.6	70.7	37.8
02:00 AM - 03:00 AM	51.8	77.0	38.1
03:00 AM - 04:00 AM	51.2	79.4	38.8
04:00 AM - 05:00 AM	59.6	80.3	44.3
05:00 AM - 06:00 AM	60.1	85.4	45.5
06:00 AM - 07:00 AM	59.1	83.9	48.7
07:00 AM - 08:00 AM	59.2	83.9	50.7
08:00 AM - 09:00 AM	57.6	79.5	48.0
09:00 AM - 10:00 AM	56.8	80.1	47.3

Leq Average 24 hrs. (dB(A)) 57.1
Lmax (dB(A)) 90.9
L90 (dB(A)) 46.0
Ldn (dB(A)) 62.6

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979649-1

Page 1 of 1

Sample Number 2438437-6
Parameter Noise (Leq 24 hrs.)
Location Ban Bowin (GPS 47P 0723626, 1444322)
Measurement Date Apr 28 - Apr 29, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173609

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.9	76.8	47.2
11:00 AM - 12:00 PM	58.5	82.2	47.1
12:00 PM - 01:00 PM	56.2	75.7	47.6
01:00 PM - 02:00 PM	57.9	83.7	47.7
02:00 PM - 03:00 PM	57.6	83.9	48.0
03:00 PM - 04:00 PM	58.6	82.3	49.8
04:00 PM - 05:00 PM	59.6	88.7	50.3
05:00 PM - 06:00 PM	58.7	83.2	50.9
06:00 PM - 07:00 PM	59.6	80.2	50.1
07:00 PM - 08:00 PM	56.8	80.4	47.3
08:00 PM - 09:00 PM	54.6	77.1	45.5
09:00 PM - 10:00 PM	51.9	70.2	43.3
10:00 PM - 11:00 PM	55.0	81.8	42.5
11:00 PM - 12:00 AM	48.5	68.9	39.9
12:00 AM - 01:00 AM	46.8	73.1	38.8
01:00 AM - 02:00 AM	45.7	67.0	37.9
02:00 AM - 03:00 AM	46.9	69.3	38.0
03:00 AM - 04:00 AM	48.4	68.1	39.5
04:00 AM - 05:00 AM	57.5	79.3	45.0
05:00 AM - 06:00 AM	58.6	78.9	49.3
06:00 AM - 07:00 AM	61.0	83.0	51.8
07:00 AM - 08:00 AM	59.2	84.6	47.7
08:00 AM - 09:00 AM	59.8	82.0	47.1
09:00 AM - 10:00 AM	59.3	84.7	47.8

Leq Average 24 hrs. (dB(A)) 57.3
Lmax (dB(A)) 88.7
L90 (dB(A)) 47.2
Ldn (dB(A)) 62.3
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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979650-1

Page 1 of 1

Sample Number 2438437-7
Parameter Noise (Leq 24 hrs.)
Location Ban Huai Hien (GPS 47P 0723114, 1444751)
Measurement Date Apr 26 - Apr 27, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.5	78.5	44.3
11:00 AM - 12:00 PM	49.0	70.2	44.5
12:00 PM - 01:00 PM	49.4	70.9	44.4
01:00 PM - 02:00 PM	48.4	69.0	44.2
02:00 PM - 03:00 PM	49.9	76.1	45.1
03:00 PM - 04:00 PM	49.0	73.5	44.9
04:00 PM - 05:00 PM	51.3	73.9	46.1
05:00 PM - 06:00 PM	50.4	74.7	45.4
06:00 PM - 07:00 PM	47.2	71.9	44.2
07:00 PM - 08:00 PM	48.3	71.9	44.6
08:00 PM - 09:00 PM	47.5	70.4	44.1
09:00 PM - 10:00 PM	45.9	68.2	44.1
10:00 PM - 11:00 PM	45.7	67.4	43.4
11:00 PM - 12:00 AM	45.7	68.1	43.1
12:00 AM - 01:00 AM	44.9	61.5	44.0
01:00 AM - 02:00 AM	46.0	81.0	44.0
02:00 AM - 03:00 AM	46.0	68.8	44.2
03:00 AM - 04:00 AM	46.1	60.0	44.4
04:00 AM - 05:00 AM	53.6	70.3	45.2
05:00 AM - 06:00 AM	51.1	76.2	45.4
06:00 AM - 07:00 AM	52.0	75.5	44.9
07:00 AM - 08:00 AM	48.8	67.9	43.8
08:00 AM - 09:00 AM	49.4	72.5	44.3
09:00 AM - 10:00 AM	47.5	66.6	43.3

Leq Average 24 hrs. (dB(A)) 49.0
Lmax (dB(A)) 81.0
L90 (dB(A)) 44.3
Ldn (dB(A)) 55.5
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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979651-1

Page 1 of 1

Sample Number 2438437-8
Parameter Noise (Leq 24 hrs.)
Location Ban Huai Hien (GPS 47P 0723114, 1444751)
Measurement Date Apr 27 - Apr 28, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.6	74.1	41.1
11:00 AM - 12:00 PM	48.7	76.0	44.6
12:00 PM - 01:00 PM	49.2	66.4	44.3
01:00 PM - 02:00 PM	49.1	70.8	44.5
02:00 PM - 03:00 PM	49.1	68.8	44.9
03:00 PM - 04:00 PM	48.7	66.1	45.3
04:00 PM - 05:00 PM	50.9	69.4	46.2
05:00 PM - 06:00 PM	50.6	66.2	45.2
06:00 PM - 07:00 PM	48.8	70.0	44.6
07:00 PM - 08:00 PM	48.7	72.3	44.4
08:00 PM - 09:00 PM	47.5	73.3	44.3
09:00 PM - 10:00 PM	46.3	65.3	44.2
10:00 PM - 11:00 PM	45.4	65.1	43.6
11:00 PM - 12:00 AM	45.4	64.3	43.4
12:00 AM - 01:00 AM	46.4	72.3	43.6
01:00 AM - 02:00 AM	44.7	58.8	43.4
02:00 AM - 03:00 AM	45.5	68.4	43.5
03:00 AM - 04:00 AM	49.2	73.8	44.0
04:00 AM - 05:00 AM	57.3	82.0	45.0
05:00 AM - 06:00 AM	54.8	85.5	45.5
06:00 AM - 07:00 AM	53.4	75.8	45.1
07:00 AM - 08:00 AM	49.3	67.7	44.8
08:00 AM - 09:00 AM	49.7	68.2	44.4
09:00 AM - 10:00 AM	48.7	66.3	44.9

Leq Average 24 hrs. (dB(A)) 50.2
Lmax (dB(A)) 85.5
L90 (dB(A)) 44.4
Ldn (dB(A)) 57.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979652-1

Page 1 of 1

Sample Number 2438437-9
Parameter Noise (Leq 24 hrs.)
Location Ban Huai Hien (GPS 47P 0723114, 1444751)
Measurement Date Apr 28 - Apr 29, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.7	75.3	44.6
11:00 AM - 12:00 PM	48.1	63.6	44.7
12:00 PM - 01:00 PM	48.9	75.9	44.1
01:00 PM - 02:00 PM	49.7	70.8	45.2
02:00 PM - 03:00 PM	49.9	71.3	45.1
03:00 PM - 04:00 PM	49.1	71.6	45.5
04:00 PM - 05:00 PM	51.1	81.4	47.2
05:00 PM - 06:00 PM	50.8	69.8	46.6
06:00 PM - 07:00 PM	50.6	71.1	45.0
07:00 PM - 08:00 PM	48.0	69.7	44.7
08:00 PM - 09:00 PM	48.0	68.8	45.2
09:00 PM - 10:00 PM	47.0	66.0	44.7
10:00 PM - 11:00 PM	47.7	69.7	45.0
11:00 PM - 12:00 AM	46.6	75.5	44.4
12:00 AM - 01:00 AM	46.3	72.0	44.8
01:00 AM - 02:00 AM	46.2	67.4	44.6
02:00 AM - 03:00 AM	47.3	72.7	44.7
03:00 AM - 04:00 AM	47.5	69.1	44.8
04:00 AM - 05:00 AM	54.1	79.5	45.8
05:00 AM - 06:00 AM	55.0	81.4	46.6
06:00 AM - 07:00 AM	51.5	77.8	45.7
07:00 AM - 08:00 AM	49.4	71.8	44.4
08:00 AM - 09:00 AM	49.7	71.7	44.8
09:00 AM - 10:00 AM	49.4	75.3	44.1

Leq Average 24 hrs. (dB(A)) 50.0
Lmax (dB(A)) 81.4
L90 (dB(A)) 44.8
Ldn (dB(A)) 56.8
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979653-1

Page 1 of 1

Sample Number 2438437-10
Parameter Noise (Leq 24 hrs.)
Location Ban Pansadet Nok (GPS 47P 0729706, 1447657)
Measurement Date Apr 26 - Apr 27, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.5	73.3	46.3
11:00 AM - 12:00 PM	52.0	80.6	47.0
12:00 PM - 01:00 PM	51.9	79.6	46.9
01:00 PM - 02:00 PM	52.1	71.4	47.3
02:00 PM - 03:00 PM	52.3	67.8	47.4
03:00 PM - 04:00 PM	53.0	73.7	48.4
04:00 PM - 05:00 PM	53.1	72.8	48.2
05:00 PM - 06:00 PM	52.7	77.4	48.4
06:00 PM - 07:00 PM	53.4	78.0	48.3
07:00 PM - 08:00 PM	51.7	78.6	47.6
08:00 PM - 09:00 PM	55.1	81.5	47.8
09:00 PM - 10:00 PM	49.2	64.9	46.7
10:00 PM - 11:00 PM	52.0	83.8	44.9
11:00 PM - 12:00 AM	46.5	67.9	44.3
12:00 AM - 01:00 AM	46.1	72.4	43.7
01:00 AM - 02:00 AM	52.0	84.6	43.9
02:00 AM - 03:00 AM	51.5	81.0	44.4
03:00 AM - 04:00 AM	54.8	82.6	45.3
04:00 AM - 05:00 AM	51.2	69.9	47.2
05:00 AM - 06:00 AM	52.6	77.4	47.5
06:00 AM - 07:00 AM	52.8	74.5	46.7
07:00 AM - 08:00 AM	52.1	78.6	46.1
08:00 AM - 09:00 AM	52.0	74.6	46.2
09:00 AM - 10:00 AM	50.2	66.6	45.2

Leq Average 24 hrs. (dB(A)) 52.1
Lmax (dB(A)) 84.6
L90 (dB(A)) 46.7
Ldn (dB(A)) 58.3
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

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979654-1

Page 1 of 1

Sample Number 2438437-11
Parameter Noise (Leq 24 hrs.)
Location Ban Pansadet Nok (GPS 47P 0729706, 1447657)
Measurement Date Apr 27 - Apr 28, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.5	68.7	45.9
11:00 AM - 12:00 PM	51.8	69.8	46.2
12:00 PM - 01:00 PM	52.6	77.4	46.8
01:00 PM - 02:00 PM	51.0	72.8	46.7
02:00 PM - 03:00 PM	52.5	71.2	47.0
03:00 PM - 04:00 PM	54.5	79.1	48.8
04:00 PM - 05:00 PM	54.2	79.1	48.3
05:00 PM - 06:00 PM	51.9	68.2	48.4
06:00 PM - 07:00 PM	53.1	81.8	47.3
07:00 PM - 08:00 PM	49.9	66.4	46.3
08:00 PM - 09:00 PM	49.5	70.4	45.1
09:00 PM - 10:00 PM	47.2	66.4	44.1
10:00 PM - 11:00 PM	49.3	79.1	44.2
11:00 PM - 12:00 AM	47.4	65.3	44.4
12:00 AM - 01:00 AM	49.4	79.0	44.1
01:00 AM - 02:00 AM	45.1	60.4	44.0
02:00 AM - 03:00 AM	55.9	85.5	43.7
03:00 AM - 04:00 AM	55.7	79.9	44.7
04:00 AM - 05:00 AM	50.7	71.6	46.2
05:00 AM - 06:00 AM	51.0	72.2	46.4
06:00 AM - 07:00 AM	51.9	75.3	46.0
07:00 AM - 08:00 AM	50.9	70.1	46.3
08:00 AM - 09:00 AM	52.2	76.1	47.4
09:00 AM - 10:00 AM	51.6	70.2	46.2

Leq Average 24 hrs. (dB(A)) 52.0
Lmax (dB(A)) 85.5
L90 (dB(A)) 46.2
Ldn (dB(A)) 58.4
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2438437

Date Received : Apr 30, 2024
Date Reported : May 03, 2024
Report Number: 2979655-1

Page 1 of 1

Sample Number 2438437-12
Parameter Noise (Leq 24 hrs.)
Location Ban Pansadet Nok (GPS 47P 0729706, 1447657)
Measurement Date Apr 28 - Apr 29, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1173611

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.5	75.8	46.1
11:00 AM - 12:00 PM	50.9	66.3	46.2
12:00 PM - 01:00 PM	51.9	73.2	46.6
01:00 PM - 02:00 PM	51.1	65.7	46.5
02:00 PM - 03:00 PM	52.9	78.7	47.2
03:00 PM - 04:00 PM	54.0	75.2	47.9
04:00 PM - 05:00 PM	56.9	76.9	48.4
05:00 PM - 06:00 PM	57.7	70.1	47.3
06:00 PM - 07:00 PM	51.3	66.0	46.8
07:00 PM - 08:00 PM	50.1	70.9	45.8
08:00 PM - 09:00 PM	48.5	68.2	45.7
09:00 PM - 10:00 PM	49.0	71.6	44.4
10:00 PM - 11:00 PM	46.8	64.2	43.8
11:00 PM - 12:00 AM	46.4	70.7	44.2
12:00 AM - 01:00 AM	52.9	81.9	43.6
01:00 AM - 02:00 AM	50.2	77.9	43.9
02:00 AM - 03:00 AM	46.0	63.8	43.1
03:00 AM - 04:00 AM	54.2	78.1	46.0
04:00 AM - 05:00 AM	51.4	69.4	46.9
05:00 AM - 06:00 AM	52.6	69.2	47.8
06:00 AM - 07:00 AM	52.6	77.0	47.0
07:00 AM - 08:00 AM	50.8	66.2	46.1
08:00 AM - 09:00 AM	51.8	73.1	46.5
09:00 AM - 10:00 AM	51.0	65.6	46.4

Leq Average 24 hrs. (dB(A)) 52.3
Lmax (dB(A)) 81.9
L90 (dB(A)) 46.2
Ldn (dB(A)) 57.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

ภาคผนวก ค-4

ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้ง



Analysis / Test Report

TESTING

No.0042

Lot ID: 241230

Date Received : Jan 04, 2024

Date Reported : Jan 11, 2024

Report Number : 2883763-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O :

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	241230-3
Sampled Date	Jan 04, 2024 9:30 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Jan 04, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five 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
Oil & Grease *	mg/L	-	1	1	≤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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	30.3	≤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	214	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O :

Project Name :

Project Location: Glow IPP

TESTING

No.0042

Lot ID: 241230

Date Received : Jan 04, 2024

Date Reported : Jan 11, 2024

Report Number : 2883763-1

Page 2 of 2

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

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2412264

Date Received : Feb 01, 2024

Date Reported : Feb 08, 2024

Report Number : 2906275-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O :

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2412264-3
Sampled Date	Feb 01, 2024 9:30 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Feb 01, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and five plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property	Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	28.5	≤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	133	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	4	≤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		-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤1		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	-	-	30.1	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	384	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	55	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O :

Project Name :

Project Location: Glow IPP

TESTING

No.0042

Lot ID: 2412264

Date Received : Feb 01, 2024

Date Reported : Feb 08, 2024

Report Number : 2906275-1

Page 2 of 2

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

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2423852

Date Received : Mar 07, 2024

Date Reported : Mar 14, 2024

Report Number : 2923191-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2423852-3
Sampled Date	Mar 07, 2024 9:36 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Mar 07, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	38.5	≤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	124	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	30.7	≤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	368	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ จ-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ จ-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Lot ID: 2423852

Date Received : Mar 07, 2024

Date Reported : Mar 14, 2024

Report Number : 2923191-1

Page 2 of 2

Sample Number	2423852-3
Sampled Date	Mar 07, 2024 9:36 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Mar 07, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	69	≤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

Remark :

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2436071

Date Received : Apr 04, 2024

Date Reported : Apr 11, 2024

Report Number : 2950432-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2436071-1
Sampled Date	Apr 04, 2024 10:13 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Apr 04, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	35.7	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	168	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	2	≤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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	33.5	≤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	284	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	42	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location: Glow IPP

TESTING
No.0042
Lot ID: 2436071
Date Received : Apr 04, 2024
Date Reported : Apr 11, 2024
Report Number : 2950432-1

Page 2 of 2

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

Remark :

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

Technical Management

Photchana S.

Photchana Seeda
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2443022

Date Received : May 02, 2024

Date Reported : May 09, 2024

Report Number : 2985929-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2443022-1
Sampled Date	May 02, 2024 9:20 AM
Sample Description	Wastewater
Location	Treated Water Discharge
Date Analysis Commenced	May 02, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.6	≤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	38	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	2	≤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		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	34.8	≤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	1650	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ จ-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ จ-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Lot ID: 2443022

Date Received : May 02, 2024

Date Reported : May 09, 2024

Report Number : 2985929-1

Page 2 of 2

Sample Number	2443022-1
Sampled Date	May 02, 2024 9:20 AM
Sample Description	Wastewater
Location	Treated Water Discharge
Date Analysis Commenced	May 02, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤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 : Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2443022

Date Received : May 02, 2024

Date Reported : May 09, 2024

Report Number : 2985931-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2443022-3
Sampled Date	May 02, 2024 9:30 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	May 02, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Brown, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	50.0	≤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	313	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	6	≤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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	0.6	≤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	488	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

N. Banongkit

Narumon Banchongkit

Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O :

Project Name :

Project Location:

Lot ID: 2454942

Date Received : May 28, 2024

Date Reported : May 31, 2024

Report Number : 2993406-1

Page 1 of 1

Sample Number 2454942-1
Sampled Date May 28, 2024 9:08 AM
Sample Description Wastewater
Location Water Quality Checking Pond
Date Analysis Commenced May 29, 2024
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	≤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.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

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

Remark :

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

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)
ทะเบียนเลขที่ ว-323-จ-9449

Approved by

D. Changchon

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2462994

Date Received : Jun 06, 2024

Date Reported : Jun 13, 2024

Report Number : 3011202-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2462994-2
Sampled Date	Jun 06, 2024 9:38 AM
Sample Description	Wastewater
Location	Water Quality Checking Pond
Date Analysis Commenced	Jun 06, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
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	39	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	2	≤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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	32.7	≤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	238	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

TESTING
No.0042
Lot ID: 2462994
Date Received : Jun 06, 2024
Date Reported : Jun 13, 2024
Report Number : 3011202-1

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Remark :

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

Technical Management

Photchana S.

Photchana Seeda
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2463000

Date Received : Jun 06, 2024

Date Reported : Jun 13, 2024

Report Number : 3011206-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location: Glow IPP

Page 1 of 2

Sample Number	2463000-1
Sampled Date	Jun 06, 2024 9:47 AM
Sample Description	Wastewater
Location	Treated water discharge
Date Analysis Commenced	Jun 06, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
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	53	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease *	mg/L	-	1	<1	≤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
Residual Free Chlorine *	mg/L	-	0.05	<0.05	≤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	-	-	35.9	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1510	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location: Glow IPP

TESTING
No.0042
Lot ID: 2463000
Date Received : Jun 06, 2024
Date Reported : Jun 13, 2024
Report Number : 3011206-1

Page 2 of 2

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

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

Remark :

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

Technical Management

Photchana S.

Photchana Seeda
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ภาคผนวก ค-5

ผลการตรวจวิเคราะห์คุณภาพน้ำผิวดิน



Analysis / Test Report

TESTING

No.0042

Lot ID: 2423864

Date Received : Mar 07, 2024

Date Reported : Mar 18, 2024

Report Number : 2923220-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 1 of 6

Sample Number	2423864-1
Sampled Date	Mar 07, 2024 10:08 AM
Sample Description	Surface Water
Location	เหนือจุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW1)
Date Analysis Commenced	Mar 07, 2024
Condition of Sample	Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Chlorine *	mg/L	-	0.01	0.07	No Standard	ISE Application	Bangkok
Sulfate *	mg/L	0.6	2	35.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Temperature *	Degree C	-	-	29.1	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	316	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

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

n : Not Change from natural condition

Sampling By : Paramet Sattayakun

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.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location: Glow IPP

TESTING
No.0042
Lot ID: 2423864
Date Received : Mar 07, 2024
Date Reported : Mar 18, 2024
Report Number : 2923220-1

Page 2 of 6

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

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

Approved by

Narumon Banchongkit
Supervisor

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2423864

Date Received : Mar 07, 2024

Date Reported : Mar 18, 2024

Report Number : 2923220-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 3 of 6

Sample Number	2423864-2
Sampled Date	Mar 07, 2024 10:32 AM
Sample Description	Surface Water
Location	ใกล้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW2)
Date Analysis Commenced	Mar 07, 2024
Condition of Sample	Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Chlorine *	mg/L	-	0.01	0.08	No Standard	ISE Application	Bangkok
Sulfate *	mg/L	0.6	2	36.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Temperature *	Degree C	-	-	28.9	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	368	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

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

n : Not Change from natural condition

Sampling By : Paramet Sattayakun

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.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

TESTING
No.0042
Lot ID: 2423864
Date Received : Mar 07, 2024
Date Reported : Mar 18, 2024
Report Number : 2923220-1

Page 4 of 6

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

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

Approved by

Narumon Banchongkit
Supervisor

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 2423864

Date Received : Mar 07, 2024

Date Reported : Mar 18, 2024

Report Number : 2923220-1

Client : Glow IPP Co., Ltd.

42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230

P/O : GLOW-OM-22-103

Project Name :

Project Location : Glow IPP

Page 5 of 6

Sample Number	2423864-3
Sampled Date	Mar 07, 2024 10:50 AM
Sample Description	Surface Water
Location	ใต้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW3)
Date Analysis Commenced	Mar 07, 2024
Condition of Sample	Contained in one amber glass bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Chlorine *	mg/L	-	0.01	0.08	No Standard	ISE Application	Bangkok
Sulfate *	mg/L	0.6	2	36.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Temperature *	Degree C	-	-	29.3	n'	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	368	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

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

n : Not Change from natural condition

Sampling By : Paramet Sattayakun

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.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location: Glow IPP

TESTING
No.0042
Lot ID: 2423864
Date Received : Mar 07, 2024
Date Reported : Mar 18, 2024
Report Number : 2923220-1

Page 6 of 6

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

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

Approved by

Narumon Banchongkit
Supervisor

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ภาคผนวก ค-6

ผลการตรวจวิเคราะห์ชีววิทยาทางน้ำ



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

Client : Glow IPP Co., Ltd.

Address : 42 Moo 8 CIE 8 Road, Bowin, Sriracha, Chonburi, Thailand, 20230

Project Location : Glow IPP

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Division Cyanophyta			
Class Cyanophyceae			
Order Nostocales			
Family Oscillatoriaceae			
1. <i>Oscillatoria brevis</i>	12,000	-	-
2. <i>Oscillatoria planctonica</i>	301,000	54,000	-
3. <i>Oscillatoria tenuis</i>	12,000	32,000	-
Division Chlorophyta			
Class Chlorophyceae			
Order Chlorococcales			
Family Coelastraceae			
4. <i>Coelastrum sphaericum</i>	-	21,000	-
Family Oocystaceae			
5. <i>Ankistrodesmus falcatus</i>	-	11,000	11,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Order Zygomatales			
Family Desmidiaceae			
6. <i>Closterium ehrenbergii</i>	-	-	22,000
7. <i>Cosmarium</i> sp.	-	11,000	-
Class Euglenophyceae			
Order Euglenales			
Family Euglenaceae			
8. <i>Euglena acus</i>	-	11,000	-
9. <i>Euglena subehrenbergii</i>	12,000	-	-
10. <i>Euglena viridis</i>	-	11,000	11,000
11. <i>Lepocinclis ovum</i>	-	11,000	-
12. <i>Phacus circulatus</i>	24,000	-	11,000
13. <i>Phacus hamatus</i>	-	21,000	-
14. <i>Phacus platalea</i>	-	11,000	-
15. <i>Trachelomonas hispida</i>	12,000	-	-
Division Chromophyta			
Class Bacillariophyceae			
Order Biddulphiales			
Suborder Coscinodiscineae			
Family Aulacoseiraceae			
16. <i>Aulacoseira granulata</i>	12,000	-	-
Order Bacillariales			
Suborder Fragilariineae			
Family Fragilariaceae			
17. <i>Fragilaria capucina</i>	12,000	-	54,000
18. <i>Synedra rumpens</i>	-	-	11,000
19. <i>Synedra ulna</i>	108,000	54,000	326,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Suborder Bacillariineae			
Family Eunotiaceae			
20. <i>Eunotia pectinalis</i>	-	-	98,000
Family Cymbellaceae			
21. <i>Gomphonema parvulum</i>	-	-	33,000
Family Naviculaceae			
22. <i>Amphora</i> sp.	-	11,000	11,000
23. <i>Diploneis smithii</i>	12,000	-	-
24. <i>Gyrosigma acuminatum</i>	-	21,000	-
25. <i>Navicula acicularis</i>	-	-	11,000
26. <i>Navicula lanceolata</i>	-	-	11,000
27. <i>Navicula</i> sp.	12,000	-	11,000
Family Bacillariaceae			
28. <i>Bacillaria paxillifer</i>	-	-	22,000
Family Surirellaceae			
29. <i>Surirella elegans</i>	-	-	11,000
30. <i>Surirella robusta</i>	-	-	22,000
ชนิดแพลงก์ตอนพืช	11	13	16
ปริมาณแพลงก์ตอนพืช	529,000	280,000	676,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	1.4726	2.3557	1.9185
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.6141	0.9184	0.6920

Sample Location :

1. สถานี 2423867-1 : เหนือจุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW1)
2. สถานี 2423867-2 : ใกล้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW2)
3. สถานี 2423867-3 : ใต้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW3)

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



(นางสาวกนกวรรณ ขาวดอน)

ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : Glow IPP Co., Ltd.

Address : 42 Moo 8 CIE 8 Road, Bowin, Sriracha, Chonburi, Thailand, 20230

Project Location : Glow IPP

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Phylum Protozoa			
Subphylum Plasmodroma			
Class Sarcodina			
Subclass Rhizopoda			
Order Testacida			
Family Arcellidae			
1. <i>Arcella</i> sp.	-	11,000	11,000
2. <i>Arcella vulgaris</i>	-	32,000	-
Family Euglyphidae			
3. <i>Euglypha acanthophora</i>	-	21,000	54,000
4. <i>Euglypha laevis</i>	-	11,000	22,000

ตาราง ผลการวิเคราะห์เพลงก่ตอนสัตว์ (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

(ต่อ)

ชนิดเพลงก่ตอนสัตว์	ปริมาณเพลงก่ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Subphylum Ciliophora Class Ciliata Subclass Holotricha Order Hymenostomatida 5. <i>Paramecium</i> sp. Subclass Peritricha Order Peritrichida 6. <i>Vorticella</i> sp. 7. <i>Zoothamnium</i> sp.	 12,000 12,000 12,000	 11,000 - - -	 - - -
Phylum Rotifera Class Monogononta Order Ploima Family Brachionidae 8. <i>Colurella obtusa</i> Family Lecanidae 9. <i>Lecane closterocerca</i> 10. <i>Lecane inopinata</i> 11. <i>Lecane thienemanni</i> Family Asplanchnidae 12. <i>Asplanchna priodonta</i>	 - 24,000 - - -	 21,000 - 11,000 21,000	 - - 11,000 43,000
Phylum Arthropoda Class Crustacea Subclass Branchiopoda Order Diplostraca Suborder Cladocera Family Bosminidae 13. <i>Bosminopsis</i> sp.	 -	 -	 11,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)		
	2423867-1	2423867-2	2423867-3
Subclass Copepoda			
14. Copepod nauplius	-	11,000	11,000
Order Cyclopoida			
15. Cyclopoid copepod	-	-	11,000
ชนิดแพลงก์ตอนสัตว์	4	9	8
ปริมาณแพลงก์ตอนสัตว์	60,000	150,000	174,000
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	1.3322	2.1134	1.8428
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	0.9610	0.9618	0.8862

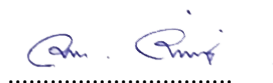
Sample Location :

1. สถานี 2423867-1 : เหนือจุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW1)
2. สถานี 2423867-2 : ใกล้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW2)
3. สถานี 2423867-3 : ใต้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW3)

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



(นางสาวกนกวรรณ ขาวอ่อน)
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : Glow IPP Co., Ltd.

Address : 42 Moo 8 CIE 8 Road, Bowin, Sriracha, Chonburi, Thailand, 20230

Project Location : Glow IPP

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 7 มีนาคม 2567)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัว/ตารางเมตร)		
	2423870-1	2423870-2	2423870-3
Phylum Annelida			
Class Clitellata			
Order Lumbriculida			
Family Lumbriculidae			
<i>Lumbriculus</i> sp. (ไส้เดือนน้ำ)	75	-	104
Order Tubificida			
Family Naididae			
<i>Branchiura</i> sp. (ไส้เดือนน้ำ)	-	60	45
Phylum Arthropoda			
Class Insecta			
Order Diptera			
Family Chironomidae			
<i>Chironomus</i> sp. (หนอนแดง)	104	60	45
รวมจำนวนสกุลที่พบทั้งหมด	2	2	3
รวมปริมาณที่พบทั้งหมด	179	120	194
ค่าดัชนีความหลากหลาย	0.6800	0.6931	1.0121

Sample Location : 1. สถานี 2423870-1 : เหนือจุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW1)
2. สถานี 2423870-2 : ใกล้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW2)
3. สถานี 2423870-3 : ใต้จุดระบายน้ำทิ้งลงสู่ห้วยมะนาว (SW3)

Condition of Sample : contained in one plastic zip bag



(นายอรรถวุฒิ กันทะวงศ์)
ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

ภาคผนวก ค-7

ผลการตรวจวัดระดับเสียงในสถานประกอบการ



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2423876

Date Received : Mar 19, 2024
Date Reported : Mar 21, 2024
Report Number: 2943394-1

Page 1 of 1

Sample Number 2423876-1
Parameter Noise (Leq 8 hrs.)
Location Working Area
Measurement Date Mar 18, 2024
Measurement by Santi Chaichana

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:01 AM - 11:01 AM	77.4	80.3	76.4
11:01 AM - 12:01 PM	77.5	79.6	76.4
12:01 PM - 01:01 PM	76.6	78.9	75.9
01:01 PM - 02:01 PM	76.4	78.2	75.9
02:01 PM - 03:01 PM	78.0	82.0	77.3
03:01 PM - 04:01 PM	77.1	79.8	76.6
04:01 PM - 05:01 PM	78.7	84.7	77.2
05:01 PM - 06:01 PM	81.6	86.6	81.3

Leq Average 8 hrs. (dB(A))

78.2

Lmax (dB(A))

86.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2423876

Date Received : Mar 19, 2024

Date Reported : Mar 21, 2024

Report Number: 2943395-1

Page 1 of 1

Sample Number 2423876-2
Parameter Noise (Leq 8 hrs.)
Location Control room
Measurement Date Mar 18, 2024
Measurement by Santi Chaichana

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:13 AM - 11:13 AM	55.8	74.6	52.3
11:13 AM - 12:13 PM	55.3	69.0	52.7
12:13 PM - 01:13 PM	55.0	69.9	52.6
01:13 PM - 02:13 PM	55.4	71.7	52.5
02:13 PM - 03:13 PM	57.7	88.0	52.4
03:13 PM - 04:13 PM	55.5	68.6	53.2
04:13 PM - 05:13 PM	55.3	67.6	53.5
05:13 PM - 06:13 PM	55.1	64.6	53.1

Leq Average 8 hrs. (dB(A))

55.7

Lmax (dB(A))

88.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2423876

Date Received : Mar 19, 2024
Date Reported : Mar 21, 2024
Report Number: 2943396-1

Page 1 of 1

Sample Number 2423876-3
Parameter Noise (Leq 8 hrs.)
Location Compressor area
Measurement Date Mar 18, 2024
Measurement by Santi Chaichana

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:06 AM - 11:06 AM	81.7	86.0	80.5
11:06 AM - 12:06 PM	81.2	84.1	80.3
12:06 PM - 01:06 PM	80.8	83.4	80.1
01:06 PM - 02:06 PM	80.8	83.9	80.0
02:06 PM - 03:06 PM	83.1	93.3	80.2
03:06 PM - 04:06 PM	89.6	93.0	89.1
04:06 PM - 05:06 PM	90.1	90.7	89.9
05:06 PM - 06:06 PM	90.1	90.9	90.0

Leq Average 8 hrs. (dB(A))

86.6

Lmax (dB(A))

93.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2423876

Date Received : Mar 19, 2024
Date Reported : Mar 21, 2024
Report Number: 2943397-1

Page 1 of 1

Sample Number 2423876-4
Parameter Noise (Leq 8 hrs.)
Location Generator area
Measurement Date Mar 18, 2024
Measurement by Santi Chaichana

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:19 AM - 11:19 AM	75.6	79.3	75.5
11:19 AM - 12:19 PM	75.4	78.3	75.3
12:19 PM - 01:19 PM	75.2	77.0	75.1
01:19 PM - 02:19 PM	75.3	84.2	75.0
02:19 PM - 03:19 PM	76.7	84.0	75.3
03:19 PM - 04:19 PM	81.1	86.0	79.8
04:19 PM - 05:19 PM	82.7	83.8	82.0
05:19 PM - 06:19 PM	81.6	82.9	80.5

Leq Average 8 hrs. (dB(A))

79.1

Lmax (dB(A))

86.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2423876

Date Received : Mar 19, 2024
Date Reported : Mar 21, 2024
Report Number: 2943398-1

Page 1 of 1

Sample Number 2423876-5
Parameter Noise (Leq 8 hrs.)
Location Pump area
Measurement Date Mar 18, 2024
Measurement by Santi Chaichana

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:09 AM - 11:09 AM	72.5	78.5	72.2
11:09 AM - 12:09 PM	72.3	74.4	71.9
12:09 PM - 01:09 PM	72.3	74.7	71.9
01:09 PM - 02:09 PM	72.5	74.9	72.0
02:09 PM - 03:09 PM	88.2	103.8	72.2
03:09 PM - 04:09 PM	91.1	93.1	90.3
04:09 PM - 05:09 PM	89.9	90.7	89.7
05:09 PM - 06:09 PM	90.3	91.0	90.1

Leq Average 8 hrs. (dB(A))

87.1

Lmax (dB(A))

103.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2461175

Date Received : Jun 14, 2024
Date Reported : Jun 19, 2024
Report Number: 3029308-1

Page 1 of 1

Sample Number 2461175-1
Parameter Noise (Leq 8 hrs.)
Location Demin Plant
Measurement Date Jun 14, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
07:52 AM - 08:52 AM	79.5	89.5	78.8
08:52 AM - 09:52 AM	77.5	88.0	75.6
09:52 AM - 10:52 AM	77.4	90.9	75.5
10:52 AM - 11:52 AM	76.4	80.2	75.4
11:52 AM - 12:52 PM	78.1	87.5	75.5
12:52 PM - 01:52 PM	77.2	88.1	75.2
01:52 PM - 02:52 PM	77.6	87.4	75.5
02:52 PM - 03:52 PM	77.5	89.1	75.7

Leq Average 8 hrs. (dB(A))

77.7

Lmax (dB(A))

90.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2461175

Date Received : Jun 14, 2024

Date Reported : Jun 19, 2024

Report Number: 3029309-1

Page 1 of 1

Sample Number 2461175-2
Parameter Noise (Leq 8 hrs.)
Location Control room
Measurement Date Jun 14, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
07:41 AM - 08:41 AM	56.4	77.0	51.4
08:41 AM - 09:41 AM	55.3	65.3	51.4
09:41 AM - 10:41 AM	54.2	72.6	51.1
10:41 AM - 11:41 AM	53.4	76.2	50.8
11:41 AM - 12:41 PM	54.8	70.0	51.2
12:41 PM - 01:41 PM	56.1	74.1	51.3
01:41 PM - 02:41 PM	54.5	70.5	51.0
02:41 PM - 03:41 PM	54.1	68.4	51.1

Leq Average 8 hrs. (dB(A))

55.0

Lmax (dB(A))

77.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2461175

Date Received : Jun 14, 2024
Date Reported : Jun 19, 2024
Report Number: 3029310-1

Page 1 of 1

Sample Number 2461175-3
Parameter Noise (Leq 8 hrs.)
Location Compressor area
Measurement Date Jun 14, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
07:58 AM - 08:58 AM	84.2	88.2	82.0
08:58 AM - 09:58 AM	84.5	88.5	82.1
09:58 AM - 10:58 AM	83.4	88.6	79.8
10:58 AM - 11:58 AM	80.7	85.5	79.5
11:58 AM - 12:58 PM	81.6	85.6	79.7
12:58 PM - 01:58 PM	80.9	86.2	79.6
01:58 PM - 02:58 PM	80.7	85.6	79.4
02:58 PM - 03:58 PM	80.9	84.7	79.6

Leq Average 8 hrs. (dB(A))

82.4

Lmax (dB(A))

88.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2461175

Date Received : Jun 14, 2024
Date Reported : Jun 19, 2024
Report Number: 3029311-1

Page 1 of 1

Sample Number 2461175-4
Parameter Noise (Leq 8 hrs.)
Location Generator area
Measurement Date Jun 14, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:05 AM - 09:05 AM	73.6	76.4	73.4
09:05 AM - 10:05 AM	73.4	74.3	73.2
10:05 AM - 11:05 AM	73.1	74.2	72.9
11:05 AM - 12:05 PM	73.1	74.2	72.9
12:05 PM - 01:05 PM	73.0	74.0	72.9
01:05 PM - 02:05 PM	73.0	73.9	72.8
02:05 PM - 03:05 PM	73.0	74.3	72.8
03:05 PM - 04:05 PM	73.0	73.9	72.9

Leq Average 8 hrs. (dB(A))

73.2

Lmax (dB(A))

76.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๔๖

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Glow IPP Co., Ltd.
42 Moo 8, CIE 8 Road, Bowin, Sriracha, Chonburi Thailand 20230
P/O : GLOW-OM-22-103
Project Name :
Project Location : Glow IPP

Lot ID: 2461175

Date Received : Jun 14, 2024
Date Reported : Jun 19, 2024
Report Number: 3029312-1

Page 1 of 1

Sample Number 2461175-5
Parameter Noise (Leq 8 hrs.)
Location Pump area
Measurement Date Jun 14, 2024
Measurement by Norranon Tathongkham

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
07:51 AM - 08:51 AM	72.9	79.2	72.5
08:51 AM - 09:51 AM	72.8	75.6	72.3
09:51 AM - 10:51 AM	72.8	74.8	72.4
10:51 AM - 11:51 AM	72.6	74.8	72.1
11:51 AM - 12:51 PM	72.8	74.9	72.3
12:51 PM - 01:51 PM	72.7	74.6	72.3
01:51 PM - 02:51 PM	72.9	75.5	72.4
02:51 PM - 03:51 PM	73.0	75.0	72.5

Leq Average 8 hrs. (dB(A))

72.8

Lmax (dB(A))

79.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. ๒๕๔๖

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER