ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์ผลกระทบสิ่งแวดล้อม

ภาคผนวก ค-1

ผลการตรวจวัดคุณภาพอากาศในบรรยากาศ

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450146
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 2982598-1

Sample Description Air Quality
Location A1 : วัดหนองคันทอน (GPS 47P 0729691, 1447670)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450146-1 May 29, 2024	2450146-2 May 30, 2024	2450146-3 May 31, 2024	2450146-4 Jun 01, 2024	2450146-5 Jun 02, 2024	2450146-6 Jun 03, 2024	2450146-7 Jun 04, 2024
02:00 PM - 03:00 PM	0.001	0.008	0.009	0.002	0.006	0.005	0.005
03:00 PM - 04:00 PM	0.004	0.007	0.004	0.002	0.007	0.006	0.007
04:00 PM - 05:00 PM	0.003	0.005	0.004	0.003	0.008	0.008	0.009
05:00 PM - 06:00 PM	0.007	0.005	0.006	0.004	0.008	0.010	0.013
06:00 PM - 07:00 PM	0.007	0.005	0.007	0.004	0.008	0.010	0.015
07:00 PM - 08:00 PM	0.011	0.005	0.008	0.004	0.008	0.007	0.010
08:00 PM - 09:00 PM	0.011	0.006	0.010	0.004	0.008	0.006	0.006
09:00 PM - 10:00 PM	0.008	0.007	0.009	0.004	0.005	0.005	0.004
10:00 PM - 11:00 PM	0.007	0.005	0.008	0.003	0.004	0.005	0.003
11:00 PM - 12:00 AM	0.005	0.007	0.007	0.003	0.004	0.004	0.003
12:00 AM - 01:00 AM	0.004	0.008	0.007	0.003	0.004	0.007	0.003
01:00 AM - 02:00 AM	0.003	0.007	0.005	0.003	0.004	0.004	0.002
02:00 AM - 03:00 AM	0.004	0.009	0.007	0.003	0.004	0.004	0.003
03:00 AM - 04:00 AM	0.004	0.007	0.007	0.004	0.004	0.004	0.005
04:00 AM - 05:00 AM	0.005	0.005	0.008	0.005	0.006	0.006	0.006
05:00 AM - 06:00 AM	0.004	0.005	0.006	0.006	0.006	0.007	0.005
06:00 AM - 07:00 AM	0.007	0.006	0.007	0.005	0.006	0.008	0.006
07:00 AM - 08:00 AM	0.007	0.004	0.004	0.005	0.006	0.008	0.007
08:00 AM - 09:00 AM	0.008	0.003	0.002	0.004	0.008	0.005	0.011
09:00 AM - 10:00 AM	0.005	0.004	0.002	0.004	0.005	0.006	0.005
10:00 AM - 11:00 AM	0.001	0.005	0.002	0.004	0.004	0.004	0.004
11:00 AM - 12:00 PM	0.004	0.004	0.002	0.005	0.004	0.003	0.004
12:00 PM - 01:00 PM	0.005	0.007	0.001	0.005	0.004	0.004	0.005
01:00 PM - 02:00 PM	0.007	0.007	0.002	0.005	0.005	0.005	0.010
Average	0.005	0.006	0.006	0.004	0.006	0.006	0.006
1hr - Maximum	0.011	0.009	0.010	0.006	0.008	0.010	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 EPAMethod Part 50 App. F (Chemiluminescence)

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

Approved by Orawan R.
Orawan Rakyong
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450146
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027944-1

Sample Description Air Quality
Location A2 : หมู่ 9 บ้านหนองตาหล่า (GPS 47P 0733883, 1447102)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450146-8 May 29, 2024	2450146-9 May 30, 2024	2450146-10 May 31, 2024	2450146-11 Jun 01, 2024	2450146-12 Jun 02, 2024	2450146-13 Jun 03, 2024	2450146-14 Jun 04, 2024
09:00 AM - 10:00 AM	0.010	0.006	0.005	0.004	0.007	0.004	<0.001
10:00 AM - 11:00 AM	0.008	0.008	0.005	0.004	0.008	0.002	<0.001
11:00 AM - 12:00 PM	0.008	0.009	0.004	0.006	0.008	0.004	<0.001
12:00 PM - 01:00 PM	0.008	0.009	0.004	0.006	0.007	0.008	<0.001
01:00 PM - 02:00 PM	0.007	0.008	0.007	0.007	0.007	0.008	<0.001
02:00 PM - 03:00 PM	0.008	0.008	0.008	0.008	0.008	0.009	<0.001
03:00 PM - 04:00 PM	0.009	0.010	0.006	0.007	0.010	0.009	<0.001
04:00 PM - 05:00 PM	0.005	0.008	0.003	0.004	0.010	0.010	<0.001
05:00 PM - 06:00 PM	0.004	0.003	0.003	0.004	0.005	0.012	<0.001
06:00 PM - 07:00 PM	0.004	0.002	0.002	0.003	0.003	0.005	<0.001
07:00 PM - 08:00 PM	0.005	0.003	0.002	0.002	0.002	0.001	0.001
08:00 PM - 09:00 PM	0.005	0.002	0.002	0.002	0.002	<0.001	0.002
09:00 PM - 10:00 PM	0.004	0.002	0.003	0.002	0.002	<0.001	0.003
10:00 PM - 11:00 PM	0.004	0.002	0.003	0.002	0.003	0.001	0.004
11:00 PM - 12:00 AM	0.004	0.003	0.004	0.003	0.003	0.002	0.004
12:00 AM - 01:00 AM	0.005	0.005	0.004	0.003	0.004	0.001	0.004
01:00 AM - 02:00 AM	0.007	0.006	0.004	0.002	0.005	0.001	0.006
02:00 AM - 03:00 AM	0.006	0.006	0.004	0.004	0.009	0.001	0.007
03:00 AM - 04:00 AM	0.005	0.008	0.005	0.008	0.015	0.001	0.006
04:00 AM - 05:00 AM	0.007	0.009	0.005	0.008	0.012	0.001	0.004
05:00 AM - 06:00 AM	0.010	0.010	0.007	0.007	0.006	<0.001	0.004
06:00 AM - 07:00 AM	0.011	0.010	0.005	0.005	0.004	<0.001	0.007
07:00 AM - 08:00 AM	0.010	0.008	0.004	0.007	0.008	<0.001	0.006
08:00 AM - 09:00 AM	0.010	0.005	0.004	0.008	0.003	<0.001	0.008
Average	0.007	0.006	0.004	0.005	0.006	0.004	0.003
1hr - Maximum	0.011	0.010	0.008	0.008	0.015	0.012	0.008
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)

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 the report is not reproduced except in full.

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450146
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027945-1

Sample Description Air Quality
Location A3 : ที่ทำการ อบต. บ่อทอง (GPS 47P 0727659, 1444085)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450146-15 May 29, 2024	2450146-16 May 30, 2024	2450146-17 May 31, 2024	2450146-18 Jun 01, 2024	2450146-19 Jun 02, 2024	2450146-20 Jun 03, 2024	2450146-21 Jun 04, 2024
01:00 PM - 02:00 PM	0.006	0.004	0.005	0.005	0.010	0.012	0.008
02:00 PM - 03:00 PM	0.009	0.003	0.005	0.006	0.008	0.012	0.006
03:00 PM - 04:00 PM	0.010	0.004	0.006	0.006	0.008	0.009	0.006
04:00 PM - 05:00 PM	0.008	0.002	0.002	0.011	<0.001	0.010	0.005
05:00 PM - 06:00 PM	0.006	0.002	0.003	0.010	<0.001	0.009	0.004
06:00 PM - 07:00 PM	0.005	0.001	0.003	0.002	0.001	0.008	0.006
07:00 PM - 08:00 PM	0.008	0.001	0.003	0.002	0.002	0.001	0.011
08:00 PM - 09:00 PM	0.002	0.002	0.003	0.005	0.002	<0.001	0.002
09:00 PM - 10:00 PM	0.003	0.002	0.003	0.002	0.003	0.001	0.004
10:00 PM - 11:00 PM	0.003	0.002	0.006	0.002	0.003	0.001	0.003
11:00 PM - 12:00 AM	0.002	0.002	0.004	0.002	0.005	0.002	0.003
12:00 AM - 01:00 AM	0.003	0.003	0.004	0.002	0.005	0.003	0.002
01:00 AM - 02:00 AM	0.004	0.003	0.004	0.002	0.004	0.004	0.002
02:00 AM - 03:00 AM	0.002	0.004	0.004	0.002	0.003	0.003	0.002
03:00 AM - 04:00 AM	0.007	0.005	0.004	0.002	0.004	0.003	0.002
04:00 AM - 05:00 AM	0.002	0.004	<0.001	0.003	0.005	0.003	0.003
05:00 AM - 06:00 AM	0.001	0.006	<0.001	0.004	0.006	0.002	0.003
06:00 AM - 07:00 AM	0.001	0.006	<0.001	0.004	0.006	0.002	0.004
07:00 AM - 08:00 AM	0.001	0.011	0.004	0.004	0.002	0.002	0.006
08:00 AM - 09:00 AM	0.002	0.006	0.002	0.004	0.013	0.003	0.004
09:00 AM - 10:00 AM	0.002	0.004	0.010	0.004	0.021	0.004	0.007
10:00 AM - 11:00 AM	0.002	0.007	0.007	0.006	0.013	0.022	0.003
11:00 AM - 12:00 PM	0.003	0.010	0.009	0.006	0.009	0.016	0.004
12:00 PM - 01:00 PM	0.002	0.009	0.010	0.008	0.009	0.006	0.007
Average	0.004	0.004	0.004	0.004	0.006	0.005	0.004
1hr - Maximum	0.010	0.011	0.010	0.011	0.021	0.022	0.011
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450146
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027946-1

Sample Description Air Quality
Location A4 : วัดหนองตำลึง (GPS 47P 0729681, 1444261)
Parameter Nitrogen dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450146-22 May 29, 2024	2450146-23 May 30, 2024	2450146-24 May 31, 2024	2450146-25 Jun 01, 2024	2450146-26 Jun 02, 2024	2450146-27 Jun 03, 2024	2450146-28 Jun 04, 2024
12:00 PM - 01:00 PM	0.001	<0.001	0.002	0.001	0.002	0.004	0.001
01:00 PM - 02:00 PM	0.001	<0.001	0.002	0.002	0.001	0.004	<0.001
02:00 PM - 03:00 PM	0.001	<0.001	<0.001	0.005	<0.001	0.003	<0.001
03:00 PM - 04:00 PM	0.001	<0.001	0.002	0.003	<0.001	0.003	<0.001
04:00 PM - 05:00 PM	0.001	<0.001	0.002	0.003	<0.001	0.003	<0.001
05:00 PM - 06:00 PM	0.001	<0.001	<0.001	0.002	<0.001	0.002	<0.001
06:00 PM - 07:00 PM	0.001	<0.001	<0.001	0.003	<0.001	0.002	0.002
07:00 PM - 08:00 PM	<0.001	<0.001	<0.001	0.004	<0.001	0.002	<0.001
08:00 PM - 09:00 PM	<0.001	<0.001	<0.001	0.004	<0.001	0.002	<0.001
09:00 PM - 10:00 PM	<0.001	0.001	<0.001	0.004	0.001	0.002	<0.001
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.005	0.003	0.002	<0.001
11:00 PM - 12:00 AM	0.004	0.005	0.002	0.007	0.005	0.003	0.001
12:00 AM - 01:00 AM	0.003	0.005	<0.001	0.008	0.006	0.003	0.002
01:00 AM - 02:00 AM	0.003	0.004	<0.001	0.008	0.006	0.002	0.005
02:00 AM - 03:00 AM	0.004	0.004	0.002	0.006	0.002	0.001	0.005
03:00 AM - 04:00 AM	0.002	0.004	0.002	0.006	0.003	<0.001	0.005
04:00 AM - 05:00 AM	<0.001	0.003	<0.001	0.006	0.004	0.001	0.002
05:00 AM - 06:00 AM	<0.001	0.003	0.002	0.008	0.005	<0.001	<0.001
06:00 AM - 07:00 AM	<0.001	0.002	0.002	0.007	0.004	0.001	<0.001
07:00 AM - 08:00 AM	<0.001	0.002	0.002	0.006	0.004	0.002	<0.001
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.007	0.003	0.002	0.001
09:00 AM - 10:00 AM	0.004	0.002	0.002	0.003	0.003	0.002	0.002
10:00 AM - 11:00 AM	0.003	0.002	0.003	0.003	0.003	0.002	0.005
11:00 AM - 12:00 PM	0.002	0.002	0.004	0.002	0.003	0.003	0.002
Average	0.002	0.002	0.002	0.005	0.003	0.002	0.002
1hr - Maximum	0.004	0.006	0.004	0.008	0.006	0.004	0.005
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)

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 the report is not reproduced except in full.

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450149
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 2982605-1

Sample Description Air Quality
Location A1 : โรงเรียนศึกษานอก (GPS 47P 0729691, 1447679)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450149-1 May 29, 2024	2450149-2 May 30, 2024	2450149-3 May 31, 2024	2450149-4 Jun 01, 2024	2450149-5 Jun 02, 2024	2450149-6 Jun 03, 2024	2450149-7 Jun 04, 2024
02:00 PM - 03:00 PM	0.002	0.004	0.005	0.005	0.004	0.004	0.004
03:00 PM - 04:00 PM	0.003	0.005	0.005	0.004	0.005	0.004	0.004
04:00 PM - 05:00 PM	0.003	0.006	0.005	0.004	0.005	0.005	0.005
05:00 PM - 06:00 PM	0.006	0.006	0.005	0.005	0.005	0.005	0.006
06:00 PM - 07:00 PM	0.008	0.006	0.005	0.005	0.005	0.005	0.006
07:00 PM - 08:00 PM	0.007	0.006	0.004	0.004	0.005	0.005	0.006
08:00 PM - 09:00 PM	0.006	0.006	0.004	0.004	0.004	0.004	0.005
09:00 PM - 10:00 PM	0.006	0.005	0.004	0.004	0.004	0.004	0.004
10:00 PM - 11:00 PM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
11:00 PM - 12:00 AM	0.004	0.004	0.004	0.004	0.004	0.003	0.004
12:00 AM - 01:00 AM	0.004	0.004	0.004	0.004	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.004	0.006	0.004	0.004	0.003	0.003	0.003
02:00 AM - 03:00 AM	0.004	0.010	0.004	0.004	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.004	0.007	0.004	0.004	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.004	0.004	0.004	0.005	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.004	0.004	0.004	0.005	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.004	0.004	0.004	0.005	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.004	0.004	0.006	0.006	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.004	0.004	0.007	0.005	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.004	0.004	0.007	0.006	0.004	0.003	0.003
10:00 AM - 11:00 AM	0.004	0.005	0.008	0.006	0.004	0.003	0.003
11:00 AM - 12:00 PM	0.004	0.005	0.008	0.005	0.004	0.004	0.003
12:00 PM - 01:00 PM	0.004	0.005	0.007	0.005	0.004	0.004	0.004
01:00 PM - 02:00 PM	0.004	0.005	0.006	0.004	0.004	0.004	0.004
Average	0.004	0.005	0.005	0.005	0.004	0.004	0.004
1hr - Maximum	0.008	0.010	0.008	0.006	0.005	0.005	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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450149
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027947-1

Sample Description Air Quality
Location A2 : หมู่ 9 สำนักวัดเขาแก่นไร่ (GPS 47P 0733883, 1447102)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450149-8 May 29, 2024	2450149-9 May 30, 2024	2450149-10 May 31, 2024	2450149-11 Jun 01, 2024	2450149-12 Jun 02, 2024	2450149-13 Jun 03, 2024	2450149-14 Jun 04, 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	0.001	0.001	0.001
12:00 PM - 01:00 PM	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001
01:00 PM - 02:00 PM	0.001	<0.001	0.001	0.001	<0.001	0.001	0.002
02:00 PM - 03:00 PM	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001
03:00 PM - 04:00 PM	0.001	0.002	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	0.002	0.001	0.001	0.001	0.001	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

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 the report is not reproduced except in full.

Approved by
Orawan Rakyong
Scientist (3)

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450149
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027950-1

Sample Description Air Quality
Location A3 : สำนักงาน อบต. เนินฉาง (GPS 47P 0727699, 1444083)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450149-15 May 29, 2024	2450149-16 May 30, 2024	2450149-17 May 31, 2024	2450149-18 Jun 01, 2024	2450149-19 Jun 02, 2024	2450149-20 Jun 03, 2024	2450149-21 Jun 04, 2024
01:00 PM - 02:00 PM	0.007	0.007	0.005	0.007	0.006	0.007	0.006
02:00 PM - 03:00 PM	0.007	0.007	0.006	0.007	0.006	0.007	0.006
03:00 PM - 04:00 PM	0.006	0.007	0.007	0.007	0.006	0.007	0.006
04:00 PM - 05:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
05:00 PM - 06:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
06:00 PM - 07:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
07:00 PM - 08:00 PM	0.006	0.007	0.007	0.007	0.006	0.007	0.006
08:00 PM - 09:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
09:00 PM - 10:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
10:00 PM - 11:00 PM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
11:00 PM - 12:00 AM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
12:00 AM - 01:00 AM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
01:00 AM - 02:00 AM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
02:00 AM - 03:00 AM	0.007	0.007	0.007	0.006	0.007	0.007	0.006
03:00 AM - 04:00 AM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
04:00 AM - 05:00 AM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
05:00 AM - 06:00 AM	0.007	0.007	0.007	0.007	0.007	0.007	0.006
06:00 AM - 07:00 AM	0.006	0.007	0.007	0.006	0.006	0.006	0.006
07:00 AM - 08:00 AM	0.006	0.007	0.007	0.006	0.006	0.007	0.006
08:00 AM - 09:00 AM	0.006	0.007	0.007	0.006	0.006	0.007	0.006
09:00 AM - 10:00 AM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
10:00 AM - 11:00 AM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
11:00 AM - 12:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
12:00 PM - 01:00 PM	0.007	0.007	0.007	0.007	0.006	0.007	0.006
Average	0.007	0.007	0.007	0.007	0.006	0.007	0.006
1hr - Maximum	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450149
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number: 3027951-1

Sample Description Air Quality
Location A4 : โรงเรียนเก้าจีน (GPS 47P 0729681, 1444261)
Parameter Sulfur Dioxide (ppm)
Measurement Date May 29, 2024 - Jun 05, 2024
Measurement by Santi Chaichana

Time	2450149-22 May 29, 2024	2450149-23 May 30, 2024	2450149-24 May 31, 2024	2450149-25 Jun 01, 2024	2450149-26 Jun 02, 2024	2450149-27 Jun 03, 2024	2450149-28 Jun 04, 2024
12:00 PM - 01:00 PM	0.001	<0.001	0.001	0.001	0.001	0.001	0.001
01:00 PM - 02:00 PM	0.001	0.001	0.002	0.001	0.001	0.001	0.001
02:00 PM - 03:00 PM	0.001	0.001	0.002	0.001	0.001	0.001	0.001
03:00 PM - 04:00 PM	0.001	0.001	0.001	0.001	0.001	0.002	0.001
04:00 PM - 05:00 PM	0.001	0.001	<0.001	0.001	0.001	0.002	0.001
05:00 PM - 06:00 PM	0.001	0.001	<0.001	0.001	0.001	0.002	0.001
06:00 PM - 07:00 PM	0.001	0.001	<0.001	0.001	0.001	0.002	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	0.002	0.001	0.001	0.001
09:00 PM - 10:00 PM	<0.001	0.001	0.001	0.002	0.001	0.001	0.001
10:00 PM - 11:00 PM	<0.001	0.001	<0.001	0.002	0.001	0.001	0.001
11:00 PM - 12:00 AM	0.001	0.001	<0.001	0.002	0.001	<0.001	0.001
12:00 AM - 01:00 AM	0.001	0.001	<0.001	0.002	0.001	0.001	0.001
01:00 AM - 02:00 AM	0.001	0.001	<0.001	0.002	0.001	0.002	0.001
02:00 AM - 03:00 AM	0.001	0.001	0.001	0.002	0.001	0.002	0.001
03:00 AM - 04:00 AM	0.001	0.001	0.001	0.002	0.002	0.002	0.001
04:00 AM - 05:00 AM	0.001	0.001	0.001	0.002	0.001	0.001	0.001
05:00 AM - 06:00 AM	<0.001	<0.001	<0.001	0.002	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	<0.001	0.001	0.001	0.001	<0.001
09:00 AM - 10:00 AM	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
10:00 AM - 11:00 AM	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001
11:00 AM - 12:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
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

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450151
Date Received : Jun 12, 2024
Date Reported : Jun 19, 2024
Report Number: 2982619-1

Sample Description Air Quality
Location A1 : โคกหนองจันนอก (GPS 47P 0729691, 1447670)
Date Analysis Commenced Jun 13, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2450151-1	May 29 - May 30, 2024	0.035	0.020	757	29
2450151-2	May 30 - May 31, 2024	0.040	0.021	757	30
2450151-3	May 31 - Jun 01, 2024	0.032	0.018	757	31
2450151-4	Jun 01 - Jun 02, 2024	0.022	0.014	757	30
2450151-5	Jun 02 - Jun 03, 2024	0.029	0.018	757	33
2450151-6	Jun 03 - Jun 04, 2024	0.040	0.028	757	33
2450151-7	Jun 04 - Jun 05, 2024	0.042	0.026	757	32
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 : Santi Chaichana
Remark :
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 Thanita Kulsuriwong
Scientist (4)

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450151
Date Received : Jun 12, 2024
Date Reported : Jun 19, 2024
Report Number: 2982619-2

Sample Description Air Quality
Location A2 : หมู่ 9 ห้วยใหญ่ตกหล่ม (GPS 47P 0733683, 1447102)
Date Analysis Commenced Jun 13, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2450151-8	May 29 - May 30, 2024	0.032	0.019	757	29
2450151-9	May 30 - May 31, 2024	0.032	0.019	757	30
2450151-10	May 31 - Jun 01, 2024	0.024	0.013	757	31
2450151-11	Jun 01 - Jun 02, 2024	0.034	0.013	757	30
2450151-12	Jun 02 - Jun 03, 2024	0.026	0.011	757	33
2450151-13	Jun 03 - Jun 04, 2024	0.037	0.025	757	33
2450151-14	Jun 04 - Jun 05, 2024	0.031	0.019	757	32
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 : Santi Chaichana
Remark :
- 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.

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450151
Date Received : Jun 12, 2024
Date Reported : Jun 19, 2024
Report Number: 2982619-3

Sample Description Air Quality
Location A3 : ที่ทำการ อบต. แม่น้ำบ (GPS 47P 0727699, 1444085)
Date Analysis Commenced Jun 13, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2450151-15	May 29 - May 30, 2024	0.037	0.015	757	29
2450151-16	May 30 - May 31, 2024	0.040	0.018	757	30
2450151-17	May 31 - Jun 01, 2024	0.026	0.015	757	31
2450151-18	Jun 01 - Jun 02, 2024	0.017	0.011	757	30
2450151-19	Jun 02 - Jun 03, 2024	0.022	0.015	757	33
2450151-20	Jun 03 - Jun 04, 2024	0.033	0.020	757	33
2450151-21	Jun 04 - Jun 05, 2024	0.039	0.021	757	32
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 : Santi Chaichana
Remark :
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 Thanita Kulsuriwong
Scientist (4)

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450151
Date Received : Jun 12, 2024
Date Reported : Jun 19, 2024
Report Number: 2982619-4

Sample Description Air Quality
Location A4 : โคกหนองจันใน (GPS 47P 0729681, 1444261)
Date Analysis Commenced Jun 13, 2024
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2450151-22	May 29 - May 30, 2024	0.035	0.025	757	29
2450151-23	May 30 - May 31, 2024	0.035	0.018	757	30
2450151-24	May 31 - Jun 01, 2024	0.023	0.016	757	31
2450151-25	Jun 01 - Jun 02, 2024	0.022	0.014	757	30
2450151-26	Jun 02 - Jun 03, 2024	0.022	0.019	757	33
2450151-27	Jun 03 - Jun 04, 2024	0.033	0.026	757	33
2450151-28	Jun 04 - Jun 05, 2024	0.031	0.022	757	32
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 : Santi Chaichana
Remark :
- 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 Thanita Kulsuriwong
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450150
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number :2982615-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450150-1 to 7
Parameter Wind Speed / Wind Direction
Location A4 : ¯ÁÃÁÁÃ¥Ïu (GPS 47P 0729681, 1444761)
Sampling Date May 29 - Jun 05, 2024
Sampling by Santi Chaichana

Time	May 29 - May 30, 2024		May 30 - May 31, 2024		May 31 - Jun 01, 2024		Jun 01 - Jun 02, 2024		Jun 02 - Jun 03, 2024		Jun 03 - Jun 04, 2024		Jun 04 - Jun 05, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
12:00 PM - 01:00 PM	1.2	258.0	WSW	1.5	241.0	WSW	1.8	127.0	SE	1.4	202.0	SSW	2.2	121.0	ESE	0.3	189.0	S	0.3	164.0	SSE
01:00 PM - 02:00 PM	0.3	265.0	W	1.0	258.0	WSW	1.0	359.0	N	0.6	105.0	ESE	1.1	175.0	S	0.5	267.0	W	1.0	255.0	WSW
02:00 PM - 03:00 PM	1.0	210.0	SSW	0.7	235.0	SW	0.6	283.0	WNW	0.5	192.0	SSW	0.3	211.0	SSW	0.8	254.0	WSW	1.2	234.0	SW
03:00 PM - 04:00 PM	2.0	219.0	SW	1.2	190.0	S	0.9	107.0	ESE	1.9	109.0	ESE	2.0	211.0	SSW	1.0	256.0	WSW	0.3	241.0	WSW
04:00 PM - 05:00 PM	1.6	68.0	ENE	0.3	226.0	SW	1.0	67.0	ENE	2.1	58.0	ENE	1.3	243.0	WSW	1.3	223.0	SW	0.0	-	-
05:00 PM - 06:00 PM	1.0	140.0	SE	0.2	-	-	1.3	229.0	WSW	0.3	258.0	WSW	1.0	181.0	S	0.5	241.0	WSW	0.2	-	-
06:00 PM - 07:00 PM	0.6	203.0	SSW	0.1	-	-	1.0	105.0	ESE	0.2	-	-	2.0	274.0	W	1.0	234.0	SW	0.0	-	-
07:00 PM - 08:00 PM	0.4	250.0	WSW	1.5	256.0	WSW	0.2	-	-	1.0	85.0	E	0.3	155.0	SSE	0.2	-	-	0.3	254.0	SSW
08:00 PM - 09:00 PM	0.3	165.0	SSE	0.6	191.0	S	0.1	-	-	1.5	72.0	ENE	1.3	198.0	SSW	0.3	71.0	ENE	0.1	-	-
09:00 PM - 10:00 PM	0.2	-	-	1.0	226.0	SW	0.3	215.0	SW	1.4	203.0	SSW	0.2	-	-	0.2	-	-	0.2	-	-
10:00 PM - 11:00 PM	0.1	-	-	0.2	-	-	0.2	-	-	1.9	103.0	E	0.3	235.0	SW	0.1	-	-	0.1	-	-
11:00 PM - 12:00 AM	0.2	-	-	0.0	-	-	2.0	169.0	S	0.3	175.0	S	0.2	-	-	0.2	-	-	0.2	-	-
12:00 AM - 01:00 AM	0.0	-	-	0.2	-	-	0.6	152.0	SSE	0.2	-	-	0.2	-	-	0.2	-	-	0.3	112.0	ESE
01:00 AM - 02:00 AM	0.0	-	-	0.1	-	-	0.3	114.0	ESE	0.1	-	-	0.1	-	-	0.3	168.0	SSE	0.2	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.3	204.0	SSW	0.1	-	-	0.2	-	-	0.3	214.0	SW	1.0	161.0	SSE	0.3	195.0	SSW
03:00 AM - 04:00 AM	0.3	168.0	SSE	1.2	2.0	N	1.2	101.0	E	0.2	-	-	0.2	-	-	0.2	-	-	0.2	-	-
04:00 AM - 05:00 AM	0.2	-	-	0.2	-	-	0.2	-	-	0.1	-	-	0.2	-	-	0.3	164.0	SSE	0.2	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.1	-	-	0.6	48.0	NE	0.3	147.0	SSE	0.0	-	-	0.2	-	-	0.1	-	-
06:00 AM - 07:00 AM	0.3	228.0	SW	0.2	-	-	0.3	51.0	NE	0.2	-	-	0.0	-	-	0.2	-	-	1.0	79.0	E
07:00 AM - 08:00 AM	0.6	285.0	WNW	0.2	-	-	0.0	-	-	1.0	142.0	SE	0.2	-	-	0.2	-	-	0.6	68.0	ENE
08:00 AM - 09:00 AM	0.2	-	-	0.3	137.0	SE	2.1	191.0	S	1.3	190.0	S	0.1	-	-	1.0	100.0	E	0.3	344.0	NNW
09:00 AM - 10:00 AM	1.0	227.0	SW	1.2	227.0	SW	1.0	74.0	ENE	0.2	-	-	0.3	237.0	WSW	0.3	236.0	SW	1.2	142.0	SE
10:00 AM - 11:00 AM	0.6	290.0	WNW	1.6	266.0	W	2.0	117.0	ESE	0.3	232.0	SW	1.0	260.0	W	0.2	-	-	2.0	213.0	SSW
11:00 AM - 12:00 PM	0.9	193.0	SSW	2.4	198.0	SSW	1.3	229.0	SW	1.6	236.0	SW	1.2	189.0	S	0.0	-	-	2.5	241.0	WSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the end-use/tested sample(s) as indicated in this report. No part of the report can be duplicated 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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450150
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number :2982615-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Wind Rose



Date : May 29-30, 2024



Date : May 30-31, 2024



Date : May 31-Jun 01, 2024



Date : Jun 01-02, 2024



Date : Jun 02-03, 2024



Date : Jun 03-04, 2024



Date : Jun 04-05, 2024



Date : May 29-Jun 05, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	8.33
0.3-1.7	52.98
Calms	38.69

The above results are valid only for the end-use/tested sample(s) as indicated in this report. No part of the report can be duplicated 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

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ภาคผนวก ค-2

ผลการตรวจวัดระดับเสียงทั่วไป

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026133-1

Sample Number 2450165-1
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่บ้านบูรพา
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.5	81.7	49.5
12:00 PM - 01:00 PM	52.9	73.2	48.7
01:00 PM - 02:00 PM	50.6	71.9	49.3
02:00 PM - 03:00 PM	50.7	74.2	47.9
03:00 PM - 04:00 PM	51.9	76.1	48.4
04:00 PM - 05:00 PM	52.8	66.8	50.6
05:00 PM - 06:00 PM	53.0	74.7	50.0
06:00 PM - 07:00 PM	51.2	67.1	49.4
07:00 PM - 08:00 PM	51.0	63.6	49.9
08:00 PM - 09:00 PM	49.8	69.0	49.0
09:00 PM - 10:00 PM	49.2	64.8	48.2
10:00 PM - 11:00 PM	48.9	61.5	48.0
11:00 PM - 12:00 AM	48.8	57.6	48.1
12:00 AM - 01:00 AM	48.6	62.3	47.9
01:00 AM - 02:00 AM	47.6	58.0	46.8
02:00 AM - 03:00 AM	47.7	59.9	46.9
03:00 AM - 04:00 AM	49.7	64.4	47.8
04:00 AM - 05:00 AM	51.0	76.0	48.2
05:00 AM - 06:00 AM	55.0	78.8	48.8
06:00 AM - 07:00 AM	54.2	74.0	50.2
07:00 AM - 08:00 AM	54.2	72.5	50.6
08:00 AM - 09:00 AM	56.0	75.4	52.7
09:00 AM - 10:00 AM	54.7	73.4	50.1
10:00 AM - 11:00 AM	51.4	67.6	48.9
Leq Average 24 hrs. (dB(A))	52.1		
Lmax (dB(A))		81.7	
L90 (dB(A))			48.7
Ldn (dB(A))	57.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026134-1

Sample Number 2450165-2
Parameter Noise (Leq 24 hrs.)
Location ที่1 : หมู่บ้านบูรพา
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.8	67.5	47.6
12:00 PM - 01:00 PM	52.6	76.6	48.2
01:00 PM - 02:00 PM	51.3	66.8	48.1
02:00 PM - 03:00 PM	54.9	81.5	50.2
03:00 PM - 04:00 PM	50.5	67.7	48.5
04:00 PM - 05:00 PM	52.5	66.9	49.6
05:00 PM - 06:00 PM	52.9	74.1	49.5
06:00 PM - 07:00 PM	49.7	63.1	48.7
07:00 PM - 08:00 PM	50.9	64.4	49.4
08:00 PM - 09:00 PM	50.8	74.9	48.7
09:00 PM - 10:00 PM	50.6	70.1	48.4
10:00 PM - 11:00 PM	48.9	58.4	48.2
11:00 PM - 12:00 AM	49.1	67.5	48.0
12:00 AM - 01:00 AM	48.6	65.5	47.6
01:00 AM - 02:00 AM	48.4	68.3	47.7
02:00 AM - 03:00 AM	48.6	61.6	47.9
03:00 AM - 04:00 AM	49.3	63.0	48.1
04:00 AM - 05:00 AM	52.4	75.5	48.7
05:00 AM - 06:00 AM	55.1	76.8	49.5
06:00 AM - 07:00 AM	53.7	74.1	49.6
07:00 AM - 08:00 AM	53.0	74.1	48.6
08:00 AM - 09:00 AM	53.0	72.9	48.6
09:00 AM - 10:00 AM	53.0	73.9	48.4
10:00 AM - 11:00 AM	51.4	68.9	48.4
Leq Average 24 hrs. (dB(A))	51.7		
Lmax (dB(A))		81.5	
L90 (dB(A))			48.4
Ldn (dB(A))	57.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026135-1

Sample Number 2450165-3
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่บ้านบูรพา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.1	75.9	49.0
12:00 PM - 01:00 PM	52.7	73.8	49.0
01:00 PM - 02:00 PM	52.3	72.4	49.7
02:00 PM - 03:00 PM	52.3	74.2	49.6
03:00 PM - 04:00 PM	50.2	68.6	48.3
04:00 PM - 05:00 PM	52.2	72.2	48.9
05:00 PM - 06:00 PM	51.8	77.1	48.6
06:00 PM - 07:00 PM	52.7	69.1	50.2
07:00 PM - 08:00 PM	56.6	72.2	54.7
08:00 PM - 09:00 PM	52.0	73.2	50.2
09:00 PM - 10:00 PM	49.8	66.6	48.8
10:00 PM - 11:00 PM	50.4	63.9	49.4
11:00 PM - 12:00 AM	53.4	64.1	51.8
12:00 AM - 01:00 AM	52.3	64.9	50.5
01:00 AM - 02:00 AM	53.5	66.8	51.9
02:00 AM - 03:00 AM	52.1	67.2	50.3
03:00 AM - 04:00 AM	51.3	69.9	49.5
04:00 AM - 05:00 AM	52.2	69.2	49.4
05:00 AM - 06:00 AM	53.3	75.3	49.2
06:00 AM - 07:00 AM	52.1	74.1	47.6
07:00 AM - 08:00 AM	53.0	72.6	49.4
08:00 AM - 09:00 AM	54.8	73.5	49.8
09:00 AM - 10:00 AM	53.2	74.7	49.3
10:00 AM - 11:00 AM	55.9	88.1	49.0
Leq Average 24 hrs. (dB(A))	53.0		
Lmax (dB(A))		88.1	
L90 (dB(A))			49.4
Ldn (dB(A))	59.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026136-1

Sample Number 2450165-4
Parameter Noise (Leq 24 hrs.)
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.1	72.6	49.2
12:00 PM - 01:00 PM	54.8	85.2	50.3
01:00 PM - 02:00 PM	54.8	80.8	49.9
02:00 PM - 03:00 PM	53.9	73.0	49.4
03:00 PM - 04:00 PM	51.7	77.7	48.3
04:00 PM - 05:00 PM	50.8	80.5	48.0
05:00 PM - 06:00 PM	51.3	71.9	48.4
06:00 PM - 07:00 PM	50.9	71.4	48.9
07:00 PM - 08:00 PM	50.7	65.7	49.8
08:00 PM - 09:00 PM	50.4	68.7	49.5
09:00 PM - 10:00 PM	49.7	58.7	49.0
10:00 PM - 11:00 PM	50.2	59.0	49.2
11:00 PM - 12:00 AM	50.5	62.7	49.6
12:00 AM - 01:00 AM	50.6	69.4	49.8
01:00 AM - 02:00 AM	48.8	59.5	48.2
02:00 AM - 03:00 AM	49.8	67.8	49.0
03:00 AM - 04:00 AM	48.2	56.7	47.4
04:00 AM - 05:00 AM	49.0	65.7	47.6
05:00 AM - 06:00 AM	53.0	86.4	49.4
06:00 AM - 07:00 AM	52.4	73.6	49.3
07:00 AM - 08:00 AM	51.9	75.9	48.5
08:00 AM - 09:00 AM	53.2	77.0	49.8
09:00 AM - 10:00 AM	54.4	80.6	49.2
10:00 AM - 11:00 AM	53.5	72.4	48.9
Leq Average 24 hrs. (dB(A))	52.5		
Lmax (dB(A))		86.4	
L90 (dB(A))			49.0
Ldn (dB(A))	57.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026137-1

Sample Number	2450165-5
Parameter	Noise (Leq 24 hrs.)
Location	N1 : หมู่บ้านบูเคา
Measurement Date	Jun 02 - Jun 03, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.6	74.5	49.4
12:00 PM - 01:00 PM	53.9	71.6	49.2
01:00 PM - 02:00 PM	53.9	72.1	49.6
02:00 PM - 03:00 PM	55.3	76.0	49.7
03:00 PM - 04:00 PM	55.5	79.2	51.0
04:00 PM - 05:00 PM	52.4	75.0	49.3
05:00 PM - 06:00 PM	51.5	71.3	48.3
06:00 PM - 07:00 PM	52.2	80.4	48.7
07:00 PM - 08:00 PM	51.3	67.3	49.6
08:00 PM - 09:00 PM	52.0	69.6	49.7
09:00 PM - 10:00 PM	49.8	62.9	48.2
10:00 PM - 11:00 PM	48.7	78.9	47.4
11:00 PM - 12:00 AM	48.1	62.8	47.1
12:00 AM - 01:00 AM	47.6	58.2	46.6
01:00 AM - 02:00 AM	47.4	67.4	46.2
02:00 AM - 03:00 AM	47.1	62.9	46.3
03:00 AM - 04:00 AM	47.6	68.9	46.7
04:00 AM - 05:00 AM	48.3	70.1	47.0
05:00 AM - 06:00 AM	52.9	75.8	49.1
06:00 AM - 07:00 AM	52.2	74.3	48.8
07:00 AM - 08:00 AM	55.5	75.0	47.9
08:00 AM - 09:00 AM	52.6	77.4	48.4
09:00 AM - 10:00 AM	54.0	75.8	48.9
10:00 AM - 11:00 AM	53.8	81.0	49.7
Leq Average 24 hrs. (dB(A))	52.3		
Lmax (dB(A))		81.0	
L90 (dB(A))			48.7
Ldn (dB(A))	56.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการระบาย และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026138-1

Sample Number	2450165-6
Parameter	Noise (Leq 24 hrs.)
Location	N1 : หมู่บ้านบูเคา
Measurement Date	Jun 03 - Jun 04, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.8	79.4	48.2
12:00 PM - 01:00 PM	50.7	74.8	46.0
01:00 PM - 02:00 PM	53.2	79.8	48.5
02:00 PM - 03:00 PM	52.8	76.0	48.9
03:00 PM - 04:00 PM	52.2	67.6	49.7
04:00 PM - 05:00 PM	52.8	76.6	50.2
05:00 PM - 06:00 PM	53.4	75.1	50.3
06:00 PM - 07:00 PM	51.9	75.7	49.4
07:00 PM - 08:00 PM	54.0	64.7	52.4
08:00 PM - 09:00 PM	52.0	67.3	50.3
09:00 PM - 10:00 PM	50.0	73.0	48.6
10:00 PM - 11:00 PM	48.9	66.5	48.0
11:00 PM - 12:00 AM	48.8	58.3	48.0
12:00 AM - 01:00 AM	49.0	61.5	48.3
01:00 AM - 02:00 AM	48.9	60.1	48.0
02:00 AM - 03:00 AM	48.5	53.8	47.9
03:00 AM - 04:00 AM	48.7	58.0	48.0
04:00 AM - 05:00 AM	49.5	62.3	48.8
05:00 AM - 06:00 AM	53.5	78.3	49.3
06:00 AM - 07:00 AM	53.2	76.3	49.4
07:00 AM - 08:00 AM	55.0	71.3	53.0
08:00 AM - 09:00 AM	53.0	77.9	48.8
09:00 AM - 10:00 AM	54.6	76.4	49.5
10:00 AM - 11:00 AM	54.4	81.6	49.3
Leq Average 24 hrs. (dB(A))	52.2		
Lmax (dB(A))		81.6	
L90 (dB(A))			48.8
Ldn (dB(A))	57.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการระบาย และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026139-1

Sample Number	2450165-7
Parameter	Noise (Leq 24 hrs.)
Location	N1 : หมู่บ้านบูเคา
Measurement Date	Jun 04 - Jun 05, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472127

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.4	80.0	48.9
12:00 PM - 01:00 PM	53.3	75.4	48.6
01:00 PM - 02:00 PM	53.8	80.4	49.1
02:00 PM - 03:00 PM	53.4	76.6	49.5
03:00 PM - 04:00 PM	52.8	68.2	50.3
04:00 PM - 05:00 PM	53.4	77.2	50.8
05:00 PM - 06:00 PM	54.0	75.7	50.9
06:00 PM - 07:00 PM	52.5	76.3	50.0
07:00 PM - 08:00 PM	54.6	65.3	53.0
08:00 PM - 09:00 PM	52.6	67.9	50.9
09:00 PM - 10:00 PM	50.6	73.6	49.2
10:00 PM - 11:00 PM	49.5	67.1	48.6
11:00 PM - 12:00 AM	49.4	58.9	48.6
12:00 AM - 01:00 AM	49.6	62.1	48.9
01:00 AM - 02:00 AM	49.0	60.3	48.2
02:00 AM - 03:00 AM	48.5	53.8	47.9
03:00 AM - 04:00 AM	48.7	58.0	48.0
04:00 AM - 05:00 AM	49.5	62.3	48.8
05:00 AM - 06:00 AM	53.5	78.3	49.3
06:00 AM - 07:00 AM	53.2	76.3	49.4
07:00 AM - 08:00 AM	55.0	71.3	53.0
08:00 AM - 09:00 AM	53.0	77.9	48.8
09:00 AM - 10:00 AM	54.6	80.8	49.4
10:00 AM - 11:00 AM	53.7	72.6	49.1
Leq Average 24 hrs. (dB(A))	52.5		
Lmax (dB(A))		80.8	
L90 (dB(A))			49.1
Ldn (dB(A))	57.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการระบาย และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026140-1

Sample Number	2450165-8
Parameter	Noise (Leq 24 hrs.)
Location	N2 : ฝั่งตรงข้ามบริษัท
Measurement Date	May 29 - May 30, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 823390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	57.1	77.6	46.8
01:00 PM - 02:00 PM	57.6	82.2	43.5
02:00 PM - 03:00 PM	55.9	81.1	43.6
03:00 PM - 04:00 PM	58.2	79.5	39.4
04:00 PM - 05:00 PM	55.3	73.5	44.0
05:00 PM - 06:00 PM	56.4	77.1	45.2
06:00 PM - 07:00 PM	60.9	83.1	47.1
07:00 PM - 08:00 PM	60.0	83.8	56.1
08:00 PM - 09:00 PM	54.7	86.9	40.3
09:00 PM - 10:00 PM	53.7	74.7	38.5
10:00 PM - 11:00 PM	50.5	79.7	38.7
11:00 PM - 12:00 AM	52.2	75.7	45.9
12:00 AM - 01:00 AM	52.3	70.1	48.5
01:00 AM - 02:00 AM	42.6	64.9	37.9
02:00 AM - 03:00 AM	49.8	81.4	36.5
03:00 AM - 04:00 AM	42.4	67.0	35.6
04:00 AM - 05:00 AM	53.9	77.5	36.2
05:00 AM - 06:00 AM	56.3	91.1	38.3
06:00 AM - 07:00 AM	55.9	72.1	42.7
07:00 AM - 08:00 AM	55.5	78.9	41.8
08:00 AM - 09:00 AM	53.2	72.2	41.0
09:00 AM - 10:00 AM	58.0	86.4	44.8
10:00 AM - 11:00 AM	59.8	79.4	48.1
11:00 AM - 12:00 PM	62.7	87.7	46.2
Leq Average 24 hrs. (dB(A))	56.7		
Lmax (dB(A))		91.1	
L90 (dB(A))			42.7
Ldn (dB(A))	60.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการระบาย และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026141 1

Sample Number	2450165-9
Parameter	Noise (Leq 24 hrs.)
Location	N2 : มัสยิดบุลกัสหาม
Measurement Date	May 30 - May 31, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	56.5	76.0	45.2
01:00 PM - 02:00 PM	52.1	76.9	38.9
02:00 PM - 03:00 PM	52.8	72.8	38.9
03:00 PM - 04:00 PM	56.6	78.0	40.2
04:00 PM - 05:00 PM	55.6	79.5	40.4
05:00 PM - 06:00 PM	54.9	80.9	42.7
06:00 PM - 07:00 PM	57.8	83.0	45.8
07:00 PM - 08:00 PM	55.5	76.3	44.4
08:00 PM - 09:00 PM	54.6	76.9	41.0
09:00 PM - 10:00 PM	49.4	70.5	39.4
10:00 PM - 11:00 PM	49.6	72.5	38.3
11:00 PM - 12:00 AM	48.5	76.3	38.2
12:00 AM - 01:00 AM	44.9	64.9	35.5
01:00 AM - 02:00 AM	47.4	75.8	35.5
02:00 AM - 03:00 AM	42.0	77.0	34.5
03:00 AM - 04:00 AM	43.1	60.2	34.6
04:00 AM - 05:00 AM	53.0	75.6	36.1
05:00 AM - 06:00 AM	51.7	81.4	37.8
06:00 AM - 07:00 AM	55.8	83.1	42.0
07:00 AM - 08:00 AM	62.0	83.4	42.5
08:00 AM - 09:00 AM	58.0	84.1	44.4
09:00 AM - 10:00 AM	55.3	75.2	41.8
10:00 AM - 11:00 AM	55.8	74.6	44.1
11:00 AM - 12:00 PM	55.3	78.5	44.6
Leq Average 24 hrs. (dB(A))	55.0		
Lmax (dB(A))		84.1	
L90 (dB(A))			40.2
Ldn (dB(A))	58.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องการหาค่าระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการกำหนดบริเวณที่ต้องควบคุมระดับเสียงจากการประกอบกิจการในเขตพื้นที่ พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K. — Thanita Kuburiwong, 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 3324 8555 FAX +66 0 3324 8556
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026142-1

Sample Number	2450165-10
Parameter	Noise (Leq 24 hrs.)
Location	N2 : มัสยิดบุลกัสหาม
Measurement Date	May 31 - Jun 01, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	57.8	74.5	48.2
01:00 PM - 02:00 PM	55.2	77.8	43.0
02:00 PM - 03:00 PM	54.6	76.7	40.4
03:00 PM - 04:00 PM	56.2	78.4	42.4
04:00 PM - 05:00 PM	59.9	88.3	48.7
05:00 PM - 06:00 PM	64.0	91.4	46.0
06:00 PM - 07:00 PM	58.1	84.0	46.8
07:00 PM - 08:00 PM	56.9	77.8	48.9
08:00 PM - 09:00 PM	58.6	78.8	48.5
09:00 PM - 10:00 PM	51.4	76.2	38.3
10:00 PM - 11:00 PM	51.4	80.8	39.5
11:00 PM - 12:00 AM	48.4	76.2	36.9
12:00 AM - 01:00 AM	45.6	71.9	36.3
01:00 AM - 02:00 AM	46.4	74.9	34.5
02:00 AM - 03:00 AM	50.8	85.4	34.7
03:00 AM - 04:00 AM	39.7	61.2	34.9
04:00 AM - 05:00 AM	54.1	76.8	43.4
05:00 AM - 06:00 AM	53.5	79.5	42.3
06:00 AM - 07:00 AM	58.1	87.6	44.5
07:00 AM - 08:00 AM	63.0	93.7	58.8
08:00 AM - 09:00 AM	58.1	73.9	48.1
09:00 AM - 10:00 AM	58.4	83.9	45.0
10:00 AM - 11:00 AM	56.2	77.4	45.8
11:00 AM - 12:00 PM	54.6	72.8	43.4
Leq Average 24 hrs. (dB(A))	57.4		
Lmax (dB(A))		93.7	
L90 (dB(A))			43.4
Ldn (dB(A))	69.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องการหาค่าระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการกำหนดบริเวณที่ต้องควบคุมระดับเสียงจากการประกอบกิจการในเขตพื้นที่ พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K. — Thanita Kuburiwong, 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 3324 8555 FAX +66 0 3324 8556
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026143 1

Sample Number	2450165-11
Parameter	Noise (Leq 24 hrs.)
Location	N2 : มัสยิดบุลกัสหาม
Measurement Date	Jun 01 - Jun 02, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	60.4	80.3	55.4
01:00 PM - 02:00 PM	58.2	84.4	44.9
02:00 PM - 03:00 PM	57.1	83.5	45.8
03:00 PM - 04:00 PM	59.4	81.7	41.6
04:00 PM - 05:00 PM	56.6	76.0	46.3
05:00 PM - 06:00 PM	57.9	79.6	47.7
06:00 PM - 07:00 PM	58.9	81.6	49.6
07:00 PM - 08:00 PM	61.5	86.3	58.6
08:00 PM - 09:00 PM	56.2	87.4	42.8
09:00 PM - 10:00 PM	55.2	77.2	41.0
10:00 PM - 11:00 PM	52.0	82.2	41.2
11:00 PM - 12:00 AM	53.7	78.2	48.4
12:00 AM - 01:00 AM	53.8	72.6	51.0
01:00 AM - 02:00 AM	44.1	67.4	40.4
02:00 AM - 03:00 AM	51.3	83.9	39.0
03:00 AM - 04:00 AM	43.9	69.5	38.1
04:00 AM - 05:00 AM	55.4	80.0	38.7
05:00 AM - 06:00 AM	57.8	93.6	40.8
06:00 AM - 07:00 AM	57.4	74.6	45.2
07:00 AM - 08:00 AM	57.0	81.4	44.3
08:00 AM - 09:00 AM	54.7	74.7	43.5
09:00 AM - 10:00 AM	59.5	88.9	47.3
10:00 AM - 11:00 AM	61.3	81.9	50.6
11:00 AM - 12:00 PM	62.4	90.2	48.5
Leq Average 24 hrs. (dB(A))	57.8		
Lmax (dB(A))		93.6	
L90 (dB(A))			44.9
Ldn (dB(A))	61.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องการหาค่าระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการกำหนดบริเวณที่ต้องควบคุมระดับเสียงจากการประกอบกิจการในเขตพื้นที่ พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K. — Thanita Kuburiwong, 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 3324 8555 FAX +66 0 3324 8556
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026144 1

Sample Number	2450165-12
Parameter	Noise (Leq 24 hrs.)
Location	N2 : มัสยิดบุลกัสหาม
Measurement Date	Jun 02 - Jun 03, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	58.0	78.5	47.7
01:00 PM - 02:00 PM	53.6	79.4	41.4
02:00 PM - 03:00 PM	54.3	75.3	43.4
03:00 PM - 04:00 PM	58.1	80.5	42.7
04:00 PM - 05:00 PM	57.1	82.0	42.9
05:00 PM - 06:00 PM	56.4	83.4	45.2
06:00 PM - 07:00 PM	59.3	85.5	48.3
07:00 PM - 08:00 PM	57.0	78.8	46.9
08:00 PM - 09:00 PM	56.1	79.4	43.5
09:00 PM - 10:00 PM	50.9	73.0	41.9
10:00 PM - 11:00 PM	51.1	75.0	40.8
11:00 PM - 12:00 AM	50.0	78.8	40.7
12:00 AM - 01:00 AM	46.4	67.4	39.0
01:00 AM - 02:00 AM	48.9	78.3	38.0
02:00 AM - 03:00 AM	43.5	79.5	37.0
03:00 AM - 04:00 AM	43.6	70.7	37.1
04:00 AM - 05:00 AM	54.5	78.1	38.6
05:00 AM - 06:00 AM	53.2	83.9	40.3
06:00 AM - 07:00 AM	57.3	85.6	44.5
07:00 AM - 08:00 AM	63.5	85.9	45.0
08:00 AM - 09:00 AM	59.5	86.6	46.9
09:00 AM - 10:00 AM	56.8	77.7	44.3
10:00 AM - 11:00 AM	57.3	77.1	46.6
11:00 AM - 12:00 PM	56.7	81.0	47.0
Leq Average 24 hrs. (dB(A))	56.5		
Lmax (dB(A))		86.6	
L90 (dB(A))			42.7
Ldn (dB(A))	69.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องการหาค่าระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการกำหนดบริเวณที่ต้องควบคุมระดับเสียงจากการประกอบกิจการในเขตพื้นที่ พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita K. — Thanita Kuburiwong, 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 3324 8555 FAX +66 0 3324 8556
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10905 312 EMAIL
S:\Reports_Air Noise rpt (10 SEAS)

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026145-1

Sample Number 2450165-13
Parameter Noise (Leq 24 hrs.)
Location N2 : บ้านปิยรัตน์สหธาม
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	59.2	76.9	50.6
01:00 PM - 02:00 PM	56.6	80.2	45.4
02:00 PM - 03:00 PM	56.0	79.1	42.8
03:00 PM - 04:00 PM	57.6	80.8	44.8
04:00 PM - 05:00 PM	60.0	90.7	52.6
05:00 PM - 06:00 PM	62.3	88.0	48.6
06:00 PM - 07:00 PM	59.5	86.4	51.2
07:00 PM - 08:00 PM	58.3	80.2	51.3
08:00 PM - 09:00 PM	60.0	81.2	50.9
09:00 PM - 10:00 PM	52.8	78.6	40.7
10:00 PM - 11:00 PM	52.8	83.2	40.9
11:00 PM - 12:00 AM	49.8	78.8	39.3
12:00 AM - 01:00 AM	47.0	74.3	38.7
01:00 AM - 02:00 AM	47.8	77.3	36.9
02:00 AM - 03:00 AM	52.2	87.8	37.1
03:00 AM - 04:00 AM	41.1	63.6	37.3
04:00 AM - 05:00 AM	55.5	79.2	45.8
05:00 AM - 06:00 AM	54.9	81.9	44.7
06:00 AM - 07:00 AM	59.5	90.0	46.9
07:00 AM - 08:00 AM	65.3	96.1	61.2
08:00 AM - 09:00 AM	59.5	76.3	50.5
09:00 AM - 10:00 AM	59.8	86.3	47.4
10:00 AM - 11:00 AM	57.6	79.8	48.2
11:00 AM - 12:00 PM	58.0	75.2	45.8
Leq Average 24 hrs. (dB(A))	58.3		
Lmax (dB(A))		96.1	
L90 (dB(A))			45.8
Ldn (dB(A))	61.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by 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
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026146-1

Sample Number 2450165-14
Parameter Noise (Leq 24 hrs.)
Location N2 : บ้านปิยรัตน์สหธาม
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	61.8	82.7	57.8
01:00 PM - 02:00 PM	57.1	79.5	42.7
02:00 PM - 03:00 PM	56.3	79.9	46.2
03:00 PM - 04:00 PM	56.4	81.4	46.7
04:00 PM - 05:00 PM	60.6	83.5	50.3
05:00 PM - 06:00 PM	64.2	92.3	50.8
06:00 PM - 07:00 PM	58.4	77.4	46.6
07:00 PM - 08:00 PM	58.5	80.3	51.4
08:00 PM - 09:00 PM	57.9	85.0	43.2
09:00 PM - 10:00 PM	52.5	73.4	39.4
10:00 PM - 11:00 PM	51.1	78.3	37.4
11:00 PM - 12:00 AM	47.8	72.8	36.0
12:00 AM - 01:00 AM	46.2	68.2	35.3
01:00 AM - 02:00 AM	43.9	67.0	35.1
02:00 AM - 03:00 AM	46.5	77.6	35.1
03:00 AM - 04:00 AM	41.5	61.5	36.9
04:00 AM - 05:00 AM	57.4	81.8	44.6
05:00 AM - 06:00 AM	54.2	77.1	43.6
06:00 AM - 07:00 AM	59.8	87.6	50.9
07:00 AM - 08:00 AM	59.1	83.7	46.6
08:00 AM - 09:00 AM	56.1	78.4	45.5
09:00 AM - 10:00 AM	58.1	81.9	45.0
10:00 AM - 11:00 AM	57.7	77.5	48.5
11:00 AM - 12:00 PM	55.9	75.9	46.3
Leq Average 24 hrs. (dB(A))	57.6		
Lmax (dB(A))		92.3	
L90 (dB(A))			45.0
Ldn (dB(A))	61.3		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026147-1

Sample Number 2450165-15
Parameter Noise (Leq 24 hrs.)
Location N3 : หมู่บ้านโชนก 5
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	46.5	75.4	41.0
11:00 AM - 12:00 PM	48.1	70.4	42.0
12:00 PM - 01:00 PM	48.3	74.2	42.0
01:00 PM - 02:00 PM	48.4	74.4	41.2
02:00 PM - 03:00 PM	46.5	70.9	39.3
03:00 PM - 04:00 PM	45.3	70.3	38.2
04:00 PM - 05:00 PM	46.0	68.9	43.2
05:00 PM - 06:00 PM	47.2	72.8	43.3
06:00 PM - 07:00 PM	46.2	66.1	42.9
07:00 PM - 08:00 PM	49.7	70.7	48.0
08:00 PM - 09:00 PM	48.9	66.9	47.1
09:00 PM - 10:00 PM	47.0	59.0	45.8
10:00 PM - 11:00 PM	47.4	65.6	46.0
11:00 PM - 12:00 AM	48.4	68.4	47.0
12:00 AM - 01:00 AM	46.7	67.9	45.5
01:00 AM - 02:00 AM	45.6	69.3	44.2
02:00 AM - 03:00 AM	48.8	74.6	44.1
03:00 AM - 04:00 AM	44.5	68.0	41.6
04:00 AM - 05:00 AM	43.8	60.3	41.5
05:00 AM - 06:00 AM	48.8	66.3	43.5
06:00 AM - 07:00 AM	55.2	77.8	44.5
07:00 AM - 08:00 AM	50.7	76.7	43.0
08:00 AM - 09:00 AM	48.0	71.6	43.1
09:00 AM - 10:00 AM	47.7	71.6	42.5
Leq Average 24 hrs. (dB(A))	48.4		
Lmax (dB(A))		77.8	
L90 (dB(A))			43.0
Ldn (dB(A))	55.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026148-1

Sample Number 2450165-16
Parameter Noise (Leq 24 hrs.)
Location N3 : หมู่บ้านโชนก 5
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	46.9	67.9	41.4
11:00 AM - 12:00 PM	46.5	70.4	40.2
12:00 PM - 01:00 PM	46.5	70.1	39.5
01:00 PM - 02:00 PM	45.8	64.2	41.1
02:00 PM - 03:00 PM	45.6	67.5	40.7
03:00 PM - 04:00 PM	49.1	79.2	41.4
04:00 PM - 05:00 PM	48.2	82.9	41.0
05:00 PM - 06:00 PM	57.9	94.0	44.3
06:00 PM - 07:00 PM	48.5	68.6	43.4
07:00 PM - 08:00 PM	50.6	68.3	48.9
08:00 PM - 09:00 PM	48.5	65.2	46.7
09:00 PM - 10:00 PM	48.3	72.6	44.6
10:00 PM - 11:00 PM	46.6	62.1	45.0
11:00 PM - 12:00 AM	47.4	63.4	45.2
12:00 AM - 01:00 AM	46.7	70.1	43.2
01:00 AM - 02:00 AM	45.5	68.8	44.2
02:00 AM - 03:00 AM	49.5	77.3	44.8
03:00 AM - 04:00 AM	44.3	54.6	42.5
04:00 AM - 05:00 AM	49.6	69.0	40.6
05:00 AM - 06:00 AM	48.8	72.5	40.2
06:00 AM - 07:00 AM	52.7	75.0	42.4
07:00 AM - 08:00 AM	56.4	73.8	43.3
08:00 AM - 09:00 AM	49.9	77.6	42.4
09:00 AM - 10:00 AM	47.4	69.5	41.2
Leq Average 24 hrs. (dB(A))	50.3		
Lmax (dB(A))		94.0	
L90 (dB(A))			42.4
Ldn (dB(A))	55.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกรมการขนส่งทางบกฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by 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
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026149-1

Sample Number	2450165-17
Parameter	Noise (Leq 24 hrs.)
Location	N3 : หมู่บ้านโขมง 5
Measurement Date	May 31 - Jun 01, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.3	71.7	41.3
11:00 AM - 12:00 PM	48.4	72.2	40.2
12:00 PM - 01:00 PM	44.5	67.5	39.2
01:00 PM - 02:00 PM	47.9	74.4	41.6
02:00 PM - 03:00 PM	47.1	70.5	41.6
03:00 PM - 04:00 PM	47.3	75.7	41.3
04:00 PM - 05:00 PM	46.6	66.9	41.7
05:00 PM - 06:00 PM	49.0	70.9	43.2
06:00 PM - 07:00 PM	49.7	70.9	44.1
07:00 PM - 08:00 PM	50.2	76.5	49.0
08:00 PM - 09:00 PM	50.3	73.0	45.6
09:00 PM - 10:00 PM	46.4	57.9	45.5
10:00 PM - 11:00 PM	45.6	61.1	44.4
11:00 PM - 12:00 AM	46.4	57.9	45.2
12:00 AM - 01:00 AM	49.0	68.3	48.0
01:00 AM - 02:00 AM	49.3	64.9	48.1
02:00 AM - 03:00 AM	49.6	62.2	48.6
03:00 AM - 04:00 AM	46.6	56.2	45.3
04:00 AM - 05:00 AM	44.1	70.4	42.0
05:00 AM - 06:00 AM	45.9	70.1	44.0
06:00 AM - 07:00 AM	52.2	70.5	47.0
07:00 AM - 08:00 AM	53.5	77.0	44.0
08:00 AM - 09:00 AM	53.5	73.7	42.4
09:00 AM - 10:00 AM	53.5	75.4	43.7
Leq Average 24 hrs. (dB(A))	49.4		
Lmax (dB(A))		79.5	
L90 (dB(A))			43.7
Ldn (dB(A))	55.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงจากการแกน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuntwong, Scientist (4)
Approved by Supot Salamteh, Section Head

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Pluakdaeng Rayong 21140 Thailand PHONE +66 0 3324 8555 FAX +66 0 3324 8556
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026150-1

Sample Number	2450165-18
Parameter	Noise (Leq 24 hrs.)
Location	N3 : หมู่บ้านโขมง 5
Measurement Date	Jun 01 - Jun 02, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.9	74.0	42.2
11:00 AM - 12:00 PM	49.2	72.8	42.5
12:00 PM - 01:00 PM	49.9	72.6	42.7
01:00 PM - 02:00 PM	49.4	74.0	44.3
02:00 PM - 03:00 PM	48.5	71.2	43.3
03:00 PM - 04:00 PM	45.5	66.5	41.1
04:00 PM - 05:00 PM	45.3	65.9	40.6
05:00 PM - 06:00 PM	47.2	73.6	42.6
06:00 PM - 07:00 PM	46.8	68.1	43.3
07:00 PM - 08:00 PM	49.6	64.4	48.3
08:00 PM - 09:00 PM	48.6	58.2	47.7
09:00 PM - 10:00 PM	47.9	60.8	46.6
10:00 PM - 11:00 PM	47.9	58.2	46.1
11:00 PM - 12:00 AM	46.4	65.3	44.7
12:00 AM - 01:00 AM	46.4	61.0	45.0
01:00 AM - 02:00 AM	45.5	54.0	44.4
02:00 AM - 03:00 AM	50.9	74.9	43.9
03:00 AM - 04:00 AM	44.2	67.6	41.6
04:00 AM - 05:00 AM	51.8	71.1	41.5
05:00 AM - 06:00 AM	53.1	81.1	42.8
06:00 AM - 07:00 AM	49.0	74.0	41.8
07:00 AM - 08:00 AM	48.6	70.3	41.1
08:00 AM - 09:00 AM	47.6	68.9	42.0
09:00 AM - 10:00 AM	50.5	78.0	41.5
Leq Average 24 hrs. (dB(A))	48.9		
Lmax (dB(A))		81.1	
L90 (dB(A))			42.8
Ldn (dB(A))	55.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงจากการแกน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuntwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026151-1

Sample Number	2450165-19
Parameter	Noise (Leq 24 hrs.)
Location	N3 : หมู่บ้านโขมง 5
Measurement Date	Jun 02 - Jun 03, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	47.1	69.1	41.5
11:00 AM - 12:00 PM	47.8	68.0	43.2
12:00 PM - 01:00 PM	48.3	72.6	42.1
01:00 PM - 02:00 PM	49.6	74.0	42.7
02:00 PM - 03:00 PM	51.6	79.1	42.5
03:00 PM - 04:00 PM	50.0	71.1	43.1
04:00 PM - 05:00 PM	47.5	69.4	41.4
05:00 PM - 06:00 PM	48.0	76.2	42.4
06:00 PM - 07:00 PM	47.3	64.5	43.5
07:00 PM - 08:00 PM	52.9	76.1	48.0
08:00 PM - 09:00 PM	50.2	74.4	48.6
09:00 PM - 10:00 PM	53.0	81.8	49.4
10:00 PM - 11:00 PM	50.6	64.6	49.5
11:00 PM - 12:00 AM	49.7	72.1	47.9
12:00 AM - 01:00 AM	48.3	58.7	45.8
01:00 AM - 02:00 AM	49.2	72.0	46.7
02:00 AM - 03:00 AM	48.8	76.1	45.9
03:00 AM - 04:00 AM	46.1	67.8	41.9
04:00 AM - 05:00 AM	48.2	68.1	41.0
05:00 AM - 06:00 AM	55.7	79.4	41.3
06:00 AM - 07:00 AM	48.5	79.1	41.8
07:00 AM - 08:00 AM	53.0	73.2	41.4
08:00 AM - 09:00 AM	47.1	71.8	39.2
09:00 AM - 10:00 AM	48.0	72.1	39.3
Leq Average 24 hrs. (dB(A))	50.2		
Lmax (dB(A))		81.8	
L90 (dB(A))			42.5
Ldn (dB(A))	56.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงจากการแกน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuntwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026152-1

Sample Number	2450165-20
Parameter	Noise (Leq 24 hrs.)
Location	N3 : หมู่บ้านโขมง 5
Measurement Date	Jun 03 - Jun 04, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.3	73.0	39.1
11:00 AM - 12:00 PM	44.8	73.9	37.7
12:00 PM - 01:00 PM	45.1	74.1	38.6
01:00 PM - 02:00 PM	42.9	70.4	38.4
02:00 PM - 03:00 PM	47.1	69.4	39.3
03:00 PM - 04:00 PM	47.2	67.7	41.8
04:00 PM - 05:00 PM	47.4	68.3	41.1
05:00 PM - 06:00 PM	46.0	66.4	41.1
06:00 PM - 07:00 PM	47.0	69.4	41.9
07:00 PM - 08:00 PM	50.8	76.7	48.2
08:00 PM - 09:00 PM	48.5	61.3	47.3
09:00 PM - 10:00 PM	48.2	71.6	45.5
10:00 PM - 11:00 PM	47.6	68.3	46.0
11:00 PM - 12:00 AM	46.4	56.9	45.3
12:00 AM - 01:00 AM	45.8	67.9	43.9
01:00 AM - 02:00 AM	49.5	75.1	44.1
02:00 AM - 03:00 AM	44.6	55.3	43.5
03:00 AM - 04:00 AM	48.6	74.3	41.5
04:00 AM - 05:00 AM	53.5	73.1	39.9
05:00 AM - 06:00 AM	54.3	72.9	41.9
06:00 AM - 07:00 AM	51.4	73.7	43.8
07:00 AM - 08:00 AM	52.3	73.1	45.2
08:00 AM - 09:00 AM	52.1	73.3	42.0
09:00 AM - 10:00 AM	46.3	71.4	39.8
Leq Average 24 hrs. (dB(A))	49.3		
Lmax (dB(A))		76.7	
L90 (dB(A))			41.9
Ldn (dB(A))	56.5		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงจากการแกน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuntwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026153-1

Sample Number	2450165-21
Parameter	Noise (Leq 24 hrs.)
Location	N3 : หมู่บ้านโมเนต 5
Measurement Date	Jun 04 - Jun 05, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 472130

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	44.6	68.0	39.9
11:00 AM - 12:00 PM	46.9	73.5	39.9
12:00 PM - 01:00 PM	45.9	71.5	37.7
01:00 PM - 02:00 PM	43.5	65.9	38.4
02:00 PM - 03:00 PM	44.6	69.3	39.9
03:00 PM - 04:00 PM	46.5	65.9	41.9
04:00 PM - 05:00 PM	46.6	68.9	41.1
05:00 PM - 06:00 PM	51.5	88.9	41.3
06:00 PM - 07:00 PM	46.6	65.0	42.2
07:00 PM - 08:00 PM	50.5	73.8	47.8
08:00 PM - 09:00 PM	49.4	76.5	47.0
09:00 PM - 10:00 PM	47.6	70.2	45.8
10:00 PM - 11:00 PM	48.4	71.3	47.3
11:00 PM - 12:00 AM	46.9	64.1	45.6
12:00 AM - 01:00 AM	45.6	66.1	44.7
01:00 AM - 02:00 AM	47.7	73.3	44.0
02:00 AM - 03:00 AM	48.1	70.9	44.5
03:00 AM - 04:00 AM	46.1	66.7	44.7
04:00 AM - 05:00 AM	52.2	80.1	41.9
05:00 AM - 06:00 AM	53.8	71.7	41.1
06:00 AM - 07:00 AM	54.2	87.3	43.3
07:00 AM - 08:00 AM	49.9	69.0	45.5
08:00 AM - 09:00 AM	50.6	77.9	43.2
09:00 AM - 10:00 AM	49.9	84.8	40.1
Leq Average 24 hrs. (dB(A))	49.2		
Lmax (dB(A))		88.9	
L90 (dB(A))			42.2
Ldn (dB(A))	56.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการแทน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kusurlwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026154-1

Sample Number	2450165-22
Parameter	Noise (Leq 24 hrs.)
Location	N4 : ที่ทำการหมู่บ้านโมเนต 5 ปากซอยที่ 6
Measurement Date	May 29 - May 30, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.4	74.1	46.7
11:00 AM - 12:00 PM	53.2	80.1	45.9
12:00 PM - 01:00 PM	52.4	75.7	47.8
01:00 PM - 02:00 PM	52.5	70.7	48.7
02:00 PM - 03:00 PM	51.7	71.3	47.8
03:00 PM - 04:00 PM	53.5	80.7	49.0
04:00 PM - 05:00 PM	53.2	78.1	48.5
05:00 PM - 06:00 PM	53.8	80.4	48.4
06:00 PM - 07:00 PM	55.1	78.2	49.8
07:00 PM - 08:00 PM	55.4	78.9	52.2
08:00 PM - 09:00 PM	54.8	74.0	52.4
09:00 PM - 10:00 PM	52.7	71.7	50.4
10:00 PM - 11:00 PM	53.4	70.2	50.2
11:00 PM - 12:00 AM	52.6	68.1	49.4
12:00 AM - 01:00 AM	53.0	81.2	48.3
01:00 AM - 02:00 AM	50.4	77.6	47.2
02:00 AM - 03:00 AM	48.6	69.1	46.3
03:00 AM - 04:00 AM	49.2	66.8	46.5
04:00 AM - 05:00 AM	49.8	65.1	46.9
05:00 AM - 06:00 AM	52.6	75.2	49.0
06:00 AM - 07:00 AM	52.9	73.7	48.8
07:00 AM - 08:00 AM	53.0	73.6	48.3
08:00 AM - 09:00 AM	50.9	68.3	46.9
09:00 AM - 10:00 AM	50.8	69.3	46.5
Leq Average 24 hrs. (dB(A))	52.8		
Lmax (dB(A))		81.2	
L90 (dB(A))			48.3
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 เรื่องกำหนดการดังเสียงการแทน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kusurlwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026155-1

Sample Number	2450165-23
Parameter	Noise (Leq 24 hrs.)
Location	N4 : ที่ทำการหมู่บ้านโมเนต 5 ปากซอยที่ 6
Measurement Date	May 30 - May 31, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.3	89.3	48.8
11:00 AM - 12:00 PM	55.7	78.2	49.6
12:00 PM - 01:00 PM	52.5	81.1	45.6
01:00 PM - 02:00 PM	50.6	65.5	47.2
02:00 PM - 03:00 PM	52.2	73.3	48.3
03:00 PM - 04:00 PM	51.1	78.8	46.9
04:00 PM - 05:00 PM	53.6	74.1	48.9
05:00 PM - 06:00 PM	53.6	70.5	50.2
06:00 PM - 07:00 PM	54.4	77.5	50.1
07:00 PM - 08:00 PM	52.9	72.5	49.7
08:00 PM - 09:00 PM	52.2	69.7	49.7
09:00 PM - 10:00 PM	52.5	72.9	49.0
10:00 PM - 11:00 PM	55.4	82.6	51.8
11:00 PM - 12:00 AM	55.7	82.7	53.4
12:00 AM - 01:00 AM	56.8	74.3	54.2
01:00 AM - 02:00 AM	55.6	69.1	53.0
02:00 AM - 03:00 AM	52.6	67.3	49.3
03:00 AM - 04:00 AM	49.3	68.4	46.1
04:00 AM - 05:00 AM	51.4	67.8	46.3
05:00 AM - 06:00 AM	53.7	78.3	49.8
06:00 AM - 07:00 AM	53.6	76.7	49.9
07:00 AM - 08:00 AM	54.3	71.6	50.9
08:00 AM - 09:00 AM	54.4	76.9	50.4
09:00 AM - 10:00 AM	54.5	76.5	50.5
Leq Average 24 hrs. (dB(A))	53.8		
Lmax (dB(A))		89.3	
L90 (dB(A))			49.7
Ldn (dB(A))	60.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการแทน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kusurlwong, Scientist (4)
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026156-1

Sample Number	2450165-24
Parameter	Noise (Leq 24 hrs.)
Location	N4 : ที่ทำการหมู่บ้านโมเนต 5 ปากซอยที่ 6
Measurement Date	May 31 - Jun 01, 2024
Measurement by	Santi Chaichana
Sound Level meter	Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.1	79.0	49.0
11:00 AM - 12:00 PM	53.2	76.5	49.2
12:00 PM - 01:00 PM	52.9	73.2	47.2
01:00 PM - 02:00 PM	53.9	82.4	47.9
02:00 PM - 03:00 PM	53.5	82.2	47.1
03:00 PM - 04:00 PM	53.0	79.9	47.2
04:00 PM - 05:00 PM	52.5	75.0	46.9
05:00 PM - 06:00 PM	54.3	83.1	49.3
06:00 PM - 07:00 PM	55.4	83.2	49.8
07:00 PM - 08:00 PM	53.6	72.5	50.3
08:00 PM - 09:00 PM	54.5	74.0	52.4
09:00 PM - 10:00 PM	56.9	71.4	54.7
10:00 PM - 11:00 PM	56.9	68.3	54.6
11:00 PM - 12:00 AM	55.7	74.4	53.0
12:00 AM - 01:00 AM	53.6	83.2	49.5
01:00 AM - 02:00 AM	59.2	64.7	57.8
02:00 AM - 03:00 AM	57.9	69.4	57.0
03:00 AM - 04:00 AM	53.3	74.0	51.8
04:00 AM - 05:00 AM	51.6	74.9	48.7
05:00 AM - 06:00 AM	53.7	77.5	50.5
06:00 AM - 07:00 AM	54.7	76.5	51.9
07:00 AM - 08:00 AM	56.2	75.1	52.6
08:00 AM - 09:00 AM	56.4	83.8	51.5
09:00 AM - 10:00 AM	54.5	77.3	50.7
Leq Average 24 hrs. (dB(A))	55.1		
Lmax (dB(A))		83.8	
L90 (dB(A))			50.3
Ldn (dB(A))	62.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการดังเสียงการแทน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kusurlwong, Scientist (4)
Approved by Supot Salamteh, Section Head

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number 3026157-1

Sample Number 2450165-25
Parameter Noise (Leq 24 hrs.)
Location N4 : ศึกษาสถานที่ก่อสร้างหมายเลข 5 ฝั่งตะวันตก
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.8	78.1	50.0
11:00 AM - 12:00 PM	53.8	80.1	49.2
12:00 PM - 01:00 PM	54.2	79.8	49.6
01:00 PM - 02:00 PM	54.6	79.4	50.5
02:00 PM - 03:00 PM	54.9	84.3	49.5
03:00 PM - 04:00 PM	51.9	69.0	47.2
04:00 PM - 05:00 PM	51.4	70.0	46.8
05:00 PM - 06:00 PM	53.9	73.7	50.1
06:00 PM - 07:00 PM	54.1	73.7	51.2
07:00 PM - 08:00 PM	54.6	72.6	51.9
08:00 PM - 09:00 PM	55.6	76.7	53.1
09:00 PM - 10:00 PM	55.2	80.4	53.0
10:00 PM - 11:00 PM	52.4	71.3	49.7
11:00 PM - 12:00 AM	51.8	75.9	49.0
12:00 AM - 01:00 AM	57.1	62.0	55.0
01:00 AM - 02:00 AM	55.6	73.0	52.1
02:00 AM - 03:00 AM	53.0	63.5	48.7
03:00 AM - 04:00 AM	51.7	66.3	48.2
04:00 AM - 05:00 AM	51.4	78.8	48.1
05:00 AM - 06:00 AM	53.6	70.4	50.3
06:00 AM - 07:00 AM	52.6	74.5	49.4
07:00 AM - 08:00 AM	53.6	81.3	48.3
08:00 AM - 09:00 AM	51.8	72.1	47.6
09:00 AM - 10:00 AM	51.9	76.5	47.5
Leq Average 24 hrs. (dB(A))	53.9		
Lmax (dB(A))		84.3	
L90 (dB(A))			49.4
Ldn (dB(A))	60.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงการอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 5) พ.ศ. 2540
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 6) พ.ศ. 2545
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number: 3026158-1

Sample Number 2450165-26
Parameter Noise (Leq 24 hrs.)
Location N4 : ศึกษาสถานที่ก่อสร้างหมายเลข 5 ฝั่งตะวันตก
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.0	66.7	47.8
11:00 AM - 12:00 PM	52.9	66.3	47.4
12:00 PM - 01:00 PM	51.5	73.6	47.3
01:00 PM - 02:00 PM	51.9	70.1	48.1
02:00 PM - 03:00 PM	51.1	70.7	47.2
03:00 PM - 04:00 PM	52.9	80.1	48.4
04:00 PM - 05:00 PM	52.6	77.5	47.9
05:00 PM - 06:00 PM	53.2	79.8	47.8
06:00 PM - 07:00 PM	54.5	77.6	49.2
07:00 PM - 08:00 PM	54.8	78.3	51.6
08:00 PM - 09:00 PM	54.2	73.4	51.8
09:00 PM - 10:00 PM	52.1	71.1	49.8
10:00 PM - 11:00 PM	52.8	69.6	49.6
11:00 PM - 12:00 AM	52.0	67.5	48.8
12:00 AM - 01:00 AM	52.4	80.6	47.7
01:00 AM - 02:00 AM	49.8	77.0	46.6
02:00 AM - 03:00 AM	48.0	68.5	45.7
03:00 AM - 04:00 AM	48.6	66.2	45.9
04:00 AM - 05:00 AM	49.2	65.5	46.3
05:00 AM - 06:00 AM	52.0	74.6	48.4
06:00 AM - 07:00 AM	52.3	73.1	48.2
07:00 AM - 08:00 AM	52.4	73.0	47.7
08:00 AM - 09:00 AM	50.3	67.7	46.3
09:00 AM - 10:00 AM	50.2	68.7	45.9
Leq Average 24 hrs. (dB(A))	52.1		
Lmax (dB(A))		86.3	
L90 (dB(A))			47.8
Ldn (dB(A))	57.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงการอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 5) พ.ศ. 2540
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 6) พ.ศ. 2545
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number 3026159-1

Sample Number 2450165-27
Parameter Noise (Leq 24 hrs.)
Location N4 : ศึกษาสถานที่ก่อสร้างหมายเลข 5 ฝั่งตะวันตก
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.6	68.1	46.5
11:00 AM - 12:00 PM	51.9	82.2	45.9
12:00 PM - 01:00 PM	50.0	69.3	45.3
01:00 PM - 02:00 PM	50.7	70.0	45.5
02:00 PM - 03:00 PM	50.3	76.0	45.9
03:00 PM - 04:00 PM	52.4	80.0	47.0
04:00 PM - 05:00 PM	52.0	70.9	48.3
05:00 PM - 06:00 PM	51.4	75.5	48.6
06:00 PM - 07:00 PM	52.9	74.2	49.1
07:00 PM - 08:00 PM	53.7	74.2	51.2
08:00 PM - 09:00 PM	53.4	72.0	50.7
09:00 PM - 10:00 PM	52.4	77.6	48.7
10:00 PM - 11:00 PM	50.1	67.0	47.9
11:00 PM - 12:00 AM	49.9	65.7	47.5
12:00 AM - 01:00 AM	49.2	68.2	46.8
01:00 AM - 02:00 AM	47.9	61.5	46.2
02:00 AM - 03:00 AM	49.6	71.8	45.0
03:00 AM - 04:00 AM	48.3	73.0	45.4
04:00 AM - 05:00 AM	50.2	76.1	45.7
05:00 AM - 06:00 AM	52.3	73.1	46.7
06:00 AM - 07:00 AM	54.2	77.4	49.2
07:00 AM - 08:00 AM	54.6	69.6	52.1
08:00 AM - 09:00 AM	53.5	90.5	48.2
09:00 AM - 10:00 AM	53.2	81.1	46.8
Leq Average 24 hrs. (dB(A))	52.6		
Lmax (dB(A))		90.5	
L90 (dB(A))			46.8
Ldn (dB(A))	57.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงการอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 5) พ.ศ. 2540
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 6) พ.ศ. 2545
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450165
Date Received : Jun 12, 2024
Date Reported : Jun 15, 2024
Report Number 3026160-1

Sample Number 2450165-28
Parameter Noise (Leq 24 hrs.)
Location N4 : ศึกษาสถานที่ก่อสร้างหมายเลข 5 ฝั่งตะวันตก
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 376364

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	54.0	80.1	46.3
11:00 AM - 12:00 PM	55.3	79.9	46.2
12:00 PM - 01:00 PM	52.9	84.7	43.9
01:00 PM - 02:00 PM	53.4	82.0	45.8
02:00 PM - 03:00 PM	54.7	82.2	47.3
03:00 PM - 04:00 PM	54.6	77.1	48.9
04:00 PM - 05:00 PM	54.2	87.1	47.0
05:00 PM - 06:00 PM	52.9	76.1	47.2
06:00 PM - 07:00 PM	53.0	76.2	48.1
07:00 PM - 08:00 PM	54.6	74.2	47.8
08:00 PM - 09:00 PM	52.7	74.4	49.1
09:00 PM - 10:00 PM	51.8	68.4	48.0
10:00 PM - 11:00 PM	51.1	73.7	47.8
11:00 PM - 12:00 AM	51.9	77.5	47.6
12:00 AM - 01:00 AM	50.5	79.7	47.6
01:00 AM - 02:00 AM	50.3	66.8	47.8
02:00 AM - 03:00 AM	51.2	72.5	48.0
03:00 AM - 04:00 AM	52.0	81.6	48.2
04:00 AM - 05:00 AM	54.3	80.9	48.1
05:00 AM - 06:00 AM	53.7	80.2	49.2
06:00 AM - 07:00 AM	54.8	77.5	51.1
07:00 AM - 08:00 AM	54.6	71.6	51.2
08:00 AM - 09:00 AM	54.3	77.7	49.1
09:00 AM - 10:00 AM	53.1	77.4	46.7
Leq Average 24 hrs. (dB(A))	53.4		
Lmax (dB(A))		87.1	
L90 (dB(A))			47.8
Ldn (dB(A))	59.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard 1. ประกาศกระทรวงการอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 5) พ.ศ. 2540
2. ประกาศกระทรวงอุตสาหกรรม เรื่องการแบ่งประเภทของโรงงานตามกฎกระทรวงที่ออกตามความในพระราชบัญญัติโรงงาน พ.ศ. 2535 (ฉบับที่ 6) พ.ศ. 2545
Remark The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Thanita Kulsuriwong, Scientist (4)
Approved by Supot Salamteh, Section Head

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022961-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-1
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูทรา
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	55.3	48.3	01:40 PM - 01:45 PM	50.6	47.2	04:20 PM - 04:25 PM	53.5	51.5
11:05 AM - 11:10 AM	51.8	49.2	01:45 PM - 01:50 PM	50.9	49.3	04:25 PM - 04:30 PM	53.5	50.9
11:10 AM - 11:15 AM	53.2	49.9	01:50 PM - 01:55 PM	49.3	47.0	04:30 PM - 04:35 PM	53.1	50.9
11:15 AM - 11:20 AM	56.3	50.1	01:55 PM - 02:00 PM	49.0	47.7	04:35 PM - 04:40 PM	52.8	50.9
11:20 AM - 11:25 AM	51.2	49.4	02:00 PM - 02:05 PM	49.8	48.3	04:40 PM - 04:45 PM	52.3	50.2
11:25 AM - 11:30 AM	52.3	49.2	02:05 PM - 02:10 PM	55.5	47.4	04:45 PM - 04:50 PM	52.0	50.4
11:30 AM - 11:35 AM	53.3	50.2	02:10 PM - 02:15 PM	49.3	47.4	04:50 PM - 04:55 PM	52.2	50.7
11:35 AM - 11:40 AM	51.3	48.8	02:15 PM - 02:20 PM	50.9	48.2	04:55 PM - 05:00 PM	53.1	50.8
11:40 AM - 11:45 AM	53.3	49.6	02:20 PM - 02:25 PM	51.0	48.1	05:00 PM - 05:05 PM	53.9	50.3
11:45 AM - 11:50 AM	54.8	50.0	02:25 PM - 02:30 PM	50.2	48.3	05:05 PM - 05:10 PM	52.8	50.3
11:50 AM - 11:55 AM	54.0	49.9	02:30 PM - 02:35 PM	50.5	48.1	05:10 PM - 05:15 PM	53.0	50.0
11:55 AM - 12:00 PM	52.4	49.2	02:35 PM - 02:40 PM	49.2	47.7	05:15 PM - 05:20 PM	56.7	50.6
12:00 PM - 12:05 PM	53.9	49.1	02:40 PM - 02:45 PM	48.7	47.1	05:20 PM - 05:25 PM	51.8	49.7
12:05 PM - 12:10 PM	55.1	49.2	02:45 PM - 02:50 PM	48.5	47.2	05:25 PM - 05:30 PM	51.4	49.5
12:10 PM - 12:15 PM	52.0	48.8	02:50 PM - 02:55 PM	49.6	48.0	05:30 PM - 05:35 PM	51.9	50.3
12:15 PM - 12:20 PM	51.9	49.0	02:55 PM - 03:00 PM	49.7	48.2	05:35 PM - 05:40 PM	51.3	49.7
12:20 PM - 12:25 PM	51.8	49.3	03:00 PM - 03:05 PM	49.5	47.5	05:40 PM - 05:45 PM	51.6	49.8
12:25 PM - 12:30 PM	53.6	48.0	03:05 PM - 03:10 PM	50.9	48.4	05:45 PM - 05:50 PM	53.8	50.0
12:30 PM - 12:35 PM	52.5	47.9	03:10 PM - 03:15 PM	55.1	48.4	05:50 PM - 05:55 PM	51.7	49.7
12:35 PM - 12:40 PM	50.6	47.7	03:15 PM - 03:20 PM	51.6	48.0	05:55 PM - 06:00 PM	52.7	49.9
12:40 PM - 12:45 PM	51.4	49.0	03:20 PM - 03:25 PM	51.0	48.2	06:00 PM - 06:05 PM	51.2	49.2
12:45 PM - 12:50 PM	52.5	48.7	03:25 PM - 03:30 PM	51.5	49.0	06:05 PM - 06:10 PM	50.9	49.3
12:50 PM - 12:55 PM	54.7	48.7	03:30 PM - 03:35 PM	51.2	49.3	06:10 PM - 06:15 PM	52.0	49.5
12:55 PM - 01:00 PM	50.5	48.7	03:35 PM - 03:40 PM	50.4	48.5	06:15 PM - 06:20 PM	51.0	49.0
01:00 PM - 01:05 PM	51.0	48.5	03:40 PM - 03:45 PM	51.3	48.3	06:20 PM - 06:25 PM	50.7	49.4
01:05 PM - 01:10 PM	52.3	49.0	03:45 PM - 03:50 PM	52.3	48.5	06:25 PM - 06:30 PM	50.8	49.4
01:10 PM - 01:15 PM	50.0	48.1	03:50 PM - 03:55 PM	53.4	48.1	06:30 PM - 06:35 PM	51.5	49.5
01:15 PM - 01:20 PM	51.7	49.0	03:55 PM - 04:00 PM	51.0	48.8	06:35 PM - 06:40 PM	52.8	49.5
01:20 PM - 01:25 PM	49.8	47.9	04:00 PM - 04:05 PM	51.7	49.3	06:40 PM - 06:45 PM	50.4	49.3
01:25 PM - 01:30 PM	51.0	48.7	04:05 PM - 04:10 PM	52.8	49.7	06:45 PM - 06:50 PM	50.0	49.4
01:30 PM - 01:35 PM	50.6	48.5	04:10 PM - 04:15 PM	52.7	50.3	06:50 PM - 06:55 PM	51.3	49.7
01:35 PM - 01:40 PM	49.2	47.7	04:15 PM - 04:20 PM	52.7	50.6	06:55 PM - 07:00 PM	50.6	49.7

The above results are valid only for the sample(s) received and 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 : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022961-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-1
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูทรา
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29 - May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	50.6	49.9	09:40 PM - 09:45 PM	48.7	48.1	12:20 AM - 12:25 AM	48.8	48.0
07:05 PM - 07:10 PM	50.6	50.0	09:45 PM - 09:50 PM	49.1	48.4	12:25 AM - 12:30 AM	48.4	48.0
07:10 PM - 07:15 PM	50.7	50.1	09:50 PM - 09:55 PM	50.1	48.4	12:30 AM - 12:35 AM	48.6	47.9
07:15 PM - 07:20 PM	51.6	50.1	09:55 PM - 10:00 PM	49.1	48.1	12:35 AM - 12:40 AM	48.5	48.0
07:20 PM - 07:25 PM	51.6	50.0	10:00 PM - 10:05 PM	49.4	48.2	12:40 AM - 12:45 AM	48.5	47.8
07:25 PM - 07:30 PM	51.3	50.0	10:05 PM - 10:10 PM	49.1	48.2	12:45 AM - 12:50 AM	48.4	47.7
07:30 PM - 07:35 PM	51.0	49.9	10:10 PM - 10:15 PM	48.5	47.8	12:50 AM - 12:55 AM	48.3	47.6
07:35 PM - 07:40 PM	51.9	50.2	10:15 PM - 10:20 PM	48.9	47.9	12:55 AM - 01:00 AM	49.0	47.3
07:40 PM - 07:45 PM	50.8	49.9	10:20 PM - 10:25 PM	48.8	47.6	01:00 AM - 01:05 AM	48.2	47.1
07:45 PM - 07:50 PM	50.6	49.7	10:25 PM - 10:30 PM	49.7	48.0	01:05 AM - 01:10 AM	47.3	46.8
07:50 PM - 07:55 PM	50.6	49.6	10:30 PM - 10:35 PM	48.5	47.9	01:10 AM - 01:15 AM	47.5	46.7
07:55 PM - 08:00 PM	50.4	49.8	10:35 PM - 10:40 PM	48.5	47.8	01:15 AM - 01:20 AM	47.3	46.7
08:00 PM - 08:05 PM	50.1	49.5	10:40 PM - 10:45 PM	48.7	47.8	01:20 AM - 01:25 AM	47.2	46.7
08:05 PM - 08:10 PM	50.0	49.4	10:45 PM - 10:50 PM	49.1	48.0	01:25 AM - 01:30 AM	47.3	46.7
08:10 PM - 08:15 PM	49.8	49.2	10:50 PM - 10:55 PM	49.1	48.2	01:30 AM - 01:35 AM	47.8	46.8
08:15 PM - 08:20 PM	49.6	48.9	10:55 PM - 11:00 PM	48.9	48.0	01:35 AM - 01:40 AM	47.9	46.8
08:20 PM - 08:25 PM	49.8	49.0	11:00 PM - 11:05 PM	48.8	48.0	01:40 AM - 01:45 AM	47.5	46.9
08:25 PM - 08:30 PM	49.8	49.1	11:05 PM - 11:10 PM	48.7	47.8	01:45 AM - 01:50 AM	47.7	46.9
08:30 PM - 08:35 PM	49.6	48.8	11:10 PM - 11:15 PM	48.9	47.9	01:50 AM - 01:55 AM	47.6	46.9
08:35 PM - 08:40 PM	50.3	48.9	11:15 PM - 11:20 PM	48.8	48.0	01:55 AM - 02:00 AM	48.2	47.0
08:40 PM - 08:45 PM	49.9	48.6	11:20 PM - 11:25 PM	48.7	47.9	02:00 AM - 02:05 AM	47.2	46.7
08:45 PM - 08:50 PM	49.6	48.7	11:25 PM - 11:30 PM	48.6	48.1	02:05 AM - 02:10 AM	47.3	46.7
08:50 PM - 08:55 PM	49.8	48.9	11:30 PM - 11:35 PM	48.6	48.0	02:10 AM - 02:15 AM	47.3	46.6
08:55 PM - 09:00 PM	49.1	48.3	11:35 PM - 11:40 PM	48.6	48.1	02:15 AM - 02:20 AM	47.6	46.9
09:00 PM - 09:05 PM	50.2	48.4	11:40 PM - 11:45 PM	48.6	48.1	02:20 AM - 02:25 AM	47.8	46.9
09:05 PM - 09:10 PM	49.4	48.3	11:45 PM - 11:50 PM	48.7	48.1	02:25 AM - 02:30 AM	47.4	46.8
09:10 PM - 09:15 PM	48.9	48.2	11:50 PM - 11:55 PM	48.8	48.3	02:30 AM - 02:35 AM	47.1	46.7
09:15 PM - 09:20 PM	48.9	48.2	11:55 PM - 12:00 AM	49.2	48.5	02:35 AM - 02:40 AM	47.8	47.0
09:20 PM - 09:25 PM	49.5	48.0	12:00 AM - 12:05 AM	48.8	48.4	02:40 AM - 02:45 AM	47.9	47.0
09:25 PM - 09:30 PM	48.9	48.3	12:05 AM - 12:10 AM	48.7	48.2	02:45 AM - 02:50 AM	48.5	47.1
09:30 PM - 09:35 PM	49.0	48.4	12:10 AM - 12:15 AM	48.7	48.2	02:50 AM - 02:55 AM	48.1	47.1
09:35 PM - 09:40 PM	48.8	48.0	12:15 AM - 12:20 AM	48.6	48.1	02:55 AM - 03:00 AM	47.7	46.9

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Approved by
Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022961-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-1
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูทรา
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
03:00 AM - 03:05 AM	48.0	46.9	05:40 AM - 05:45 AM	53.6	49.0	08:20 AM - 08:25 AM	53.1	50.8
03:05 AM - 03:10 AM	50.5	47.0	05:45 AM - 05:50 AM	53.5	49.4	08:25 AM - 08:30 AM	55.7	52.6
03:10 AM - 03:15 AM	49.3	47.1	05:50 AM - 05:55 AM	51.9	49.7	08:30 AM - 08:35 AM	57.5	54.8
03:15 AM - 03:20 AM	48.2	47.5	05:55 AM - 06:00 AM	53.2	49.8	08:35 AM - 08:40 AM	56.4	53.7
03:20 AM - 03:25 AM	48.6	47.5	06:00 AM - 06:05 AM	54.4	49.9	08:40 AM - 08:45 AM	57.8	55.8
03:25 AM - 03:30 AM	49.5	47.8	06:05 AM - 06:10 AM	53.2	49.7	08:45 AM - 08:50 AM	57.2	53.1
03:30 AM - 03:35 AM	50.3	48.5	06:10 AM - 06:15 AM	56.0	50.6	08:50 AM - 08:55 AM	57.8	51.4
03:35 AM - 03:40 AM	51.4	48.7	06:15 AM - 06:20 AM	54.6	49.9	08:55 AM - 09:00 AM	54.8	50.7
03:40 AM - 03:45 AM	50.1	48.5	06:20 AM - 06:25 AM	54.6	50.2	09:00 AM - 09:05 AM	53.0	50.6
03:45 AM - 03:50 AM	49.3	48.2	06:25 AM - 06:30 AM	54.0	50.7	09:05 AM - 09:10 AM	55.6	50.6
03:50 AM - 03:55 AM	50.1	47.8	06:30 AM - 06:35 AM	55.1	50.3	09:10 AM - 09:15 AM	55.3	50.3
03:55 AM - 04:00 AM	49.8	48.1	06:35 AM - 06:40 AM	53.9	50.8	09:15 AM - 09:20 AM	54.2	50.6
04:00 AM - 04:05 AM	50.7	48.2	06:40 AM - 06:45 AM	52.7	50.0	09:20 AM - 09:25 AM	52.7	49.7
04:05 AM - 04:10 AM	50.0	48.2	06:45 AM - 06:50 AM	52.3	50.0	09:25 AM - 09:30 AM	52.5	49.1
04:10 AM - 04:15 AM	50.3	48.3	06:50 AM - 06:55 AM	54.7	50.3	09:30 AM - 09:35 AM	54.2	50.4
04:15 AM - 04:20 AM	49.9	48.1	06:55 AM - 07:00 AM	52.9	49.7	09:35 AM - 09:40 AM	58.3	50.8
04:20 AM - 04:25 AM	48.7	47.9	07:00 AM - 07:05 AM	53.7	50.1	09:40 AM - 09:45 AM	55.7	50.8
04:25 AM - 04:30 AM	50.8	48.0	07:05 AM - 07:10 AM	53.7	49.5	09:45 AM - 09:50 AM	52.5	49.6
04:30 AM - 04:35 AM	49.8	48.0	07:10 AM - 07:15 AM	52.7	50.8	09:50 AM - 09:55 AM	55.6	48.7
04:35 AM - 04:40 AM	49.5	48.0	07:15 AM - 07:20 AM	53.9	49.6	09:55 AM - 10:00 AM	51.4	49.2
04:40 AM - 04:45 AM	50.8	48.0	07:20 AM - 07:25 AM	55.9	50.4	10:00 AM - 10:05 AM	52.6	50.3
04:45 AM - 04:50 AM	51.3	48.4	07:25 AM - 07:30 AM	55.5	50.9	10:05 AM - 10:10 AM	51.3	49.7
04:50 AM - 04:55 AM	52.9	48.5	07:30 AM - 07:35 AM	54.4	51.1	10:10 AM - 10:15 AM	51.0	49.0
04:55 AM - 05:00 AM	53.9	48.5	07:35 AM - 07:40 AM	54.0	51.0	10:15 AM - 10:20 AM	55.0	50.6
05:00 AM - 05:05 AM	55.7	49.7	07:40 AM - 07:45 AM	53.3	51.3	10:20 AM - 10:25 AM	51.6	49.1
05:05 AM - 05:10 AM	58.3	48.7	07:45 AM - 07:50 AM	53.8	50.7	10:25 AM - 10:30 AM	51.1	49.1
05:10 AM - 05:15 AM	56.9	48.5	07:50 AM - 07:55 AM	53.0	50.6	10:30 AM - 10:35 AM	50.2	48.3
05:15 AM - 05:20 AM	54.2	48.3	07:55 AM - 08:00 AM	55.4	50.5	10:35 AM - 10:40 AM	50.3	48.4
05:20 AM - 05:25 AM	55.6	47.9	08:00 AM - 08:05 AM	53.4	51.6	10:40 AM - 10:45 AM	52.0	47.4
05:25 AM - 05:30 AM	57.5	48.8	08:05 AM - 08:10 AM	54.3	50.8	10:45 AM - 10:50 AM	49.6	47.6
05:30 AM - 05:35 AM	50.6	48.3	08:10 AM - 08:15 AM	54.4	51.4	10:50 AM - 10:55 AM	50.2	47.9
05:35 AM - 05:40 AM	51.0	48.6	08:15 AM - 08:20 AM	55.5	51.5	10:55 AM - 11:00 AM	50.3	47.6

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022962-1

P/O : RJN-BW009/66
Project Name Chonburi Bowin
Project Location :

Sample Number 2450167-2
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูทรา
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	49.2	46.9	01:40 PM - 01:45 PM	49.1	47.0	04:20 PM - 04:25 PM	51.1	49.5
11:05 AM - 11:10 AM	49.1	47.4	01:45 PM - 01:50 PM	52.9	47.2	04:25 PM - 04:30 PM	51.8	49.4
11:10 AM - 11:15 AM	49.9	48.1	01:50 PM - 01:55 PM	51.4	47.7	04:30 PM - 04:35 PM	52.9	49.8
11:15 AM - 11:20 AM	50.1	48.6	01:55 PM - 02:00 PM	52.2	48.7	04:35 PM - 04:40 PM	53.2	49.9
11:20 AM - 11:25 AM	48.9	47.3	02:00 PM - 02:05 PM	54.3	50.3	04:40 PM - 04:45 PM	51.9	50.4
11:25 AM - 11:30 AM	49.4	47.1	02:05 PM - 02:10 PM	54.3	50.0	04:45 PM - 04:50 PM	52.3	49.5
11:30 AM - 11:35 AM	49.5	47.6	02:10 PM - 02:15 PM	53.7	50.5	04:50 PM - 04:55 PM	53.5	49.7
11:35 AM - 11:40 AM	51.5	47.9	02:15 PM - 02:20 PM	52.4	49.8	04:55 PM - 05:00 PM	51.5	49.7
11:40 AM - 11:45 AM	50.2	47.8	02:20 PM - 02:25 PM	52.8	50.5	05:00 PM - 05:05 PM	53.0	49.5
11:45 AM - 11:50 AM	49.2	47.8	02:25 PM - 02:30 PM	61.7	51.0	05:05 PM - 05:10 PM	54.3	50.6
11:50 AM - 11:55 AM	50.1	47.4	02:30 PM - 02:35 PM	52.5	50.2	05:10 PM - 05:15 PM	53.1	50.3
11:55 AM - 12:00 PM	50.0	47.1	02:35 PM - 02:40 PM	52.6	50.2	05:15 PM - 05:20 PM	52.4	50.5
12:00 PM - 12:05 PM	49.3	47.2	02:40 PM - 02:45 PM	52.2	50.3	05:20 PM - 05:25 PM	55.5	49.2
12:05 PM - 12:10 PM	56.4	47.4	02:45 PM - 02:50 PM	53.3	50.0	05:25 PM - 05:30 PM	51.7	49.7
12:10 PM - 12:15 PM	51.3	48.1	02:50 PM - 02:55 PM	52.5	49.8	05:30 PM - 05:35 PM	53.0	49.3
12:15 PM - 12:20 PM	50.6	48.0	02:55 PM - 03:00 PM	52.5	48.9	05:35 PM - 05:40 PM	50.5	48.7
12:20 PM - 12:25 PM	51.1	47.9	03:00 PM - 03:05 PM	50.7	48.7	05:40 PM - 05:45 PM	51.3	49.1
12:25 PM - 12:30 PM	52.1	49.1	03:05 PM - 03:10 PM	49.7	48.2	05:45 PM - 05:50 PM	51.5	48.9
12:30 PM - 12:35 PM	51.1	48.0	03:10 PM - 03:15 PM	50.7	48.4	05:50 PM - 05:55 PM	51.3	48.8
12:35 PM - 12:40 PM	51.9	47.1	03:15 PM - 03:20 PM	50.3	47.7	05:55 PM - 06:00 PM	54.4	48.6
12:40 PM - 12:45 PM	53.0	47.6	03:20 PM - 03:25 PM	50.4	48.3	06:00 PM - 06:05 PM	49.8	48.3
12:45 PM - 12:50 PM	54.6	47.8	03:25 PM - 03:30 PM	49.0	47.6	06:05 PM - 06:10 PM	49.3	48.3
12:50 PM - 12:55 PM	53.9	50.3	03:30 PM - 03:35 PM	50.7	48.9	06:10 PM - 06:15 PM	49.5	48.2
12:55 PM - 01:00 PM	51.1	48.7	03:35 PM - 03:40 PM	50.7	48.2	06:15 PM - 06:20 PM	49.2	48.4
01:00 PM - 01:05 PM	51.8	48.8	03:40 PM - 03:45 PM	51.2	49.2	06:20 PM - 06:25 PM	49.7	48.7
01:05 PM - 01:10 PM	51.7	48.0	03:45 PM - 03:50 PM	50.5	47.8	06:25 PM - 06:30 PM	49.7	48.8
01:10 PM - 01:15 PM	51.8	49.7	03:50 PM - 03:55 PM	50.6	49.0	06:30 PM - 06:35 PM	49.5	48.7
01:15 PM - 01:20 PM	50.1	48.2	03:55 PM - 04:00 PM	51.5	49.8	06:35 PM - 06:40 PM	50.7	49.0
01:20 PM - 01:25 PM	50.9	48.4	04:00 PM - 04:05 PM	53.0	50.4	06:40 PM - 06:45 PM	49.8	48.8
01:25 PM - 01:30 PM	50.3	47.8	04:05 PM - 04:10 PM	51.0	49.0	06:45 PM - 06:50 PM	49.7	48.8
01:30 PM - 01:35 PM	50.5	47.4	04:10 PM - 04:15 PM	50.9	48.6	06:50 PM - 06:55 PM	49.3	48.7
01:35 PM - 01:40 PM	51.7	47.3	04:15 PM - 04:20 PM	50.8	48.4	06:55 PM - 07:00 PM	50.1	49.1

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Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022962-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-2
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุษราคา
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30 - May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	50.1	48.7	09:40 PM - 09:45 PM	49.6	48.2	12:20 AM - 12:25 AM	48.0	47.6
07:05 PM - 07:10 PM	50.1	49.2	09:45 PM - 09:50 PM	50.3	48.3	12:25 AM - 12:30 AM	50.0	47.6
07:10 PM - 07:15 PM	50.2	49.4	09:50 PM - 09:55 PM	49.3	48.2	12:30 AM - 12:35 AM	48.1	47.4
07:15 PM - 07:20 PM	50.5	49.5	09:55 PM - 10:00 PM	50.5	47.8	12:35 AM - 12:40 AM	47.9	47.4
07:20 PM - 07:25 PM	50.6	49.7	10:00 PM - 10:05 PM	48.7	47.7	12:40 AM - 12:45 AM	48.5	47.5
07:25 PM - 07:30 PM	50.9	49.7	10:05 PM - 10:10 PM	48.4	47.6	12:45 AM - 12:50 AM	48.2	47.4
07:30 PM - 07:35 PM	51.0	49.8	10:10 PM - 10:15 PM	48.7	47.9	12:50 AM - 12:55 AM	48.2	47.7
07:35 PM - 07:40 PM	51.0	49.5	10:15 PM - 10:20 PM	49.5	48.3	12:55 AM - 01:00 AM	48.0	47.4
07:40 PM - 07:45 PM	51.0	49.3	10:20 PM - 10:25 PM	49.7	48.5	01:00 AM - 01:05 AM	48.2	47.5
07:45 PM - 07:50 PM	49.9	49.0	10:25 PM - 10:30 PM	49.0	48.4	01:05 AM - 01:10 AM	48.1	47.7
07:50 PM - 07:55 PM	51.7	49.3	10:30 PM - 10:35 PM	48.7	48.3	01:10 AM - 01:15 AM	48.4	47.8
07:55 PM - 08:00 PM	52.5	49.6	10:35 PM - 10:40 PM	48.7	48.2	01:15 AM - 01:20 AM	48.8	48.0
08:00 PM - 08:05 PM	51.3	48.9	10:40 PM - 10:45 PM	48.9	48.3	01:20 AM - 01:25 AM	48.6	48.0
08:05 PM - 08:10 PM	51.3	49.5	10:45 PM - 10:50 PM	48.9	48.3	01:25 AM - 01:30 AM	48.1	47.5
08:10 PM - 08:15 PM	51.0	49.0	10:50 PM - 10:55 PM	49.0	48.2	01:30 AM - 01:35 AM	48.4	47.6
08:15 PM - 08:20 PM	50.7	49.1	10:55 PM - 11:00 PM	49.0	48.3	01:35 AM - 01:40 AM	47.8	47.3
08:20 PM - 08:25 PM	51.8	48.4	11:00 PM - 11:05 PM	49.0	48.2	01:40 AM - 01:45 AM	48.1	47.3
08:25 PM - 08:30 PM	49.8	48.0	11:05 PM - 11:10 PM	48.8	48.2	01:45 AM - 01:50 AM	48.5	47.5
08:30 PM - 08:35 PM	49.7	48.4	11:10 PM - 11:15 PM	49.3	48.3	01:50 AM - 01:55 AM	48.6	48.0
08:35 PM - 08:40 PM	50.4	48.5	11:15 PM - 11:20 PM	49.3	48.3	01:55 AM - 02:00 AM	48.6	47.9
08:40 PM - 08:45 PM	51.2	49.0	11:20 PM - 11:25 PM	49.0	48.3	02:00 AM - 02:05 AM	48.6	48.1
08:45 PM - 08:50 PM	52.2	49.0	11:25 PM - 11:30 PM	49.1	47.9	02:05 AM - 02:10 AM	48.5	48.0
08:50 PM - 08:55 PM	49.8	48.4	11:30 PM - 11:35 PM	49.2	48.1	02:10 AM - 02:15 AM	48.6	48.0
08:55 PM - 09:00 PM	49.7	48.2	11:35 PM - 11:40 PM	50.7	47.8	02:15 AM - 02:20 AM	48.8	48.2
09:00 PM - 09:05 PM	49.5	47.8	11:40 PM - 11:45 PM	48.5	47.6	02:20 AM - 02:25 AM	48.5	47.8
09:05 PM - 09:10 PM	49.3	48.3	11:45 PM - 11:50 PM	48.5	47.6	02:25 AM - 02:30 AM	48.2	47.7
09:10 PM - 09:15 PM	50.1	48.4	11:50 PM - 11:55 PM	48.6	47.7	02:30 AM - 02:35 AM	48.3	47.7
09:15 PM - 09:20 PM	50.1	48.7	11:55 PM - 12:00 AM	48.6	47.7	02:35 AM - 02:40 AM	49.6	47.6
09:20 PM - 09:25 PM	50.8	48.5	12:00 AM - 12:05 AM	48.5	47.6	02:40 AM - 02:45 AM	48.6	47.8
09:25 PM - 09:30 PM	52.9	49.0	12:05 AM - 12:10 AM	49.7	47.9	02:45 AM - 02:50 AM	48.3	47.8
09:30 PM - 09:35 PM	53.0	48.7	12:10 AM - 12:15 AM	48.7	47.8	02:50 AM - 02:55 AM	48.4	47.9
09:35 PM - 09:40 PM	49.8	48.3	12:15 AM - 12:20 AM	48.3	47.6	02:55 AM - 03:00 AM	48.7	47.9

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022962-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-2
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุษราคา
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
03:00 AM - 03:05 AM	48.7	47.9	05:40 AM - 05:45 AM	52.6	49.2	08:20 AM - 08:25 AM	53.9	50.0
03:05 AM - 03:10 AM	48.9	48.4	05:45 AM - 05:50 AM	54.7	49.7	08:25 AM - 08:30 AM	55.9	48.7
03:10 AM - 03:15 AM	49.0	47.9	05:50 AM - 05:55 AM	52.1	49.4	08:30 AM - 08:35 AM	51.1	48.4
03:15 AM - 03:20 AM	49.4	48.9	05:55 AM - 06:00 AM	55.3	50.0	08:35 AM - 08:40 AM	51.0	48.2
03:20 AM - 03:25 AM	49.1	48.6	06:00 AM - 06:05 AM	54.4	50.1	08:40 AM - 08:45 AM	52.2	48.1
03:25 AM - 03:30 AM	48.9	48.3	06:05 AM - 06:10 AM	54.5	50.1	08:45 AM - 08:50 AM	50.4	48.0
03:30 AM - 03:35 AM	49.2	48.6	06:10 AM - 06:15 AM	53.0	50.0	08:50 AM - 08:55 AM	55.0	48.0
03:35 AM - 03:40 AM	48.8	47.9	06:15 AM - 06:20 AM	52.2	49.9	08:55 AM - 09:00 AM	51.8	48.2
03:40 AM - 03:45 AM	48.6	47.7	06:20 AM - 06:25 AM	52.9	49.8	09:00 AM - 09:05 AM	52.5	48.9
03:45 AM - 03:50 AM	51.1	48.0	06:25 AM - 06:30 AM	56.2	49.6	09:05 AM - 09:10 AM	53.6	49.2
03:50 AM - 03:55 AM	50.3	47.6	06:30 AM - 06:35 AM	51.9	49.4	09:10 AM - 09:15 AM	50.5	47.9
03:55 AM - 04:00 AM	49.1	47.7	06:35 AM - 06:40 AM	51.0	49.3	09:15 AM - 09:20 AM	51.0	48.7
04:00 AM - 04:05 AM	48.7	48.0	06:40 AM - 06:45 AM	52.8	49.4	09:20 AM - 09:25 AM	51.3	48.8
04:05 AM - 04:10 AM	49.7	48.0	06:45 AM - 06:50 AM	54.8	49.7	09:25 AM - 09:30 AM	51.9	49.1
04:10 AM - 04:15 AM	50.8	48.2	06:50 AM - 06:55 AM	54.0	49.3	09:30 AM - 09:35 AM	53.0	49.6
04:15 AM - 04:20 AM	49.5	48.6	06:55 AM - 07:00 AM	53.7	48.7	09:35 AM - 09:40 AM	58.1	48.2
04:20 AM - 04:25 AM	50.9	48.7	07:00 AM - 07:05 AM	53.4	48.4	09:40 AM - 09:45 AM	53.6	47.5
04:25 AM - 04:30 AM	49.6	48.5	07:05 AM - 07:10 AM	52.1	48.6	09:45 AM - 09:50 AM	52.3	48.3
04:30 AM - 04:35 AM	51.3	48.5	07:10 AM - 07:15 AM	52.3	48.6	09:50 AM - 09:55 AM	50.1	46.9
04:35 AM - 04:40 AM	50.2	48.6	07:15 AM - 07:20 AM	53.1	48.9	09:55 AM - 10:00 AM	49.7	47.3
04:40 AM - 04:45 AM	50.3	48.6	07:20 AM - 07:25 AM	54.9	49.1	10:00 AM - 10:05 AM	49.5	47.0
04:45 AM - 04:50 AM	49.9	49.0	07:25 AM - 07:30 AM	53.7	48.9	10:05 AM - 10:10 AM	51.3	48.1
04:50 AM - 04:55 AM	58.0	49.5	07:30 AM - 07:35 AM	52.4	48.5	10:10 AM - 10:15 AM	50.4	48.0
04:55 AM - 05:00 AM	56.2	50.0	07:35 AM - 07:40 AM	53.8	48.7	10:15 AM - 10:20 AM	51.4	49.0
05:00 AM - 05:05 AM	56.6	50.0	07:40 AM - 07:45 AM	51.5	48.4	10:20 AM - 10:25 AM	49.9	48.0
05:05 AM - 05:10 AM	54.8	49.7	07:45 AM - 07:50 AM	53.8	49.0	10:25 AM - 10:30 AM	49.8	47.5
05:10 AM - 05:15 AM	58.1	49.6	07:50 AM - 07:55 AM	52.4	48.1	10:30 AM - 10:35 AM	50.8	48.6
05:15 AM - 05:20 AM	54.4	49.4	07:55 AM - 08:00 AM	51.0	48.4	10:35 AM - 10:40 AM	52.6	49.4
05:20 AM - 05:25 AM	54.0	49.3	08:00 AM - 08:05 AM	51.8	48.2	10:40 AM - 10:45 AM	51.9	48.8
05:25 AM - 05:30 AM	53.8	49.2	08:05 AM - 08:10 AM	51.6	48.1	10:45 AM - 10:50 AM	51.1	48.8
05:30 AM - 05:35 AM	53.6	48.8	08:10 AM - 08:15 AM	54.8	49.4	10:50 AM - 10:55 AM	53.4	48.7
05:35 AM - 05:40 AM	56.4	49.3	08:15 AM - 08:20 AM	51.7	49.3	10:55 AM - 11:00 AM	52.6	48.5

Approved by
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022963-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-3
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุษราคา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	56.4	49.5	01:40 PM - 01:45 PM	53.9	50.5	04:20 PM - 04:25 PM	51.2	48.6
11:05 AM - 11:10 AM	53.9	48.2	01:45 PM - 01:50 PM	51.7	49.4	04:25 PM - 04:30 PM	53.1	49.9
11:10 AM - 11:15 AM	52.0	47.6	01:50 PM - 01:55 PM	52.4	49.7	04:30 PM - 04:35 PM	52.7	49.7
11:15 AM - 11:20 AM	52.7	50.2	01:55 PM - 02:00 PM	53.6	51.2	04:35 PM - 04:40 PM	50.9	48.9
11:20 AM - 11:25 AM	55.9	49.5	02:00 PM - 02:05 PM	50.8	48.6	04:40 PM - 04:45 PM	54.5	49.5
11:25 AM - 11:30 AM	55.2	49.4	02:05 PM - 02:10 PM	55.2	49.4	04:45 PM - 04:50 PM	52.4	48.5
11:30 AM - 11:35 AM	55.0	49.2	02:10 PM - 02:15 PM	51.9	49.6	04:50 PM - 04:55 PM	53.9	49.3
11:35 AM - 11:40 AM	58.0	49.0	02:15 PM - 02:20 PM	53.3	51.2	04:55 PM - 05:00 PM	52.6	49.2
11:40 AM - 11:45 AM	55.2	49.1	02:20 PM - 02:25 PM	53.2	50.7	05:00 PM - 05:05 PM	51.2	48.8
11:45 AM - 11:50 AM	55.3	49.5	02:25 PM - 02:30 PM	52.4	50.1	05:05 PM - 05:10 PM	50.1	48.7
11:50 AM - 11:55 AM	51.5	48.3	02:30 PM - 02:35 PM	53.1	49.4	05:10 PM - 05:15 PM	50.7	48.9
11:55 AM - 12:00 PM	56.1	48.2	02:35 PM - 02:40 PM	51.3	49.0	05:15 PM - 05:20 PM	50.7	48.3
12:00 PM - 12:05 PM	54.5	48.4	02:40 PM - 02:45 PM	51.8	49.4	05:20 PM - 05:25 PM	51.8	48.5
12:05 PM - 12:10 PM	51.2	48.6	02:45 PM - 02:50 PM	50.0	48.5	05:25 PM - 05:30 PM	52.2	48.2
12:10 PM - 12:15 PM	53.8	48.5	02:50 PM - 02:55 PM	50.5	48.7	05:30 PM - 05:35 PM	50.6	48.2
12:15 PM - 12:20 PM	52.9	47.5	02:55 PM - 03:00 PM	50.9	49.1	05:35 PM - 05:40 PM	50.9	48.0
12:20 PM - 12:25 PM	52.9	48.8	03:00 PM - 03:05 PM	50.8	49.0	05:40 PM - 05:45 PM	49.2	47.8
12:25 PM - 12:30 PM	50.5	48.3	03:05 PM - 03:10 PM	51.3	48.3	05:45 PM - 05:50 PM	49.2	47.9
12:30 PM - 12:35 PM	52.0	49.1	03:10 PM - 03:15 PM	50.9	48.5	05:50 PM - 05:55 PM	51.4	49.3
12:35 PM - 12:40 PM	52.8	48.7	03:15 PM - 03:20 PM	51.3	49.1	05:55 PM - 06:00 PM	57.0	49.9
12:40 PM - 12:45 PM	51.6	49.6	03:20 PM - 03:25 PM	49.5	48.0	06:00 PM - 06:05 PM	53.5	50.8
12:45 PM - 12:50 PM	52.8	49.1	03:25 PM - 03:30 PM	50.0	48.4	06:05 PM - 06:10 PM	52.1	49.9
12:50 PM - 12:55 PM	53.4	50.5	03:30 PM - 03:35 PM	51.0	48.7	06:10 PM - 06:15 PM	55.3	51.9
12:55 PM - 01:00 PM	52.5	49.7	03:35 PM - 03:40 PM	49.0	47.7	06:15 PM - 06:20 PM	55.7	51.7
01:00 PM - 01:05 PM	52.9	50.5	03:40 PM - 03:45 PM	49.1	47.7	06:20 PM - 06:25 PM	53.5	51.0
01:05 PM - 01:10 PM	52.0	49.8	03:45 PM - 03:50 PM	49.3	48.0	06:25 PM - 06:30 PM	53.0	50.7
01:10 PM - 01:15 PM	52.1	49.6	03:50 PM - 03:55 PM	49.5	47.9	06:30 PM - 06:35 PM	51.5	49.8
01:15 PM - 01:20 PM	51.9	49.2	03:55 PM - 04:00 PM	49.6	48.0	06:35 PM - 06:40 PM	49.5	48.7
01:20 PM - 01:25 PM	51.0	49.1	04:00 PM - 04:05 PM	51.9	48.2	06:40 PM - 06:45 PM	51.7	48.7
01:25 PM - 01:30 PM	51.5	48.6	04:05 PM - 04:10 PM	50.0	48.0	06:45 PM - 06:50 PM	49.5	48.3
01:30 PM - 01:35 PM	50.6	48.6	04:10 PM - 04:15 PM	50.8	48.2	06:50 PM - 06:55 PM	50.5	49.4
01:35 PM - 01:40 PM	53.0	49.7	04:15 PM - 04:20 PM	50.3	48.1	06:55 PM - 07:00 PM	51.3	49.8

Approved by
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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022963-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-3
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุษราคา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31 - Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	50.8	49.6	09:40 PM - 09:45 PM	49.5	48.5	12:20 AM - 12:25 AM	51.2	49.3
07:05 PM - 07:10 PM	51.2	49.9	09:45 PM - 09:50 PM	49.3	48.7	12:25 AM - 12:30 AM	51.0	49.0
07:10 PM - 07:15 PM	51.1	49.9	09:50 PM - 09:55 PM	49.6	48.7	12:30 AM - 12:35 AM	51.0	49.1
07:15 PM - 07:20 PM	54.4	51.8	09:55 PM - 10:00 PM	49.2	48.5	12:35 AM - 12:40 AM	51.4	49.3
07:20 PM - 07:25 PM	55.7	54.9	10:00 PM - 10:05 PM	49.6	48.5	12:40 AM - 12:45 AM	51.8	50.0
07:25 PM - 07:30 PM	56.4	55.2	10:05 PM - 10:10 PM	49.2	48.3	12:45 AM - 12:50 AM	52.9	51.1
07:30 PM - 07:35 PM	60.8	59.0	10:10 PM - 10:15 PM	49.4	48.4	12:50 AM - 12:55 AM	52.7	51.0
07:35 PM - 07:40 PM	61.9	60.0	10:15 PM - 10:20 PM	49.2	48.3	12:55 AM - 01:00 AM	52.9	51.2
07:40 PM - 07:45 PM	57.4	54.3	10:20 PM - 10:25 PM	49.4	48.2	01:00 AM - 01:05 AM	53.2	51.5
07:45 PM - 07:50 PM	55.0	52.8	10:25 PM - 10:30 PM	49.8	48.2	01:05 AM - 01:10 AM	53.6	51.8
07:50 PM - 07:55 PM	53.5	51.3	10:30 PM - 10:35 PM	48.9	48.4	01:10 AM - 01:15 AM	53.5	52.0
07:55 PM - 08:00 PM	52.4	50.6	10:35 PM - 10:40 PM	49.0	48.5	01:15 AM - 01:20 AM	53.8	52.2
08:00 PM - 08:05 PM	52.3	51.1	10:40 PM - 10:45 PM	49.6	49.0	01:20 AM - 01:25 AM	53.5	51.9
08:05 PM - 08:10 PM	53.1	50.6	10:45 PM - 10:50 PM	50.6	49.9	01:25 AM - 01:30 AM	53.6	52.1
08:10 PM - 08:15 PM	51.8	50.4	10:50 PM - 10:55 PM	52.3	51.1	01:30 AM - 01:35 AM	53.7	52.3
08:15 PM - 08:20 PM	55.0	50.8	10:55 PM - 11:00 PM	54.0	52.7	01:35 AM - 01:40 AM	53.2	51.6
08:20 PM - 08:25 PM	51.9	50.6	11:00 PM - 11:05 PM	54.1	52.3	01:40 AM - 01:45 AM	53.0	51.5
08:25 PM - 08:30 PM	51.6	50.2	11:05 PM - 11:10 PM	55.7	54.1	01:45 AM - 01:50 AM	53.5	51.9
08:30 PM - 08:35 PM	51.4	50.1	11:10 PM - 11:15 PM	51.6	50.0	01:50 AM - 01:55 AM	53.5	52.0
08:35 PM - 08:40 PM	50.8	50.1	11:15 PM - 11:20 PM	52.2	50.4	01:55 AM - 02:00 AM	53.6	52.1
08:40 PM - 08:45 PM	51 0	49.7	11:20 PM - 11:25 PM	52.8	51.1	02:00 AM - 02:05 AM	53.9	52.3
08:45 PM - 08:50 PM	50.6	49.2	11:25 PM - 11:30 PM	52.7	51.1	02:05 AM - 02:10 AM	53.2	51.6
08:50 PM - 08:55 PM	51.2	49.6	11:30 PM - 11:35 PM	52.6	50.9	02:10 AM - 02:15 AM	52.4	50.9
08:55 PM - 09:00 PM	50.2	49.4	11:35 PM - 11:40 PM	52.7	51.1	02:15 AM - 02:20 AM	52.2	50.4
09:00 PM - 09:05 PM	49.8	49.0	11:40 PM - 11:45 PM	53.6	52.1	02:20 AM - 02:25 AM	51.6	49.7
09:05 PM - 09:10 PM	50.1	49.2	11:45 PM - 11:50 PM	53.9	52.3	02:25 AM - 02:30 AM	50.7	48.7
09:10 PM - 09:15 PM	49.9	49.2	11:50 PM - 11:55 PM	53.7	52.1	02:30 AM - 02:35 AM	50.1	48.1
09:15 PM - 09:20 PM	49.5	48.8	11:55 PM - 12:00 AM	53.6	52.1	02:35 AM - 02:40 AM	49.8	47.8
09:20 PM - 09:25 PM	50.0	48.9	12:00 AM - 12:05 AM	53.3	51.7	02:40 AM - 02:45 AM	49.4	47.4
09:25 PM - 09:30 PM	49.5	48.8	12:05 AM - 12:10 AM	53.2	51.5	02:45 AM - 02:50 AM	53.5	51.7
09:30 PM - 09:35 PM	51.4	48.9	12:10 AM - 12:15 AM	53.0	51.1	02:50 AM - 02:55 AM	53.3	51.3
09:35 PM - 09:40 PM	49.4	48.5	12:15 AM - 12:20 AM	52.1	50.2	02:55 AM - 03:00 AM	52.6	50.7

Approved by
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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022963-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-3
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูรพา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
03:00 AM - 03:05 AM	52.3	50.4	05:40 AM - 05:45 AM	51.0	48.2	08:20 AM - 08:25 AM	53.0	49.6
03:05 AM - 03:10 AM	52.4	50.4	05:45 AM - 05:50 AM	50.3	48.0	08:25 AM - 08:30 AM	53.2	49.6
03:10 AM - 03:15 AM	52.0	50.1	05:50 AM - 05:55 AM	51.3	48.0	08:30 AM - 08:35 AM	56.3	50.6
03:15 AM - 03:20 AM	51.8	49.9	05:55 AM - 06:00 AM	51.5	47.9	08:35 AM - 08:40 AM	53.1	49.8
03:20 AM - 03:25 AM	51.4	49.5	06:00 AM - 06:05 AM	56.3	47.7	08:40 AM - 08:45 AM	56.4	49.7
03:25 AM - 03:30 AM	51.1	49.4	06:05 AM - 06:10 AM	50.0	47.6	08:45 AM - 08:50 AM	55.3	50.0
03:30 AM - 03:35 AM	51.2	49.2	06:10 AM - 06:15 AM	49.8	47.6	08:50 AM - 08:55 AM	53.3	49.6
03:35 AM - 03:40 AM	50.9	49.2	06:15 AM - 06:20 AM	49.8	47.6	08:55 AM - 09:00 AM	54.8	49.8
03:40 AM - 03:45 AM	50.8	49.2	06:20 AM - 06:25 AM	52.6	47.7	09:00 AM - 09:05 AM	53.5	50.1
03:45 AM - 03:50 AM	50.9	49.1	06:25 AM - 06:30 AM	52.8	47.8	09:05 AM - 09:10 AM	53.8	50.0
03:50 AM - 03:55 AM	50.5	48.8	06:30 AM - 06:35 AM	49.8	47.4	09:10 AM - 09:15 AM	52.8	49.4
03:55 AM - 04:00 AM	50.2	48.8	06:35 AM - 06:40 AM	51.0	47.6	09:15 AM - 09:20 AM	52.5	49.0
04:00 AM - 04:05 AM	50.7	48.9	06:40 AM - 06:45 AM	51.6	47.8	09:20 AM - 09:25 AM	50.7	48.3
04:05 AM - 04:10 AM	50.8	49.0	06:45 AM - 06:50 AM	51.5	47.7	09:25 AM - 09:30 AM	51.1	48.3
04:10 AM - 04:15 AM	50.8	49.0	06:50 AM - 06:55 AM	52.5	47.7	09:30 AM - 09:35 AM	53.7	49.0
04:15 AM - 04:20 AM	51.2	49.1	06:55 AM - 07:00 AM	52.7	47.5	09:35 AM - 09:40 AM	55.4	49.4
04:20 AM - 04:25 AM	53.6	49.4	07:00 AM - 07:05 AM	53.7	49.6	09:40 AM - 09:45 AM	55.1	49.4
04:25 AM - 04:30 AM	52.8	49.3	07:05 AM - 07:10 AM	53.1	49.6	09:45 AM - 09:50 AM	54.5	49.9
04:30 AM - 04:35 AM	51.8	49.2	07:10 AM - 07:15 AM	51.5	49.3	09:50 AM - 09:55 AM	50.7	48.8
04:35 AM - 04:40 AM	52.8	49.3	07:15 AM - 07:20 AM	51.8	49.0	09:55 AM - 10:00 AM	51.3	49.0
04:40 AM - 04:45 AM	51.8	49.4	07:20 AM - 07:25 AM	49.7	48.7	10:00 AM - 10:05 AM	55.9	48.5
04:45 AM - 04:50 AM	51.5	49.6	07:25 AM - 07:30 AM	55.5	48.9	10:05 AM - 10:10 AM	55.4	48.9
04:50 AM - 04:55 AM	52.6	49.6	07:30 AM - 07:35 AM	54.2	49.1	10:10 AM - 10:15 AM	57.2	49.5
04:55 AM - 05:00 AM	54.2	50.6	07:35 AM - 07:40 AM	50.9	49.1	10:15 AM - 10:20 AM	51.1	49.0
05:00 AM - 05:05 AM	57.5	50.5	07:40 AM - 07:45 AM	54.5	49.1	10:20 AM - 10:25 AM	62.8	48.6
05:05 AM - 05:10 AM	53.0	50.7	07:45 AM - 07:50 AM	52.4	49.6	10:25 AM - 10:30 AM	53.0	48.9
05:10 AM - 05:15 AM	52.9	50.2	07:50 AM - 07:55 AM	51.9	50.1	10:30 AM - 10:35 AM	51.5	48.3
05:15 AM - 05:20 AM	52.7	49.8	07:55 AM - 08:00 AM	53.1	50.4	10:35 AM - 10:40 AM	53.0	49.5
05:20 AM - 05:25 AM	54.8	49.5	08:00 AM - 08:05 AM	54.8	49.3	10:40 AM - 10:45 AM	55.0	50.1
05:25 AM - 05:30 AM	53.4	49.3	08:05 AM - 08:10 AM	54.0	49.6	10:45 AM - 10:50 AM	53.3	48.7
05:30 AM - 05:35 AM	53.2	48.7	08:10 AM - 08:15 AM	57.3	49.6	10:50 AM - 10:55 AM	52.6	49.1
05:35 AM - 05:40 AM	52.5	48.3	08:15 AM - 08:20 AM	53.7	50.2	10:55 AM - 11:00 AM	50.5	48.5

The above results are valid only for the sample(s) tested(s) as indicated in this report. No part of this report or use it state 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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022964-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-4
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	50.8	48.6	01:40 PM - 01:45 PM	57.8	51.2	04:20 PM - 04:25 PM	50.4	48.1
11:05 AM - 11:10 AM	55.7	49.6	01:45 PM - 01:50 PM	53.2	50.2	04:25 PM - 04:30 PM	48.6	47.7
11:10 AM - 11:15 AM	52.6	49.3	01:50 PM - 01:55 PM	56.1	50.1	04:30 PM - 04:35 PM	48.5	47.5
11:15 AM - 11:20 AM	51.3	48.7	01:55 PM - 02:00 PM	52.3	48.8	04:35 PM - 04:40 PM	48.6	47.7
11:20 AM - 11:25 AM	52.5	49.2	02:00 PM - 02:05 PM	54.9	50.9	04:40 PM - 04:45 PM	49.8	48.1
11:25 AM - 11:30 AM	51.8	48.8	02:05 PM - 02:10 PM	55.2	49.9	04:45 PM - 04:50 PM	50.4	48.6
11:30 AM - 11:35 AM	50.9	48.5	02:10 PM - 02:15 PM	53.9	49.6	04:50 PM - 04:55 PM	49.7	47.8
11:35 AM - 11:40 AM	53.8	49.4	02:15 PM - 02:20 PM	54.6	49.1	04:55 PM - 05:00 PM	48.7	47.4
11:40 AM - 11:45 AM	54.7	50.2	02:20 PM - 02:25 PM	52.7	48.6	05:00 PM - 05:05 PM	49.0	47.7
11:45 AM - 11:50 AM	54.6	49.9	02:25 PM - 02:30 PM	54.3	49.7	05:05 PM - 05:10 PM	51.2	48.1
11:50 AM - 11:55 AM	53.1	49.3	02:30 PM - 02:35 PM	53.7	49.0	05:10 PM - 05:15 PM	55.5	48.1
11:55 AM - 12:00 PM	51.7	48.6	02:35 PM - 02:40 PM	51.8	49.1	05:15 PM - 05:20 PM	49.9	48.5
12:00 PM - 12:05 PM	55.7	49.4	02:40 PM - 02:45 PM	53.8	49.9	05:20 PM - 05:25 PM	50.1	48.5
12:05 PM - 12:10 PM	57.9	51.9	02:45 PM - 02:50 PM	55.7	50.1	05:25 PM - 05:30 PM	51.1	49.0
12:10 PM - 12:15 PM	55.6	50.2	02:50 PM - 02:55 PM	51.0	48.8	05:30 PM - 05:35 PM	52.7	48.3
12:15 PM - 12:20 PM	56.3	51.1	02:55 PM - 03:00 PM	51.5	49.1	05:35 PM - 05:40 PM	51.2	48.6
12:20 PM - 12:25 PM	57.9	50.5	03:00 PM - 03:05 PM	50.8	48.8	05:40 PM - 05:45 PM	50.7	48.6
12:25 PM - 12:30 PM	55.2	49.8	03:05 PM - 03:10 PM	51.1	48.9	05:45 PM - 05:50 PM	50.5	48.9
12:30 PM - 12:35 PM	52.6	49.1	03:10 PM - 03:15 PM	51.5	47.7	05:50 PM - 05:55 PM	49.8	48.6
12:35 PM - 12:40 PM	58.2	49.9	03:15 PM - 03:20 PM	52.3	48.0	05:55 PM - 06:00 PM	49.1	47.9
12:40 PM - 12:45 PM	58.0	51.3	03:20 PM - 03:25 PM	54.2	49.7	06:00 PM - 06:05 PM	51.5	48.5
12:45 PM - 12:50 PM	55.1	51.1	03:25 PM - 03:30 PM	50.2	48.0	06:05 PM - 06:10 PM	50.4	48.8
12:50 PM - 12:55 PM	55.6	49.3	03:30 PM - 03:35 PM	50.9	48.1	06:10 PM - 06:15 PM	51.0	48.1
12:55 PM - 01:00 PM	55.1	48.8	03:35 PM - 03:40 PM	50.8	48.1	06:15 PM - 06:20 PM	51.1	48.3
01:00 PM - 01:05 PM	55.1	49.6	03:40 PM - 03:45 PM	50.2	48.4	06:20 PM - 06:25 PM	50.1	48.6
01:05 PM - 01:10 PM	52.2	49.7	03:45 PM - 03:50 PM	50.5	48.0	06:25 PM - 06:30 PM	50.0	48.7
01:10 PM - 01:15 PM	51.8	48.9	03:50 PM - 03:55 PM	50.5	47.8	06:30 PM - 06:35 PM	50.2	49.2
01:15 PM - 01:20 PM	55.3	49.7	03:55 PM - 04:00 PM	54.1	48.1	06:35 PM - 06:40 PM	49.9	49.0
01:20 PM - 01:25 PM	56.2	51.5	04:00 PM - 04:05 PM	53.9	48.1	06:40 PM - 06:45 PM	49.8	49.0
01:25 PM - 01:30 PM	53.3	49.7	04:05 PM - 04:10 PM	53.5	48.6	06:45 PM - 06:50 PM	50.2	48.8
01:30 PM - 01:35 PM	54.8	49.3	04:10 PM - 04:15 PM	53.2	48.6	06:50 PM - 06:55 PM	50.4	49.5
01:35 PM - 01:40 PM	54.5	49.8	04:15 PM - 04:20 PM	48.7	47.7	06:55 PM - 07:00 PM	52.0	50.2

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Assistant General Manager

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Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022964-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-4
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01 - Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	50.2	49.7	09:40 PM - 09:45 PM	49.4	48.7	12:20 AM - 12:25 AM	51.3	50.4
07:05 PM - 07:10 PM	50.2	49.7	09:45 PM - 09:50 PM	49.5	49.0	12:25 AM - 12:30 AM	51.5	50.4
07:10 PM - 07:15 PM	50.6	49.8	09:50 PM - 09:55 PM	49.8	48.9	12:30 AM - 12:35 AM	51.5	50.5
07:15 PM - 07:20 PM	51.0	49.8	09:55 PM - 10:00 PM	50.6	49.3	12:35 AM - 12:40 AM	51.0	49.7
07:20 PM - 07:25 PM	50.5	49.9	10:00 PM - 10:05 PM	50.0	49.2	12:40 AM - 12:45 AM	50.2	49.0
07:25 PM - 07:30 PM	50.5	49.9	10:05 PM - 10:10 PM	50.0	49.2	12:45 AM - 12:50 AM	49.7	48.6
07:30 PM - 07:35 PM	50.4	49.6	10:10 PM - 10:15 PM	49.8	49.2	12:50 AM - 12:55 AM	49.1	48.3
07:35 PM - 07:40 PM	50.4	49.8	10:15 PM - 10:20 PM	50.7	49.5	12:55 AM - 01:00 AM	49.1	48.4
07:40 PM - 07:45 PM	51.9	49.7	10:20 PM - 10:25 PM	50.2	49.2	01:00 AM - 01:05 AM	49.1	48.3
07:45 PM - 07:50 PM	50.4	49.8	10:25 PM - 10:30 PM	50.0	49.0	01:05 AM - 01:10 AM	49.2	48.2
07:50 PM - 07:55 PM	50.8	50.2	10:30 PM - 10:35 PM	50.1	48.8	01:10 AM - 01:15 AM	49.0	48.0
07:55 PM - 08:00 PM	51.1	50.0	10:35 PM - 10:40 PM	49.8	48.8	01:15 AM - 01:20 AM	48.6	48.0
08:00 PM - 08:05 PM	50.5	50.0	10:40 PM - 10:45 PM	50.3	49.2	01:20 AM - 01:25 AM	48.7	48.1
08:05 PM - 08:10 PM	51.2	49.6	10:45 PM - 10:50 PM	50.1	49.1	01:25 AM - 01:30 AM	48.5	48.1
08:10 PM - 08:15 PM	51.2	49.6	10:50 PM - 10:55 PM	50.0	49.2	01:30 AM - 01:35 AM	48.5	48.1
08:15 PM - 08:20 PM	50.3	49.6	10:55 PM - 11:00 PM	50.9	49.4	01:35 AM - 01:40 AM	48.8	48.1
08:20 PM - 08:25 PM	50.1	49.4	11:00 PM - 11:05 PM	50.1	49.2	01:40 AM - 01:45 AM	48.7	48.3
08:25 PM - 08:30 PM	49.9	49.3	11:05 PM - 11:10 PM	50.1	49.0	01:45 AM - 01:50 AM	48.8	48.2
08:30 PM - 08:35 PM	50.0	49.3	11:10 PM - 11:15 PM	50.0	49.0	01:50 AM - 01:55 AM	49.0	48.6
08:35 PM - 08:40 PM	50.3	49.4	11:15 PM - 11:20 PM	50.2	49.1	01:55 AM - 02:00 AM	49.0	48.4
08:40 PM - 08:45 PM	50.3	49.4	11:20 PM - 11:25 PM	51.5	50.2	02:00 AM - 02:05 AM	48.7	48.1
08:45 PM - 08:50 PM	49.9	49.3	11:25 PM - 11:30 PM	51.0	50.0	02:05 AM - 02:10 AM	48.4	47.9
08:50 PM - 08:55 PM	50.3	49.3	11:30 PM - 11:35 PM	50.1	49.5	02:10 AM - 02:15 AM	48.6	48.0
08:55 PM - 09:00 PM	50.3	49.5	11:35 PM - 11:40 PM	50.1	49.6	02:15 AM - 02:20 AM	48.3	47.8
09:00 PM - 09:05 PM	50.0	49.1	11:40 PM - 11:45 PM	50.4	49.7	02:20 AM - 02:25 AM	48.8	48.1
09:05 PM - 09:10 PM	49.8	49.2	11:45 PM - 11:50 PM	50.6	49.6	02:25 AM - 02:30 AM	48.6	48.3
09:10 PM - 09:15 PM	49.6	49.0	11:50 PM - 11:55 PM	50.3	49.7	02:30 AM - 02:35 AM	53.6	48.7
09:15 PM - 09:20 PM	49.7	49.1	11:55 PM - 12:00 AM	51.0	50.2	02:35 AM - 02:40 AM	52.7	48.3
09:20 PM - 09:25 PM	49.8	49.0	12:00 AM - 12:05 AM	51.0	50.1	02:40 AM - 02:45 AM	51.5	48.3
09:25 PM - 09:30 PM	49.7	48.9	12:05 AM - 12:10 AM	50.9	50.1	02:45 AM - 02:50 AM	49.7	48.0
09:30 PM - 09:35 PM	49.5	48.9	12:10 AM - 12:15 AM	52.6	50.6	02:50 AM - 02:55 AM	48.6	47.8
09:35 PM - 09:40 PM	49.3	48.6	12:15 AM - 12:20 AM	51.5	50.7	02:55 AM - 03:00 AM	48.2	47.6

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Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022964-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample Number 2450167-4
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
03:00 AM - 03:05 AM	48.3	47.7	05:40 AM - 05:45 AM	51.1	50.0	08:20 AM - 08:25 AM	56.4	49.4
03:05 AM - 03:10 AM	48.0	47.3	05:45 AM - 05:50 AM	55.0	49.9	08:25 AM - 08:30 AM	53.8	48.5
03:10 AM - 03:15 AM	47.9	47.4	05:50 AM - 05:55 AM	52.4	50.0	08:30 AM - 08:35 AM	54.3	48.9
03:15 AM - 03:20 AM	48.3	47.5	05:55 AM - 06:00 AM	51.4	49.5	08:35 AM - 08:40 AM	52.9	49.0
03:20 AM - 03:25 AM	47.8	47.2	06:00 AM - 06:05 AM	50.5	49.3	08:40 AM - 08:45 AM	52.2	48.8
03:25 AM - 03:30 AM	48.1	47.4	06:05 AM - 06:10 AM	50.5	49.2	08:45 AM - 08:50 AM	53.8	49.2
03:30 AM - 03:35 AM	48.3	47.4	06:10 AM - 06:15 AM	52.0	49.4	08:50 AM - 08:55 AM	52.5	48.8
03:35 AM - 03:40 AM	48.5	47.3	06:15 AM - 06:20 AM	51.9	49.1	08:55 AM - 09:00 AM	55.9	49.0
03:40 AM - 03:45 AM	48.2	47.4	06:20 AM - 06:25 AM	52.8	49.6	09:00 AM - 09:05 AM	50.4	47.8
03:45 AM - 03:50 AM	48.2	47.3	06:25 AM - 06:30 AM	51.6	49.1	09:05 AM - 09:10 AM	52.6	48.8
03:50 AM - 03:55 AM	48.6	47.5	06:30 AM - 06:35 AM	54.3	49.2	09:10 AM - 09:15 AM	53.3	49.8
03:55 AM - 04:00 AM	48.2	47.4	06:35 AM - 06:40 AM	54.5	49.4	09:15 AM - 09:20 AM	54.6	49.8
04:00 AM - 04:05 AM	47.6	47.1	06:40 AM - 06:45 AM	51.1	49.2	09:20 AM - 09:25 AM	52.5	49.6
04:05 AM - 04:10 AM	48.4	47.2	06:45 AM - 06:50 AM	50.9	48.9	09:25 AM - 09:30 AM	52.2	48.6
04:10 AM - 04:15 AM	48.0	47.2	06:50 AM - 06:55 AM	53.8	49.3	09:30 AM - 09:35 AM	55.4	49.5
04:15 AM - 04:20 AM	48.8	47.3	06:55 AM - 07:00 AM	52.0	49.4	09:35 AM - 09:40 AM	53.1	48.9
04:20 AM - 04:25 AM	49.0	47.6	07:00 AM - 07:05 AM	52.6	49.5	09:40 AM - 09:45 AM	54.3	49.5
04:25 AM - 04:30 AM	48.7	47.6	07:05 AM - 07:10 AM	51.7	49.2	09:45 AM - 09:50 AM	52.2	48.6
04:30 AM - 04:35 AM	48.7	47.7	07:10 AM - 07:15 AM	52.8	49.3	09:50 AM - 09:55 AM	51.9	48.5
04:35 AM - 04:40 AM	48.8	47.8	07:15 AM - 07:20 AM	51.1	49.1	09:55 AM - 10:00 AM	55.8	49.0
04:40 AM - 04:45 AM	48.9	47.9	07:20 AM - 07:25 AM	51.7	48.7	10:00 AM - 10:05 AM	51.5	48.3
04:45 AM - 04:50 AM	48.5	47.5	07:25 AM - 07:30 AM	52.5	48.9	10:05 AM - 10:10 AM	52.2	49.0
04:50 AM - 04:55 AM	49.6	48.6	07:30 AM - 07:35 AM	51.1	48.0	10:10 AM - 10:15 AM	55.6	48.1
04:55 AM - 05:00 AM	51.2	48.2	07:35 AM - 07:40 AM	51.6	47.9	10:15 AM - 10:20 AM	53.2	48.8
05:00 AM - 05:05 AM	51.5	48.9	07:40 AM - 07:45 AM	54.3	48.0	10:20 AM - 10:25 AM	54.5	48.7
05:05 AM - 05:10 AM	51.9	48.4	07:45 AM - 07:50 AM	51.5	47.7	10:25 AM - 10:30 AM	51.4	48.9
05:10 AM - 05:15 AM	50.8	48.8	07:50 AM - 07:55 AM	48.8	47.4	10:30 AM - 10:35 AM	54.9	50.0
05:15 AM - 05:20 AM	49.9	49.1	07:55 AM - 08:00 AM	51.2	48.0	10:35 AM - 10:40 AM	52.7	48.9
05:20 AM - 05:25 AM	52.0	49.5	08:00 AM - 08:05 AM	51.6	48.1	10:40 AM - 10:45 AM	53.5	49.3
05:25 AM - 05:30 AM	50.4	49.3	08:05 AM - 08:10 AM	51.1	47.8	10:45 AM - 10:50 AM	52.9	49.1
05:30 AM - 05:35 AM	52.3	49.3	08:10 AM - 08:15 AM	54.6	49.4	10:50 AM - 10:55 AM	53.3	48.8
05:35 AM - 05:40 AM	51.0	49.4	08:15 AM - 08:20 AM	51.8	48.9	10:55 AM - 11:00 AM	52.1	49.1

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022965-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-5
Parameter Noise Level (Leq 5 min)
Location NL : หมู่บ้านบูรพา
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	52.8	49.0	01:40 PM - 01:45 PM	53.1	49.9	04:20 PM - 04:25 PM	51.8	49.3
11:05 AM - 11:10 AM	55.1	50.1	01:45 PM - 01:50 PM	54.3	49.3	04:25 PM - 04:30 PM	50.9	49.2
11:10 AM - 11:15 AM	54.4	49.3	01:50 PM - 01:55 PM	54.0	50.3	04:30 PM - 04:35 PM	51.2	49.1
11:15 AM - 11:20 AM	55.7	50.1	01:55 PM - 02:00 PM	54.4	50.3	04:35 PM - 04:40 PM	51.0	48.8
11:20 AM - 11:25 AM	52.5	48.3	02:00 PM - 02:05 PM	55.6	49.9	04:40 PM - 04:45 PM	53.2	48.9
11:25 AM - 11:30 AM	51.8	48.1	02:05 PM - 02:10 PM	55.5	52.1	04:45 PM - 04:50 PM	53.0	49.0
11:30 AM - 11:35 AM	52.4	49.9	02:10 PM - 02:15 PM	54.7	51.1	04:50 PM - 04:55 PM	51.0	48.8
11:35 AM - 11:40 AM	52.5	49.4	02:15 PM - 02:20 PM	53.9	48.9	04:55 PM - 05:00 PM	50.5	48.6
11:40 AM - 11:45 AM	53.1	49.2	02:20 PM - 02:25 PM	55.4	49.3	05:00 PM - 05:05 PM	53.9	49.2
11:45 AM - 11:50 AM	53.2	49.5	02:25 PM - 02:30 PM	52.6	49.7	05:05 PM - 05:10 PM	51.3	49.5
11:50 AM - 11:55 AM	54.8	49.7	02:30 PM - 02:35 PM	50.8	48.4	05:10 PM - 05:15 PM	51.8	48.6
11:55 AM - 12:00 PM	53.0	50.0	02:35 PM - 02:40 PM	51.7	48.9	05:15 PM - 05:20 PM	51.9	48.8
12:00 PM - 12:05 PM	51.7	49.2	02:40 PM - 02:45 PM	60.1	48.9	05:20 PM - 05:25 PM	50.9	48.5
12:05 PM - 12:10 PM	51.7	50.5	02:45 PM - 02:50 PM	57.1	49.0	05:25 PM - 05:30 PM	50.2	47.4
12:10 PM - 12:15 PM	54.8	48.4	02:50 PM - 02:55 PM	54.7	48.7	05:30 PM - 05:35 PM	50.9	47.7
12:15 PM - 12:20 PM	54.3	49.8	02:55 PM - 03:00 PM	51.8	49.7	05:35 PM - 05:40 PM	51.9	47.9
12:20 PM - 12:25 PM	53.8	50.3	03:00 PM - 03:05 PM	53.3	49.7	05:40 PM - 05:45 PM	52.0	47.9
12:25 PM - 12:30 PM	52.1	48.7	03:05 PM - 03:10 PM	53.6	51.1	05:45 PM - 05:50 PM	49.6	47.6
12:30 PM - 12:35 PM	52.2	48.5	03:10 PM - 03:15 PM	54.1	49.3	05:50 PM - 05:55 PM	50.4	47.9
12:35 PM - 12:40 PM	56.6	49.8	03:15 PM - 03:20 PM	53.9	50.8	05:55 PM - 06:00 PM	51.7	48.1
12:40 PM - 12:45 PM	53.3	48.3	03:20 PM - 03:25 PM	54.2	51.0	06:00 PM - 06:05 PM	51.5	48.4
12:45 PM - 12:50 PM	52.6	49.3	03:25 PM - 03:30 PM	55.8	50.4	06:05 PM - 06:10 PM	52.9	50.5
12:50 PM - 12:55 PM	55.1	48.9	03:30 PM - 03:35 PM	54.8	51.5	06:10 PM - 06:15 PM	50.4	48.6
12:55 PM - 01:00 PM	54.6	48.3	03:35 PM - 03:40 PM	56.0	52.1	06:15 PM - 06:20 PM	51.6	49.0
01:00 PM - 01:05 PM	54.6	49.1	03:40 PM - 03:45 PM	53.7	51.1	06:20 PM - 06:25 PM	51.0	49.1
01:05 PM - 01:10 PM	51.7	49.2	03:45 PM - 03:50 PM	53.9	50.2	06:25 PM - 06:30 PM	51.8	49.0
01:10 PM - 01:15 PM	51.3	48.4	03:50 PM - 03:55 PM	53.7	52.0	06:30 PM - 06:35 PM	50.8	48.8
01:15 PM - 01:20 PM	54.8	49.2	03:55 PM - 04:00 PM	55.0	51.5	06:35 PM - 06:40 PM	51.4	48.8
01:20 PM - 01:25 PM	55.7	51.0	04:00 PM - 04:05 PM	53.9	49.6	06:40 PM - 06:45 PM	49.8	47.7
01:25 PM - 01:30 PM	52.8	49.2	04:05 PM - 04:10 PM	52.7	49.9	06:45 PM - 06:50 PM	50.2	47.9
01:30 PM - 01:35 PM	51.6	49.0	04:10 PM - 04:15 PM	52.3	49.9	06:50 PM - 06:55 PM	50.0	47.7
01:35 PM - 01:40 PM	54.8	49.8	04:15 PM - 04:20 PM	52.5	49.9	06:55 PM - 07:00 PM	57.5	48.4

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022965-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-5
Parameter Noise Level (Leq 5 min)
Location NL : หมู่บ้านบูรพา
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02 - Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	51.2	49.0	09:40 PM - 09:45 PM	49.2	47.9	12:20 AM - 12:25 AM	48.2	47.0
07:05 PM - 07:10 PM	50.2	48.9	09:45 PM - 09:50 PM	49.2	47.8	12:25 AM - 12:30 AM	47.9	46.9
07:10 PM - 07:15 PM	50.6	49.2	09:50 PM - 09:55 PM	49.3	47.9	12:30 AM - 12:35 AM	48.1	46.8
07:15 PM - 07:20 PM	51.4	49.4	09:55 PM - 10:00 PM	49.6	48.0	12:35 AM - 12:40 AM	47.6	46.8
07:20 PM - 07:25 PM	51.9	49.6	10:00 PM - 10:05 PM	48.9	47.7	12:40 AM - 12:45 AM	47.4	46.6
07:25 PM - 07:30 PM	51.3	49.6	10:05 PM - 10:10 PM	48.4	47.5	12:45 AM - 12:50 AM	47.2	46.1
07:30 PM - 07:35 PM	51.6	49.8	10:10 PM - 10:15 PM	50.1	47.5	12:50 AM - 12:55 AM	47.2	46.3
07:35 PM - 07:40 PM	51.6	49.8	10:15 PM - 10:20 PM	50.8	47.4	12:55 AM - 01:00 AM	46.8	46.0
07:40 PM - 07:45 PM	50.9	49.6	10:20 PM - 10:25 PM	48.3	47.4	01:00 AM - 01:05 AM	47.0	46.2
07:45 PM - 07:50 PM	51.1	50.0	10:25 PM - 10:30 PM	47.9	47.3	01:05 AM - 01:10 AM	47.5	46.5
07:50 PM - 07:55 PM	52.0	50.0	10:30 PM - 10:35 PM	48.5	47.4	01:10 AM - 01:15 AM	47.4	46.5
07:55 PM - 08:00 PM	51.3	50.0	10:35 PM - 10:40 PM	48.6	47.5	01:15 AM - 01:20 AM	47.4	46.5
08:00 PM - 08:05 PM	51.3	49.9	10:40 PM - 10:45 PM	48.1	47.3	01:20 AM - 01:25 AM	47.1	46.1
08:05 PM - 08:10 PM	52.5	50.0	10:45 PM - 10:50 PM	47.9	47.4	01:25 AM - 01:30 AM	47.0	46.1
08:10 PM - 08:15 PM	51.2	49.8	10:50 PM - 10:55 PM	47.8	47.3	01:30 AM - 01:35 AM	47.0	46.2
08:15 PM - 08:20 PM	53.4	49.8	10:55 PM - 11:00 PM	48.5	47.0	01:35 AM - 01:40 AM	46.8	46.1
08:20 PM - 08:25 PM	52.8	49.9	11:00 PM - 11:05 PM	48.6	47.0	01:40 AM - 01:45 AM	46.9	46.1
08:25 PM - 08:30 PM	50.9	49.3	11:05 PM - 11:10 PM	47.5	46.9	01:45 AM - 01:50 AM	47.6	46.2
08:30 PM - 08:35 PM	51.5	49.7	11:10 PM - 11:15 PM	47.4	47.0	01:50 AM - 01:55 AM	49.7	46.2
08:35 PM - 08:40 PM	50.8	49.6	11:15 PM - 11:20 PM	47.4	47.0	01:55 AM - 02:00 AM	47.0	46.1
08:40 PM - 08:45 PM	53.4	49.7	11:20 PM - 11:25 PM	47.6	47.0	02:00 AM - 02:05 AM	47.5	45.9
08:45 PM - 08:50 PM	50.4	49.4	11:25 PM - 11:30 PM	48.2	47.4	02:05 AM - 02:10 AM	46.6	45.8
08:50 PM - 08:55 PM	51.6	49.6	11:30 PM - 11:35 PM	48.5	47.4	02:10 AM - 02:15 AM	46.4	45.5
08:55 PM - 09:00 PM	52.3	49.5	11:35 PM - 11:40 PM	48.5	47.1	02:15 AM - 02:20 AM	46.6	46.0
09:00 PM - 09:05 PM	49.8	48.6	11:40 PM - 11:45 PM	49.3	47.5	02:20 AM - 02:25 AM	46.5	46.0
09:05 PM - 09:10 PM	49.5	48.4	11:45 PM - 11:50 PM	48.3	47.3	02:25 AM - 02:30 AM	46.5	46.0
09:10 PM - 09:15 PM	52.4	48.9	11:50 PM - 11:55 PM	47.6	46.9	02:30 AM - 02:35 AM	47.1	46.4
09:15 PM - 09:20 PM	49.5	48.2	11:55 PM - 12:00 AM	47.5	46.8	02:35 AM - 02:40 AM	47.1	46.5
09:20 PM - 09:25 PM	49.9	48.4	12:00 AM - 12:05 AM	47.7	46.8	02:40 AM - 02:45 AM	48.7	46.8
09:25 PM - 09:30 PM	49.5	48.4	12:05 AM - 12:10 AM	47.2	46.7	02:45 AM - 02:50 AM	47.0	46.5
09:30 PM - 09:35 PM	49.1	48.0	12:10 AM - 12:15 AM	47.4	46.6	02:50 AM - 02:55 AM	47.6	46.9
09:35 PM - 09:40 PM	49.6	48.1	12:15 AM - 12:20 AM	48.4	47.0	02:55 AM - 03:00 AM	47.2	46.7

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Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022965-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-5
Parameter Noise Level (Leq 5 min)
Location NL : หมู่บ้านบูรพา
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
01:00 AM - 01:05 AM	48.6	46.7	05:40 AM - 05:45 AM	51.4	49.2	08:20 AM - 08:25 AM	52.0	49.6
01:05 AM - 01:10 AM	47.4	46.7	05:45 AM - 05:50 AM	52.5	49.0	08:25 AM - 08:30 AM	50.3	48.4
01:10 AM - 01:15 AM	48.2	46.7	05:50 AM - 05:55 AM	53.6	49.0	08:30 AM - 08:35 AM	51.4	47.7
01:15 AM - 01:20 AM	47.4	46.8	05:55 AM - 06:00 AM	53.3	49.5	08:35 AM - 08:40 AM	52.5	48.7
01:20 AM - 01:25 AM	47.6	46.9	06:00 AM - 06:05 AM	51.9	49.2	08:40 AM - 08:45 AM	52.4	48.5
01:25 AM - 01:30 AM	47.8	47.1	06:05 AM - 06:10 AM	51.8	49.4	08:45 AM - 08:50 AM	49.3	47.8
01:30 AM - 01:35 AM	47.4	46.7	06:10 AM - 06:15 AM	53.0	48.5	08:50 AM - 08:55 AM	51.0	48.1
01:35 AM - 01:40 AM	47.4	46.5	06:15 AM - 06:20 AM	53.1	48.5	08:55 AM - 09:00 AM	58.0	48.6
01:40 AM - 01:45 AM	47.5	46.6	06:20 AM - 06:25 AM	49.6	48.5	09:00 AM - 09:05 AM	50.9	48.3
01:45 AM - 01:50 AM	47.4	46.8	06:25 AM - 06:30 AM	50.7	48.3	09:05 AM - 09:10 AM	61.4	53.4
01:50 AM - 01:55 AM	47.3	46.4	06:30 AM - 06:35 AM	52.3	49.2	09:10 AM - 09:15 AM	55.6	49.1
01:55 AM - 02:00 AM	46.8	46.0	06:35 AM - 06:40 AM	53.7	49.3	09:15 AM - 09:20 AM	50.7	48.4
02:00 AM - 02:05 AM	47.3	46.4	06:40 AM - 06:45 AM	53.1	49.0	09:20 AM - 09:25 AM	52.3	47.6
02:05 AM - 02:10 AM	47.6	46.5	06:45 AM - 06:50 AM	53.4	48.7	09:25 AM - 09:30 AM	50.3	47.3
02:10 AM - 02:15 AM	47.6	46.6	06:50 AM - 06:55 AM	50.2	48.2	09:30 AM - 09:35 AM	51.2	48.5
02:15 AM - 02:20 AM	47.7	46.6	06:55 AM - 07:00 AM	50.6	48.4	09:35 AM - 09:40 AM	51.5	47.7
02:20 AM - 02:25 AM	47.7	46.7	07:00 AM - 07:05 AM	52.6	48.2	09:40 AM - 09:45 AM	52.8	48.5
02:25 AM - 02:30 AM	48.3	46.9	07:05 AM - 07:10 AM	51.4	48.2	09:45 AM - 09:50 AM	50.2	48.0
02:30 AM - 02:35 AM	48.0	46.8	07:10 AM - 07:15 AM	54.8	48.0	09:50 AM - 09:55 AM	50.9	47.9
02:35 AM - 02:40 AM	48.7	47.2	07:15 AM - 07:20 AM	49.6	47.9	09:55 AM - 10:00 AM	49.7	47.5
02:40 AM - 02:45 AM	49.4	46.9	07:20 AM - 07:25 AM	53.8	48.0	10:00 AM - 10:05 AM	53.9	48.2
02:45 AM - 02:50 AM	48.2	46.9	07:25 AM - 07:30 AM	53.7	47.7	10:05 AM - 10:10 AM	50.4	48.2
02:50 AM - 02:55 AM	49.0	47.7	07:30 AM - 07:35 AM	53.0	47.6	10:10 AM - 10:15 AM	50.9	47.9
02:55 AM - 03:00 AM	49.6	48.6	07:35 AM - 07:40 AM	58.5	48.2	10:15 AM - 10:20 AM	52.1	49.2
03:00 AM - 03:05 AM	49.7	48.5	07:40 AM - 07:45 AM	57.2	47.9	10:20 AM - 10:25 AM	51.9	49.8
03:05 AM - 03:10 AM	50.3	48.7	07:45 AM - 07:50 AM	59.7	48.3	10:25 AM - 10:30 AM	57.0	49.2
03:10 AM - 03:15 AM	51.3	49.5	07:50 AM - 07:55 AM	55.4	47.7	10:30 AM - 10:35 AM	51.5	49.1
03:15 AM - 03:20 AM	50.6	48.7	07:55 AM - 08:00 AM	55.1	47.4	10:35 AM - 10:40 AM	53.2	48.7
03:20 AM - 03:25 AM	57.6	49.2	08:00 AM - 08:05 AM	52.9	48.1	10:40 AM - 10:45 AM	53.5	48.4
03:25 AM - 03:30 AM	51.0	49.0	08:05 AM - 08:10 AM	49.5	47.9	10:45 AM - 10:50 AM	50.9	48.0
03:30 AM - 03:35 AM	52.6	49.5	08:10 AM - 08:15 AM	52.3	48.2	10:50 AM - 10:55 AM	51.0	48.3
03:35 AM - 03:40 AM	53.7	49.3	08:15 AM - 08:20 AM	51.0	48.5	10:55 AM - 11:00 AM	58.8	49.1

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Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022966-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-6
Parameter Noise Level (Leq 5 min)
Location NL : หมู่บ้านบูรพา
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	51.5	49.3	01:40 PM - 01:45 PM	58.6	49.4	04:20 PM - 04:25 PM	51.8	48.9
11:05 AM - 11:10 AM	50.3	48.1	01:45 PM - 01:50 PM	50.7	48.5	04:25 PM - 04:30 PM	51.4	49.4
11:10 AM - 11:15 AM	48.6	47.2	01:50 PM - 01:55 PM	53.4	48.9	04:30 PM - 04:35 PM	51.2	49.4
11:15 AM - 11:20 AM	50.1	47.5	01:55 PM - 02:00 PM	54.6	49.0	04:35 PM - 04:40 PM	53.2	50.0
11:20 AM - 11:25 AM	50.4	48.2	02:00 PM - 02:05 PM	56.1	49.8	04:40 PM - 04:45 PM	53.9	51.3
11:25 AM - 11:30 AM	50.9	48.5	02:05 PM - 02:10 PM	55.3	50.5	04:45 PM - 04:50 PM	52.9	49.8
11:30 AM - 11:35 AM	49.1	47.8	02:10 PM - 02:15 PM	54.8	48.7	04:50 PM - 04:55 PM	51.6	49.5
11:35 AM - 11:40 AM	50.2	48.0	02:15 PM - 02:20 PM	51.7	48.9	04:55 PM - 05:00 PM	51.9	50.0
11:40 AM - 11:45 AM	50.0	48.3	02:20 PM - 02:25 PM	51.3	48.2	05:00 PM - 05:05 PM	51.4	49.3
11:45 AM - 11:50 AM	50.7	49.9	02:25 PM - 02:30 PM	50.8	48.2	05:05 PM - 05:10 PM	52.5	49.8
11:50 AM - 11:55 AM	49.4	47.6	02:30 PM - 02:35 PM	49.8	48.0	05:10 PM - 05:15 PM	51.9	50.0
11:55 AM - 12:00 PM	50.1	48.5	02:35 PM - 02:40 PM	51.9	49.5	05:15 PM - 05:20 PM	51.9	50.2
12:00 PM - 12:05 PM	53.0	48.8	02:40 PM - 02:45 PM	51.4	49.1	05:20 PM - 05:25 PM	52.5	50.0
12:05 PM - 12:10 PM	51.0	47.7	02:45 PM - 02:50 PM	53.0	49.2	05:25 PM - 05:30 PM	53.0	50.3
12:10 PM - 12:15 PM	50.6	47.2	02:50 PM - 02:55 PM	50.0	48.0	05:30 PM - 05:35 PM	52.9	50.8
12:15 PM - 12:20 PM	50.3	48.1	02:55 PM - 03:00 PM	50.9	48.1	05:35 PM - 05:40 PM	52.8	50.2
12:20 PM - 12:25 PM	51.1	48.6	03:00 PM - 03:05 PM	52.1	49.2	05:40 PM - 05:45 PM	54.6	51.1
12:25 PM - 12:30 PM	50.9	48.7	03:05 PM - 03:10 PM	51.7	49.6	05:45 PM - 05:50 PM	52.7	50.1
12:30 PM - 12:35 PM	49.5	47.3	03:10 PM - 03:15 PM	53.1	50.0	05:50 PM - 05:55 PM	57.2	50.5
12:35 PM - 12:40 PM	49.2	47.5	03:15 PM - 03:20 PM	52.2	49.8	05:55 PM - 06:00 PM	54.0	50.6
12:40 PM - 12:45 PM	50.1	47.7	03:20 PM - 03:25 PM	50.6	49.0	06:00 PM - 06:05 PM	51.5	50.1
12:45 PM - 12:50 PM	49.5	47.5	03:25 PM - 03:30 PM	51.0	49.1	06:05 PM - 06:10 PM	52.0	49.8
12:50 PM - 12:55 PM	49.2	48.0	03:30 PM - 03:35 PM	52.1	48.7	06:10 PM - 06:15 PM	52.1	49.8
12:55 PM - 01:00 PM	52.4	48.2	03:35 PM - 03:40 PM	52.9	49.9	06:15 PM - 06:20 PM	51.6	49.4
01:00 PM - 01:05 PM	53.4	47.3	03:40 PM - 03:45 PM	52.1	49.9	06:20 PM - 06:25 PM	52.3	49.1
01:05 PM - 01:10 PM	51.6	48.7	03:45 PM - 03:50 PM	53.2	50.7	06:25 PM - 06:30 PM	52.2	50.0
01:10 PM - 01:15 PM	49.3	47.7	03:50 PM - 03:55 PM	51.8	50.0	06:30 PM - 06:35 PM	51.2	49.5
01:15 PM - 01:20 PM	49.6	47.1	03:55 PM - 04:00 PM	53.2	50.5	06:35 PM - 06:40 PM	51.1	49.4
01:20 PM - 01:25 PM	53.1	48.3	04:00 PM - 04:05 PM	52.7	50.6	06:40 PM - 06:45 PM	51.0	48.9
01:25 PM - 01:30 PM	50.9	47.5	04:05 PM - 04:10 PM	54.6	51.7	06:45 PM - 06:50 PM	54.9	49.0
01:30 PM - 01:35 PM	52.4	49.8	04:10 PM - 04:15 PM	54.0	50.8	06:50 PM - 06:55 PM	50.6	48.5
01:35 PM - 01:40 PM	51.3	49.1	04:15 PM - 04:20 PM	53.0	50.1	06:55 PM - 07:00 PM	50.6	48.9

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022966-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-6
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03 - Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	53.2	49.8	09:40 PM - 09:45 PM	48.8	48.0	12:20 AM - 12:25 AM	49.0	48.4
07:05 PM - 07:10 PM	54.3	52.7	09:45 PM - 09:50 PM	49.7	47.9	12:25 AM - 12:30 AM	49.3	48.8
07:10 PM - 07:15 PM	54.1	51.6	09:50 PM - 09:55 PM	48.6	47.7	12:30 AM - 12:35 AM	48.9	48.3
07:15 PM - 07:20 PM	55.0	53.7	09:55 PM - 10:00 PM	48.5	47.8	12:35 AM - 12:40 AM	49.6	47.9
07:20 PM - 07:25 PM	55.2	53.8	10:00 PM - 10:05 PM	48.7	47.7	12:40 AM - 12:45 AM	48.8	48.3
07:25 PM - 07:30 PM	54.3	53.3	10:05 PM - 10:10 PM	49.4	48.1	12:45 AM - 12:50 AM	48.7	48.0
07:30 PM - 07:35 PM	53.6	52.2	10:10 PM - 10:15 PM	48.6	48.0	12:50 AM - 12:55 AM	48.8	48.0
07:35 PM - 07:40 PM	53.6	52.6	10:15 PM - 10:20 PM	49.0	48.3	12:55 AM - 01:00 AM	48.9	48.1
07:40 PM - 07:45 PM	53.2	52.3	10:20 PM - 10:25 PM	49.3	48.2	01:00 AM - 01:05 AM	49.0	48.1
07:45 PM - 07:50 PM	53.2	52.2	10:25 PM - 10:30 PM	48.9	48.2	01:05 AM - 01:10 AM	49.4	48.3
07:50 PM - 07:55 PM	53.0	51.8	10:30 PM - 10:35 PM	48.8	47.9	01:10 AM - 01:15 AM	49.1	48.0
07:55 PM - 08:00 PM	54.1	52.0	10:35 PM - 10:40 PM	49.0	48.1	01:15 AM - 01:20 AM	49.0	48.3
08:00 PM - 08:05 PM	53.0	51.2	10:40 PM - 10:45 PM	48.6	47.9	01:20 AM - 01:25 AM	49.1	48.6
08:05 PM - 08:10 PM	52.3	50.3	10:45 PM - 10:50 PM	48.7	48.0	01:25 AM - 01:30 AM	49.1	48.4
08:10 PM - 08:15 PM	52.2	49.9	10:50 PM - 10:55 PM	49.2	48.1	01:30 AM - 01:35 AM	48.8	48.1
08:15 PM - 08:20 PM	52.2	51.1	10:55 PM - 11:00 PM	48.9	47.9	01:35 AM - 01:40 AM	48.9	48.1
08:20 PM - 08:25 PM	52.0	50.0	11:00 PM - 11:05 PM	48.9	48.1	01:40 AM - 01:45 AM	49.0	48.1
08:25 PM - 08:30 PM	53.5	49.4	11:05 PM - 11:10 PM	49.1	48.3	01:45 AM - 01:50 AM	47.8	47.1
08:30 PM - 08:35 PM	51.6	49.2	11:10 PM - 11:15 PM	48.9	48.0	01:50 AM - 01:55 AM	48.6	47.6
08:35 PM - 08:40 PM	51.6	49.8	11:15 PM - 11:20 PM	48.7	47.7	01:55 AM - 02:00 AM	48.3	47.7
08:40 PM - 08:45 PM	51.7	50.3	11:20 PM - 11:25 PM	49.0	47.9	02:00 AM - 02:05 AM	48.2	47.6
08:45 PM - 08:50 PM	52.6	50.7	11:25 PM - 11:30 PM	48.9	48.1	02:05 AM - 02:10 AM	48.9	48.3
08:50 PM - 08:55 PM	52.0	50.9	11:30 PM - 11:35 PM	48.6	47.9	02:10 AM - 02:15 AM	48.7	48.2
08:55 PM - 09:00 PM	51.5	50.4	11:35 PM - 11:40 PM	48.4	47.7	02:15 AM - 02:20 AM	49.0	48.4
09:00 PM - 09:05 PM	51.7	50.5	11:40 PM - 11:45 PM	48.9	48.1	02:20 AM - 02:25 AM	48.7	48.2
09:05 PM - 09:10 PM	53.1	49.2	11:45 PM - 11:50 PM	48.6	47.8	02:25 AM - 02:30 AM	49.0	48.4
09:10 PM - 09:15 PM	49.9	48.7	11:50 PM - 11:55 PM	49.0	47.8	02:30 AM - 02:35 AM	48.6	48.1
09:15 PM - 09:20 PM	49.7	48.7	11:55 PM - 12:00 AM	48.8	48.0	02:35 AM - 02:40 AM	48.1	47.5
09:20 PM - 09:25 PM	49.9	48.8	12:00 AM - 12:05 AM	48.8	48.0	02:40 AM - 02:45 AM	48.2	47.6
09:25 PM - 09:30 PM	49.5	48.4	12:05 AM - 12:10 AM	48.5	47.9	02:45 AM - 02:50 AM	48.1	47.4
09:30 PM - 09:35 PM	49.2	48.4	12:10 AM - 12:15 AM	49.1	48.4	02:50 AM - 02:55 AM	48.2	47.6
09:35 PM - 09:40 PM	49.3	48.5	12:15 AM - 12:20 AM	49.5	49.0	02:55 AM - 03:00 AM	48.4	47.8

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022966-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-6
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
03:00 AM - 03:05 AM	48.6	47.7	05:40 AM - 05:45 AM	54.1	49.5	08:20 AM - 08:25 AM	51.0	48.4
03:05 AM - 03:10 AM	48.5	47.5	05:45 AM - 05:50 AM	57.0	49.8	08:25 AM - 08:30 AM	52.8	48.7
03:10 AM - 03:15 AM	48.1	47.4	05:50 AM - 05:55 AM	55.3	49.7	08:30 AM - 08:35 AM	55.0	48.4
03:15 AM - 03:20 AM	48.6	47.9	05:55 AM - 06:00 AM	51.4	49.2	08:35 AM - 08:40 AM	54.4	48.1
03:20 AM - 03:25 AM	48.4	47.7	06:00 AM - 06:05 AM	55.0	49.5	08:40 AM - 08:45 AM	49.8	48.1
03:25 AM - 03:30 AM	48.2	47.7	06:05 AM - 06:10 AM	54.4	49.3	08:45 AM - 08:50 AM	50.3	48.3
03:30 AM - 03:35 AM	48.2	47.7	06:10 AM - 06:15 AM	51.3	49.2	08:50 AM - 08:55 AM	50.6	48.2
03:35 AM - 03:40 AM	48.9	48.3	06:15 AM - 06:20 AM	52.7	49.2	08:55 AM - 09:00 AM	51.0	48.5
03:40 AM - 03:45 AM	49.0	48.5	06:20 AM - 06:25 AM	54.7	49.6	09:00 AM - 09:05 AM	51.5	48.9
03:45 AM - 03:50 AM	48.9	48.3	06:25 AM - 06:30 AM	54.8	49.1	09:05 AM - 09:10 AM	62.0	54.0
03:50 AM - 03:55 AM	49.1	48.6	06:30 AM - 06:35 AM	53.9	49.4	09:10 AM - 09:15 AM	56.2	49.7
03:55 AM - 04:00 AM	49.5	48.8	06:35 AM - 06:40 AM	52.6	49.2	09:15 AM - 09:20 AM	51.3	49.0
04:00 AM - 04:05 AM	49.7	49.1	06:40 AM - 06:45 AM	51.8	49.0	09:20 AM - 09:25 AM	52.9	48.2
04:05 AM - 04:10 AM	49.7	49.1	06:45 AM - 06:50 AM	49.7	48.8	09:25 AM - 09:30 AM	50.9	47.9
04:10 AM - 04:15 AM	49.0	48.4	06:50 AM - 06:55 AM	51.0	49.2	09:30 AM - 09:35 AM	51.8	49.1
04:15 AM - 04:20 AM	49.2	48.3	06:55 AM - 07:00 AM	53.2	51.2	09:35 AM - 09:40 AM	52.1	48.2
04:20 AM - 04:25 AM	48.9	48.1	07:00 AM - 07:05 AM	51.8	50.3	09:40 AM - 09:45 AM	53.4	49.1
04:25 AM - 04:30 AM	49.6	49.0	07:05 AM - 07:10 AM	52.8	50.6	09:45 AM - 09:50 AM	50.8	48.6
04:30 AM - 04:35 AM	49.9	49.4	07:10 AM - 07:15 AM	52.5	50.7	09:50 AM - 09:55 AM	51.5	48.5
04:35 AM - 04:40 AM	50.0	49.1	07:15 AM - 07:20 AM	52.2	50.7	09:55 AM - 10:00 AM	50.3	48.1
04:40 AM - 04:45 AM	50.0	48.9	07:20 AM - 07:25 AM	52.4	50.5	10:00 AM - 10:05 AM	54.5	48.8
04:45 AM - 04:50 AM	49.6	48.9	07:25 AM - 07:30 AM	51.9	49.8	10:05 AM - 10:10 AM	51.0	48.8
04:50 AM - 04:55 AM	49.3	48.6	07:30 AM - 07:35 AM	52.6	50.2	10:10 AM - 10:15 AM	51.5	48.5
04:55 AM - 05:00 AM	49.3	48.7	07:35 AM - 07:40 AM	54.6	51.3	10:15 AM - 10:20 AM	52.7	49.8
05:00 AM - 05:05 AM	49.3	48.7	07:40 AM - 07:45 AM	57.4	56.0	10:20 AM - 10:25 AM	52.5	50.4
05:05 AM - 05:10 AM	49.7	49.0	07:45 AM - 07:50 AM	58.5	56.8	10:25 AM - 10:30 AM	57.6	49.8
05:10 AM - 05:15 AM	49.8	49.1	07:50 AM - 07:55 AM	58.5	56.5	10:30 AM - 10:35 AM	51.9	49.7
05:15 AM - 05:20 AM	49.8	49.2	07:55 AM - 08:00 AM	55.4	52.4	10:35 AM - 10:40 AM	53.8	49.3
05:20 AM - 05:25 AM	52.2	49.4	08:00 AM - 08:05 AM	53.7	50.4	10:40 AM - 10:45 AM	54.1	49.0
05:25 AM - 05:30 AM	50.1	48.9	08:05 AM - 08:10 AM	52.5	49.8	10:45 AM - 10:50 AM	51.5	48.6
05:30 AM - 05:35 AM	50.4	49.3	08:10 AM - 08:15 AM	51.8	49.1	10:50 AM - 10:55 AM	51.6	48.9
05:35 AM - 05:40 AM	55.9	49.1	08:15 AM - 08:20 AM	51.4	49.4	10:55 AM - 11:00 AM	59.4	49.7

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022967-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-7
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
11:00 AM - 11:05 AM	52.1	49.9	01:40 PM - 01:45 PM	59.2	50.0	04:20 PM - 04:25 PM	52.4	49.5
11:05 AM - 11:10 AM	50.9	48.7	01:45 PM - 01:50 PM	51.3	49.1	04:25 PM - 04:30 PM	52.0	50.0
11:10 AM - 11:15 AM	49.2	47.8	01:50 PM - 01:55 PM	54.0	49.5	04:30 PM - 04:35 PM	51.8	50.0
11:15 AM - 11:20 AM	50.7	48.1	01:55 PM - 02:00 PM	55.2	49.6	04:35 PM - 04:40 PM	53.8	50.6
11:20 AM - 11:25 AM	51.0	48.8	02:00 PM - 02:05 PM	56.7	50.4	04:40 PM - 04:45 PM	54.5	51.9
11:25 AM - 11:30 AM	51.5	49.1	02:05 PM - 02:10 PM	55.9	51.1	04:45 PM - 04:50 PM	53.5	50.4
11:30 AM - 11:35 AM	49.7	48.4	02:10 PM - 02:15 PM	55.4	49.3	04:50 PM - 04:55 PM	52.2	50.1
11:35 AM - 11:40 AM	50.0	48.6	02:15 PM - 02:20 PM	52.1	49.5	04:55 PM - 05:00 PM	52.5	50.6
11:40 AM - 11:45 AM	50.6	48.9	02:20 PM - 02:25 PM	51.9	48.8	05:00 PM - 05:05 PM	52.8	49.9
11:45 AM - 11:50 AM	61.3	50.5	02:25 PM - 02:30 PM	51.4	48.8	05:05 PM - 05:10 PM	53.1	50.4
11:50 AM - 11:55 AM	50.0	48.2	02:30 PM - 02:35 PM	50.4	48.6	05:10 PM - 05:15 PM	52.5	50.6
11:55 AM - 12:00 PM	50.7	49.1	02:35 PM - 02:40 PM	52.5	50.1	05:15 PM - 05:20 PM	52.5	50.8
12:00 PM - 12:05 PM	53.6	49.4	02:40 PM - 02:45 PM	52.0	49.7	05:20 PM - 05:25 PM	53.1	50.6
12:05 PM - 12:10 PM	51.6	48.3	02:45 PM - 02:50 PM	53.6	49.8	05:25 PM - 05:30 PM	53.6	50.9
12:10 PM - 12:15 PM	51.2	47.8	02:50 PM - 02:55 PM	50.6	48.6	05:30 PM - 05:35 PM	53.5	51.4
12:15 PM - 12:20 PM	50.9	48.2	02:55 PM - 03:00 PM	51.5	48.9	05:35 PM - 05:40 PM	53.4	50.8
12:20 PM - 12:25 PM	51.7	49.2	03:00 PM - 03:05 PM	52.7	49.8	05:40 PM - 05:45 PM	55.2	51.9
12:25 PM - 12:30 PM	51.5	49.3	03:05 PM - 03:10 PM	52.3	50.2	05:45 PM - 05:50 PM	53.3	50.7
12:30 PM - 12:35 PM	50.1	47.9	03:10 PM - 03:15 PM	53.7	50.6	05:50 PM - 05:55 PM	57.8	51.1
12:35 PM - 12:40 PM	49.8	48.1	03:15 PM - 03:20 PM	52.8	50.4	05:55 PM - 06:00 PM	54.6	51.2
12:40 PM - 12:45 PM	50.7	48.3	03:20 PM - 03:25 PM	51.2	49.6	06:00 PM - 06:05 PM	52.1	50.7
12:45 PM - 12:50 PM	50.1	48.1	03:25 PM - 03:30 PM	51.6	49.7	06:05 PM - 06:10 PM	52.6	50.4
12:50 PM - 12:55 PM	49.8	48.6	03:30 PM - 03:35 PM	52.7	49.3	06:10 PM - 06:15 PM	52.7	50.4
12:55 PM - 01:00 PM	53.0	49.8	03:35 PM - 03:40 PM	53.5	50.5	06:15 PM - 06:20 PM	52.2	50.0
01:00 PM - 01:05 PM	54.0	47.9	03:40 PM - 03:45 PM	50.7	50.5	06:20 PM - 06:25 PM	52.9	49.7
01:05 PM - 01:10 PM	52.2	49.3	03:45 PM - 03:50 PM	53.6	51.3	06:25 PM - 06:30 PM	52.8	50.6
01:10 PM - 01:15 PM	49.9	48.2	03:50 PM - 03:55 PM	52.4	50.6	06:30 PM - 06:35 PM	51.8	50.1
01:15 PM - 01:20 PM	50.2	47.7	03:55 PM - 04:00 PM	53.8	51.1	06:35 PM - 06:40 PM	51.7	50.6
01:20 PM - 01:25 PM	53.7	48.9	04:00 PM - 04:05 PM	53.3	51.2	06:40 PM - 06:45 PM	51.6	49.5
01:25 PM - 01:30 PM	51.5	48.1	04:05 PM - 04:10 PM	55.2	52.3	06:45 PM - 06:50 PM	55.5	49.6
01:30 PM - 01:35 PM	53.0	50.4	04:10 PM - 04:15 PM	54.6	51.4	06:50 PM - 06:55 PM	51.2	49.1
01:35 PM - 01:40 PM	51.9	49.7	04:15 PM - 04:20 PM	53.6	50.7	06:55 PM - 07:00 PM	51.2	49.5

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Approved by
Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022967-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-7
Parameter Noise Level (Leq 5 min)
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04 - Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
07:00 PM - 07:05 PM	53.8	50.4	09:40 PM - 09:45 PM	49.4	48.6	12:20 AM - 12:25 AM	49.6	49.0
07:05 PM - 07:10 PM	54.9	53.3	09:45 PM - 09:50 PM	50.3	48.5	12:25 AM - 12:30 AM	49.9	49.4
07:10 PM - 07:15 PM	54.7	52.2	09:50 PM - 09:55 PM	49.2	48.3	12:30 AM - 12:35 AM	49.5	48.9
07:15 PM - 07:20 PM	55.6	54.3	09:55 PM - 10:00 PM	49.1	48.4	12:35 AM - 12:40 AM	50.2	48.5
07:20 PM - 07:25 PM	55.8	54.4	10:00 PM - 10:05 PM	49.3	48.3	12:40 AM - 12:45 AM	49.4	48.9
07:25 PM - 07:30 PM	54.9	53.9	10:05 PM - 10:10 PM	50.0	48.7	12:45 AM - 12:50 AM	49.3	48.6
07:30 PM - 07:35 PM	54.2	52.8	10:10 PM - 10:15 PM	49.2	48.6	12:50 AM - 12:55 AM	49.4	48.6
07:35 PM - 07:40 PM	54.2	53.2	10:15 PM - 10:20 PM	49.6	48.9	12:55 AM - 01:00 AM	49.5	48.7
07:40 PM - 07:45 PM	53.8	52.9	10:20 PM - 10:25 PM	49.9	48.8	01:00 AM - 01:05 AM	49.6	48.7
07:45 PM - 07:50 PM	53.8	52.8	10:25 PM - 10:30 PM	49.5	48.8	01:05 AM - 01:10 AM	50.0	48.9
07:50 PM - 07:55 PM	53.6	52.4	10:30 PM - 10:35 PM	49.4	48.5	01:10 AM - 01:15 AM	49.7	48.6
07:55 PM - 08:00 PM	54.7	52.6	10:35 PM - 10:40 PM	49.6	48.7	01:15 AM - 01:20 AM	49.9	48.3
08:00 PM - 08:05 PM	53.6	51.8	10:40 PM - 10:45 PM	49.2	48.3	01:20 AM - 01:25 AM	49.2	48.6
08:05 PM - 08:10 PM	52.9	50.9	10:45 PM - 10:50 PM	49.3	48.6	01:25 AM - 01:30 AM	49.1	48.4
08:10 PM - 08:15 PM	52.8	50.5	10:50 PM - 10:55 PM	49.8	48.7	01:30 AM - 01:35 AM	48.8	48.1
08:15 PM - 08:20 PM	52.8	51.7	10:55 PM - 11:00 PM	49.5	48.5	01:35 AM - 01:40 AM	48.9	48.1
08:20 PM - 08:25 PM	52.6	50.6	11:00 PM - 11:05 PM	49.5	48.7	01:40 AM - 01:45 AM	49.0	48.1
08:25 PM - 08:30 PM	52.1	50.0	11:05 PM - 11:10 PM	49.7	48.9	01:45 AM - 01:50 AM	47.8	47.1
08:30 PM - 08:35 PM	52.2	49.8	11:10 PM - 11:15 PM	49.5	48.6	01:50 AM - 01:55 AM	48.6	47.6
08:35 PM - 08:40 PM	52.2	50.4	11:15 PM - 11:20 PM	49.3	48.3	01:55 AM - 02:00 AM	48.3	47.7
08:40 PM - 08:45 PM	52.3	50.9	11:20 PM - 11:25 PM	49.6	48.5	02:00 AM - 02:05 AM	48.2	47.6
08:45 PM - 08:50 PM	53.2	51.3	11:25 PM - 11:30 PM	49.5	48.7	02:05 AM - 02:10 AM	48.9	48.3
08:50 PM - 08:55 PM	52.6	51.5	11:30 PM - 11:35 PM	49.2	48.5	02:10 AM - 02:15 AM	48.7	48.2
08:55 PM - 09:00 PM	52.1	51.0	11:35 PM - 11:40 PM	49.0	48.1	02:15 AM - 02:20 AM	49.0	48.4
09:00 PM - 09:05 PM	52.3	51.1	11:40 PM - 11:45 PM	49.5	48.7	02:20 AM - 02:25 AM	48.7	48.2
09:05 PM - 09:10 PM	53.7	49.8	11:45 PM - 11:50 PM	49.2	48.4	02:25 AM - 02:30 AM	49.0	48.4
09:10 PM - 09:15 PM	50.5	49.2	11:50 PM - 11:55 PM	49.6	48.4	02:30 AM - 02:35 AM	48.6	48.1
09:15 PM - 09:20 PM	50.3	49.2	11:55 PM - 12:00 AM	49.4	48.6	02:35 AM - 02:40 AM	48.1	47.5
09:20 PM - 09:25 PM	50.5	49.4	12:00 AM - 12:05 AM	49.4	48.6	02:40 AM - 02:45 AM	48.2	47.6
09:25 PM - 09:30 PM	50.1	49.0	12:05 AM - 12:10 AM	49.1	48.5	02:45 AM - 02:50 AM	48.1	47.4
09:30 PM - 09:35 PM	49.8	49.0	12:10 AM - 12:15 AM	49.7	49.0	02:50 AM - 02:55 AM	48.2	47.6
09:35 PM - 09:40 PM	49.9	49.1	12:15 AM - 12:20 AM	50.1	49.6	02:55 AM - 03:00 AM	48.4	47.8

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Approved by
Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022967-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-7
Parameter Noise Level (Leq 5 min)
Location NI : หมู่บ้านบางพระ
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472127

Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	48.6	47.7	05:40 AM - 05:45 AM	54.1	49.5	08:20 AM - 08:25 AM	51.0	48.4
02:05 AM - 02:10 AM	48.5	47.5	05:45 AM - 05:50 AM	57.0	49.8	08:25 AM - 08:30 AM	52.8	48.7
02:10 AM - 02:15 AM	48.1	47.4	05:50 AM - 05:55 AM	55.3	49.7	08:30 AM - 08:35 AM	55.0	48.4
02:15 AM - 02:20 AM	48.6	47.9	05:55 AM - 06:00 AM	51.4	49.2	08:35 AM - 08:40 AM	54.4	48.1
02:20 AM - 02:25 AM	48.4	47.7	06:00 AM - 06:05 AM	55.0	49.5	08:40 AM - 08:45 AM	49.8	48.1
02:25 AM - 02:30 AM	48.2	47.7	06:05 AM - 06:10 AM	54.4	49.3	08:45 AM - 08:50 AM	50.3	48.3
02:30 AM - 02:35 AM	48.3	47.7	06:10 AM - 06:15 AM	51.3	49.2	08:50 AM - 08:55 AM	56.6	48.2
02:35 AM - 02:40 AM	48.9	48.3	06:15 AM - 06:20 AM	52.7	49.2	08:55 AM - 09:00 AM	51.0	48.5
02:40 AM - 02:45 AM	49.0	48.5	06:20 AM - 06:25 AM	54.7	49.0	09:00 AM - 09:05 AM	50.6	48.0
02:45 AM - 02:50 AM	48.9	48.5	06:25 AM - 06:30 AM	54.8	49.1	09:05 AM - 09:10 AM	52.8	49.0
02:50 AM - 02:55 AM	49.1	48.6	06:30 AM - 06:35 AM	53.9	49.4	09:10 AM - 09:15 AM	59.5	50.0
02:55 AM - 03:00 AM	49.5	48.8	06:35 AM - 06:40 AM	52.0	49.2	09:15 AM - 09:20 AM	54.8	50.0
03:00 AM - 03:05 AM	49.7	49.1	06:40 AM - 06:45 AM	51.8	49.0	09:20 AM - 09:25 AM	52.7	49.8
03:05 AM - 03:10 AM	49.7	49.1	06:45 AM - 06:50 AM	49.7	48.8	09:25 AM - 09:30 AM	52.4	48.8
03:10 AM - 03:15 AM	49.0	48.4	06:50 AM - 06:55 AM	51.0	49.2	09:30 AM - 09:35 AM	55.6	49.7
03:15 AM - 03:20 AM	49.2	48.3	06:55 AM - 07:00 AM	53.2	51.2	09:35 AM - 09:40 AM	52.3	49.1
03:20 AM - 03:25 AM	48.9	48.1	07:00 AM - 07:05 AM	51.8	50.3	09:40 AM - 09:45 AM	54.5	49.7
03:25 AM - 03:30 AM	49.6	49.0	07:05 AM - 07:10 AM	52.8	50.6	09:45 AM - 09:50 AM	52.4	48.8
03:30 AM - 03:35 AM	49.9	49.4	07:10 AM - 07:15 AM	52.5	50.7	09:50 AM - 09:55 AM	52.1	49.7
03:35 AM - 03:40 AM	50.0	49.1	07:15 AM - 07:20 AM	52.2	50.7	09:55 AM - 10:00 AM	56.0	49.2
03:40 AM - 03:45 AM	50.0	48.9	07:20 AM - 07:25 AM	52.4	50.5	10:00 AM - 10:05 AM	51.7	48.5
03:45 AM - 03:50 AM	49.6	48.9	07:25 AM - 07:30 AM	51.9	49.8	10:05 AM - 10:10 AM	52.4	49.2
03:50 AM - 03:55 AM	49.3	48.6	07:30 AM - 07:35 AM	52.6	50.2	10:10 AM - 10:15 AM	56.0	48.3
03:55 AM - 04:00 AM	49.3	48.7	07:35 AM - 07:40 AM	54.6	51.3	10:15 AM - 10:20 AM	53.4	49.0
04:00 AM - 04:05 AM	49.3	48.7	07:40 AM - 07:45 AM	57.4	56.0	10:20 AM - 10:25 AM	54.7	48.9
04:05 AM - 04:10 AM	49.7	49.0	07:45 AM - 07:50 AM	58.5	56.8	10:25 AM - 10:30 AM	51.6	49.1
04:10 AM - 04:15 AM	49.8	49.1	07:50 AM - 07:55 AM	58.5	56.5	10:30 AM - 10:35 AM	54.2	50.2
04:15 AM - 04:20 AM	49.8	49.2	07:55 AM - 08:00 AM	55.4	52.4	10:35 AM - 10:40 AM	52.9	49.3
04:20 AM - 04:25 AM	52.2	49.4	08:00 AM - 08:05 AM	53.7	50.4	10:40 AM - 10:45 AM	55.7	49.5
04:25 AM - 04:30 AM	50.1	48.9	08:05 AM - 08:10 AM	52.5	49.8	10:45 AM - 10:50 AM	53.1	49.3
04:30 AM - 04:35 AM	56.4	49.3	08:10 AM - 08:15 AM	51.8	49.1	10:50 AM - 10:55 AM	53.5	48.2
04:35 AM - 04:40 AM	55.9	49.1	08:15 AM - 08:20 AM	51.4	49.4	10:55 AM - 11:00 AM	52.3	49.3

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022968-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-8
Parameter Noise Level (Leq 5 min)
Location NI : สถานีอนามัยบางพระ
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	55.1	46.1	02:40 PM - 02:45 PM	52.1	37.8	05:20 PM - 05:25 PM	56.5	48.7
12:05 PM - 12:10 PM	55.7	44.3	02:45 PM - 02:50 PM	51.7	36.2	05:25 PM - 05:30 PM	55.5	43.4
12:10 PM - 12:15 PM	51.4	40.7	02:50 PM - 02:55 PM	50.1	36.8	05:30 PM - 05:35 PM	54.4	42.8
12:15 PM - 12:20 PM	63.5	43.7	02:55 PM - 03:00 PM	57.7	38.3	05:35 PM - 05:40 PM	53.8	43.6
12:20 PM - 12:25 PM	51.2	43.5	03:00 PM - 03:05 PM	54.1	35.9	05:40 PM - 05:45 PM	61.3	43.3
12:25 PM - 12:30 PM	53.1	43.2	03:05 PM - 03:10 PM	54.5	39.3	05:45 PM - 05:50 PM	55.1	43.8
12:30 PM - 12:35 PM	55.3	45.8	03:10 PM - 03:15 PM	62.6	43.8	05:50 PM - 05:55 PM	56.5	45.3
12:35 PM - 12:40 PM	55.5	50.6	03:15 PM - 03:20 PM	53.4	36.2	05:55 PM - 06:00 PM	56.6	44.3
12:40 PM - 12:45 PM	58.9	53.5	03:20 PM - 03:25 PM	58.9	38.5	06:00 PM - 06:05 PM	55.5	44.9
12:45 PM - 12:50 PM	57.3	42.6	03:25 PM - 03:30 PM	51.2	38.4	06:05 PM - 06:10 PM	54.5	44.6
12:50 PM - 12:55 PM	52.7	40.8	03:30 PM - 03:35 PM	51.4	37.0	06:10 PM - 06:15 PM	56.5	48.7
12:55 PM - 01:00 PM	57.7	42.8	03:35 PM - 03:40 PM	51.9	38.0	06:15 PM - 06:20 PM	58.9	51.5
01:00 PM - 01:05 PM	56.6	41.9	03:40 PM - 03:45 PM	51.8	38.0	06:20 PM - 06:25 PM	58.4	50.2
01:05 PM - 01:10 PM	56.1	42.8	03:45 PM - 03:50 PM	52.7	40.4	06:25 PM - 06:30 PM	58.9	48.5
01:10 PM - 01:15 PM	52.6	38.0	03:50 PM - 03:55 PM	60.3	37.5	06:30 PM - 06:35 PM	57.6	47.5
01:15 PM - 01:20 PM	56.1	38.9	03:55 PM - 04:00 PM	60.1	42.0	06:35 PM - 06:40 PM	55.5	45.8
01:20 PM - 01:25 PM	52.1	40.3	04:00 PM - 04:05 PM	59.3	46.4	06:40 PM - 06:45 PM	69.6	43.1
01:25 PM - 01:30 PM	49.8	40.2	04:05 PM - 04:10 PM	53.4	43.6	06:45 PM - 06:50 PM	58.2	43.2
01:30 PM - 01:35 PM	51.7	39.7	04:10 PM - 04:15 PM	52.3	40.3	06:50 PM - 06:55 PM	53.3	44.0
01:35 PM - 01:40 PM	49.6	37.8	04:15 PM - 04:20 PM	55.8	42.9	06:55 PM - 07:00 PM	56.5	44.0
01:40 PM - 01:45 PM	65.7	46.1	04:20 PM - 04:25 PM	50.9	41.4	07:00 PM - 07:05 PM	55.4	42.2
01:45 PM - 01:50 PM	56.2	44.5	04:25 PM - 04:30 PM	54.4	42.2	07:05 PM - 07:10 PM	54.4	39.8
01:50 PM - 01:55 PM	54.4	45.4	04:30 PM - 04:35 PM	52.0	43.2	07:10 PM - 07:15 PM	64.4	62.4
01:55 PM - 02:00 PM	57.8	48.6	04:35 PM - 04:40 PM	54.0	44.9	07:15 PM - 07:20 PM	65.1	61.7
02:00 PM - 02:05 PM	63.8	53.1	04:40 PM - 04:45 PM	55.1	45.5	07:20 PM - 07:25 PM	64.8	61.7
02:05 PM - 02:10 PM	55.0	38.9	04:45 PM - 04:50 PM	54.8	44.9	07:25 PM - 07:30 PM	57.9	40.0
02:10 PM - 02:15 PM	52.8	39.7	04:50 PM - 04:55 PM	57.6	44.9	07:30 PM - 07:35 PM	56.9	40.6
02:15 PM - 02:20 PM	51.5	37.9	04:55 PM - 05:00 PM	56.2	43.6	07:35 PM - 07:40 PM	50.4	41.0
02:20 PM - 02:25 PM	54.2	38.9	05:00 PM - 05:05 PM	52.5	41.9	07:40 PM - 07:45 PM	48.0	42.6
02:25 PM - 02:30 PM	45.4	38.3	05:05 PM - 05:10 PM	54.8	45.7	07:45 PM - 07:50 PM	52.6	41.9
02:30 PM - 02:35 PM	54.0	36.7	05:10 PM - 05:15 PM	53.4	47.4	07:50 PM - 07:55 PM	53.4	43.6
02:35 PM - 02:40 PM	50.4	38.5	05:15 PM - 05:20 PM	57.5	46.8	07:55 PM - 08:00 PM	57.6	43.1

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022968-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-8
Parameter Noise Level (Leq 5 min)
Location NI : สถานีอนามัยบางพระ
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29 - May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	58.4	43.0	10:40 PM - 10:45 PM	45.9	39.4	01:20 AM - 01:25 AM	41.9	35.6
08:05 PM - 08:10 PM	54.7	43.9	10:45 PM - 10:50 PM	50.4	39.5	01:25 AM - 01:30 AM	38.9	34.9
08:10 PM - 08:15 PM	50.2	40.9	10:50 PM - 10:55 PM	49.0	40.5	01:30 AM - 01:35 AM	40.4	35.2
08:15 PM - 08:20 PM	60.7	41.9	10:55 PM - 11:00 PM	48.6	40.1	01:35 AM - 01:40 AM	40.3	35.8
08:20 PM - 08:25 PM	56.0	38.0	11:00 PM - 11:05 PM	57.5	43.5	01:40 AM - 01:45 AM	40.0	36.2
08:25 PM - 08:30 PM	50.4	37.6	11:05 PM - 11:10 PM	49.4	45.5	01:45 AM - 01:50 AM	39.9	35.4
08:30 PM - 08:35 PM	52.9	37.4	11:10 PM - 11:15 PM	55.6	45.4	01:50 AM - 01:55 AM	43.2	35.6
08:35 PM - 08:40 PM	52.0	38.8	11:15 PM - 11:20 PM	46.3	43.7	01:55 AM - 02:00 AM	41.1	38.3
08:40 PM - 08:45 PM	51.9	38.8	11:20 PM - 11:25 PM	49.2	45.4	02:00 AM - 02:05 AM	42.8	37.6
08:45 PM - 08:50 PM	48.7	39.3	11:25 PM - 11:30 PM	49.1	46.3	02:05 AM - 02:10 AM	43.0	37.4
08:50 PM - 08:55 PM	48.3	38.1	11:30 PM - 11:35 PM	49.7	46.9	02:10 AM - 02:15 AM	41.2	36.4
08:55 PM - 09:00 PM	51.2	39.6	11:35 PM - 11:40 PM	53.2	49.5	02:15 AM - 02:20 AM	43.0	36.7
09:00 PM - 09:05 PM	57.5	39.8	11:40 PM - 11:45 PM	52.2	48.4	02:20 AM - 02:25 AM	39.4	36.0
09:05 PM - 09:10 PM	58.0	41.1	11:45 PM - 11:50 PM	48.6	44.7	02:25 AM - 02:30 AM	38.2	35.6
09:10 PM - 09:15 PM	54.5	38.7	11:50 PM - 11:55 PM	53.0	43.4	02:30 AM - 02:35 AM	60.0	38.6
09:15 PM - 09:20 PM	53.1	38.4	11:55 PM - 12:00 AM	45.5	42.3	02:35 AM - 02:40 AM	42.1	36.1
09:20 PM - 09:25 PM	50.3	38.9	12:00 AM - 12:05 AM	49.7	44.8	02:40 AM - 02:45 AM	41.8	35.7
09:25 PM - 09:30 PM	48.2	38.2	12:05 AM - 12:10 AM	52.6	49.3	02:45 AM - 02:50 AM	41.5	35.1
09:30 PM - 09:35 PM	51.6	38.6	12:10 AM - 12:15 AM	54.5	51.5	02:50 AM - 02:55 AM	38.2	35.4
09:35 PM - 09:40 PM	51.9	37.7	12:15 AM - 12:20 AM	55.2	50.9	02:55 AM - 03:00 AM	42.0	35.9
09:40 PM - 09:45 PM	53.1	37.0	12:20 AM - 12:25 AM	55.3	53.0	03:00 AM - 03:05 AM	38.5	35.6
09:45 PM - 09:50 PM	55.1	36.5	12:25 AM - 12:30 AM	53.6	49.8	03:05 AM - 03:10 AM	39.1	35.6
09:50 PM - 09:55 PM	49.1	37.4	12:30 AM - 12:35 AM	51.1	47.9	03:10 AM - 03:15 AM	40.2	35.7
09:55 PM - 10:00 PM	48.5	37.4	12:35 AM - 12:40 AM	50.3	45.3	03:15 AM - 03:20 AM	48.6	36.1
10:00 PM - 10:05 PM	57.5	37.2	12:40 AM - 12:45 AM	51.5	44.1	03:20 AM - 03:25 AM	42.1	35.8
10:05 PM - 10:10 PM	52.9	38.3	12:45 AM - 12:50 AM	50.4	43.7	03:25 AM - 03:30 AM	41.8	35.6
10:10 PM - 10:15 PM	48.5	38.0	12:50 AM - 12:55 AM	47.6	43.6	03:30 AM - 03:35 AM	43.8	36.0
10:15 PM - 10:20 PM	46.5	37.5	12:55 AM - 01:00 AM	45.9	41.4	03:35 AM - 03:40 AM	38.0	35.2
10:20 PM - 10:25 PM	50.4	38.0	01:00 AM - 01:05 AM	46.6	41.1	03:40 AM - 03:45 AM	39.2	35.3
10:25 PM - 10:30 PM	44.1	37.3	01:05 AM - 01:10 AM	44.7	40.7	03:45 AM - 03:50 AM	38.1	35.3
10:30 PM - 10:35 PM	44.7	38.3	01:10 AM - 01:15 AM	44.1	39.8	03:50 AM - 03:55 AM	40.6	35.1
10:35 PM - 10:40 PM	45.9	39.3	01:15 AM - 01:20 AM	43.3	38.6	03:55 AM - 04:00 AM	39.7	35.9

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Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022968-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-8
Parameter Noise Level (Leq 5 min)
Location NI : สถานีอนามัยบางพระ
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	39.3	35.3	06:40 AM - 06:45 AM	58.1	42.2	09:20 AM - 09:25 AM	55.9	44.9
04:05 AM - 04:10 AM	38.8	34.5	06:45 AM - 06:50 AM	56.5	44.7	09:25 AM - 09:30 AM	60.6	49.4
04:10 AM - 04:15 AM	43.6	35.5	06:50 AM - 06:55 AM	58.6	42.5	09:30 AM - 09:35 AM	60.3	46.3
04:15 AM - 04:20 AM	49.0	34.9	06:55 AM - 07:00 AM	56.3	37.9	09:35 AM - 09:40 AM	58.8	43.4
04:20 AM - 04:25 AM	41.5	35.3	07:00 AM - 07:05 AM	58.3	41.3	09:40 AM - 09:45 AM	56.7	43.3
04:25 AM - 04:30 AM	47.1	35.3	07:05 AM - 07:10 AM	55.0	39.1	09:45 AM - 09:50 AM	57.7	45.7
04:30 AM - 04:35 AM	39.1	34.7	07:10 AM - 07:15 AM	57.6	43.7	09:50 AM - 09:55 AM	55.9	44.3
04:35 AM - 04:40 AM	49.3	34.4	07:15 AM - 07:20 AM	54.3	38.9	09:55 AM - 10:00 AM	54.3	42.9
04:40 AM - 04:45 AM	63.9	37.7	07:20 AM - 07:25 AM	50.4	41.4	10:00 AM - 10:05 AM	52.5	43.5
04:45 AM - 04:50 AM	44.5	37.6	07:25 AM - 07:30 AM	52.4	37.4	10:05 AM - 10:10 AM	56.4	46.8
04:50 AM - 04:55 AM	50.0	38.1	07:30 AM - 07:35 AM	52.4	38.7	10:10 AM - 10:15 AM	54.9	45.4
04:55 AM - 05:00 AM	49.6	38.0	07:35 AM - 07:40 AM	56.1	36.1	10:15 AM - 10:20 AM	57.3	46.5
05:00 AM - 05:05 AM	41.6	36.9	07:40 AM - 07:45 AM	52.6	41.6	10:20 AM - 10:25 AM	61.2	48.7
05:05 AM - 05:10 AM	42.6	37.2	07:45 AM - 07:50 AM	57.3	44.9	10:25 AM - 10:30 AM	58.6	48.2
05:10 AM - 05:15 AM	46.6	36.7	07:50 AM - 07:55 AM	56.9	45.1	10:30 AM - 10:35 AM	58.1	48.3
05:15 AM - 05:20 AM	65.8	36.1	07:55 AM - 08:00 AM	55.7	42.7	10:35 AM - 10:40 AM	58.4	47.3
05:20 AM - 05:25 AM	44.2	36.3	08:00 AM - 08:05 AM	49.7	39.0	10:40 AM - 10:45 AM	64.1	52.6
05:25 AM - 05:30 AM	53.1	37.8	08:05 AM - 08:10 AM	53.1	38.3	10:45 AM - 10:50 AM	61.4	48.6
05:30 AM - 05:35 AM	47.6	37.3	08:10 AM - 08:15 AM	49.0	39.6	10:50 AM - 10:55 AM	61.7	48.4
05:35 AM - 05:40 AM	53.4	39.0	08:15 AM - 08:20 AM	52.0	39.1	10:55 AM - 11:00 AM	60.9	45.9
05:40 AM - 05:45 AM	51.8	39.3	08:20 AM - 08:25 AM	51.1	40.1	11:00 AM - 11:05 AM	55.2	43.1
05:45 AM - 05:50 AM	49.4	38.9	08:25 AM - 08:30 AM	52.9	41.5	11:05 AM - 11:10 AM	53.2	45.0
05:50 AM - 05:55 AM	53.5	40.2	08:30 AM - 08:35 AM	54.3	42.8	11:10 AM - 11:15 AM	65.8	48.7
05:55 AM - 06:00 AM	54.2	40.4	08:35 AM - 08:40 AM	54.1	39.7	11:15 AM - 11:20 AM	65.9	48.2
06:00 AM - 06:05 AM	51.5	40.0	08:40 AM - 08:45 AM	51.0	40.0	11:20 AM - 11:25 AM	69.6	46.7
06:05 AM - 06:10 AM	53.7	40.9	08:45 AM - 08:50 AM	53.9	43.6	11:25 AM - 11:30 AM	56.7	46.1
06:10 AM - 06:15 AM	49.8	38.4	08:50 AM - 08:55 AM	52.6	42.3	11:30 AM - 11:35 AM	62.4	50.8
06:15 AM - 06:20 AM	54.2	39.9	08:55 AM - 09:00 AM	57.1	42.9	11:35 AM - 11:40 AM	61.9	46.9
06:20 AM - 06:25 AM	51.9	39.6	09:00 AM - 09:05 AM	51.6	42.4	11:40 AM - 11:45 AM	51.7	38.1
06:25 AM - 06:30 AM	51.3	37.2	09:05 AM - 09:10 AM	52.6	43.7	11:45 AM - 11:50 AM	52.6	41.0
06:30 AM - 06:35 AM	58.5	44.3	09:10 AM - 09:15 AM	62.2	42.1	11:50 AM - 11:55 AM	55.0	42.0
06:35 AM - 06:40 AM	58.6	48.6	09:15 AM - 09:20 AM	57.0	42.7	11:55 AM - 12:00 PM	56.9	43.2

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Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022969-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-9
Parameter Noise Level (Leq 5 min)
Location N2 : ลิตัดบุรัสลิตลาน
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	54.5	44.5	02:40 PM - 02:45 PM	49.3	37.0	05:20 PM - 05:25 PM	54.8	42.2
12:05 PM - 12:10 PM	55.1	42.7	02:45 PM - 02:50 PM	57.8	40.3	05:25 PM - 05:30 PM	52.4	41.4
12:10 PM - 12:15 PM	50.8	39.1	02:50 PM - 02:55 PM	52.1	38.1	05:30 PM - 05:35 PM	52.3	42.2
12:15 PM - 12:20 PM	62.9	42.1	02:55 PM - 03:00 PM	49.7	39.6	05:35 PM - 05:40 PM	52.2	42.0
12:20 PM - 12:25 PM	59.6	41.9	03:00 PM - 03:05 PM	51.4	39.2	05:40 PM - 05:45 PM	56.8	42.4
12:25 PM - 12:30 PM	52.5	41.6	03:05 PM - 03:10 PM	54.5	41.1	05:45 PM - 05:50 PM	53.0	42.7
12:30 PM - 12:35 PM	54.7	44.2	03:10 PM - 03:15 PM	53.4	39.1	05:50 PM - 05:55 PM	54.0	43.8
12:35 PM - 12:40 PM	54.9	49.0	03:15 PM - 03:20 PM	51.2	37.7	05:55 PM - 06:00 PM	54.5	42.8
12:40 PM - 12:45 PM	58.3	51.9	03:20 PM - 03:25 PM	52.2	38.2	06:00 PM - 06:05 PM	55.6	42.5
12:45 PM - 12:50 PM	56.7	41.0	03:25 PM - 03:30 PM	54.7	39.0	06:05 PM - 06:10 PM	54.5	44.3
12:50 PM - 12:55 PM	52.1	39.2	03:30 PM - 03:35 PM	50.1	39.4	06:10 PM - 06:15 PM	54.8	43.8
12:55 PM - 01:00 PM	57.1	41.2	03:35 PM - 03:40 PM	53.4	40.8	06:15 PM - 06:20 PM	54.4	43.5
01:00 PM - 01:05 PM	56.0	42.3	03:40 PM - 03:45 PM	64.9	41.0	06:20 PM - 06:25 PM	54.1	46.1
01:05 PM - 01:10 PM	55.5	41.2	03:45 PM - 03:50 PM	46.3	39.8	06:25 PM - 06:30 PM	57.1	46.0
01:10 PM - 01:15 PM	52.0	36.4	03:50 PM - 03:55 PM	53.5	40.7	06:30 PM - 06:35 PM	56.6	47.1
01:15 PM - 01:20 PM	55.5	37.3	03:55 PM - 04:00 PM	57.7	41.3	06:35 PM - 06:40 PM	55.6	48.0
01:20 PM - 01:25 PM	51.5	38.7	04:00 PM - 04:05 PM	60.7	40.1	06:40 PM - 06:45 PM	65.6	46.4
01:25 PM - 01:30 PM	49.2	38.6	04:05 PM - 04:10 PM	50.4	40.3	06:45 PM - 06:50 PM	54.4	46.3
01:30 PM - 01:35 PM	51.1	38.1	04:10 PM - 04:15 PM	52.0	40.8	06:50 PM - 06:55 PM	54.2	45.8
01:35 PM - 01:40 PM	49.0	36.2	04:15 PM - 04:20 PM	49.2	40.7	06:55 PM - 07:00 PM	57.2	46.3
01:40 PM - 01:45 PM	47.8	38.5	04:20 PM - 04:25 PM	54.1	42.0	07:00 PM - 07:05 PM	53.6	44.8
01:45 PM - 01:50 PM	47.6	37.7	04:25 PM - 04:30 PM	55.3	39.5	07:05 PM - 07:10 PM	52.8	44.4
01:50 PM - 01:55 PM	49.1	37.7	04:30 PM - 04:35 PM	55.8	40.1	07:10 PM - 07:15 PM	57.7	41.7
01:55 PM - 02:00 PM	48.1	39.9	04:35 PM - 04:40 PM	57.9	41.4	07:15 PM - 07:20 PM	56.2	42.9
02:00 PM - 02:05 PM	49.4	39.2	04:40 PM - 04:45 PM	58.2	39.0	07:20 PM - 07:25 PM	54.1	44.7
02:05 PM - 02:10 PM	52.0	39.0	04:45 PM - 04:50 PM	51.0	38.6	07:25 PM - 07:30 PM	58.4	45.3
02:10 PM - 02:15 PM	46.4	37.2	04:50 PM - 04:55 PM	49.3	39.5	07:30 PM - 07:35 PM	54.0	44.7
02:15 PM - 02:20 PM	54.9	38.7	04:55 PM - 05:00 PM	54.7	41.5	07:35 PM - 07:40 PM	55.8	43.9
02:20 PM - 02:25 PM	51.0	38.4	05:00 PM - 05:05 PM	52.9	42.8	07:40 PM - 07:45 PM	52.4	43.4
02:25 PM - 02:30 PM	53.4	39.4	05:05 PM - 05:10 PM	56.3	43.0	07:45 PM - 07:50 PM	53.8	45.0
02:30 PM - 02:35 PM	54.9	39.1	05:10 PM - 05:15 PM	51.9	41.2	07:50 PM - 07:55 PM	53.4	45.4
02:35 PM - 02:40 PM	48.7	39.8	05:15 PM - 05:20 PM	59.6	44.4	07:55 PM - 08:00 PM	58.0	43.3

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022969-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-9
Parameter Noise Level (Leq 5 min)
Location N2 : ลิตัดบุรัสลิตลาน
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30 - May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	58.4	42.6	10:40 PM - 10:45 PM	49.2	38.4	01:20 AM - 01:25 AM	42.0	35.0
08:05 PM - 08:10 PM	54.8	43.6	10:45 PM - 10:50 PM	55.4	38.2	01:25 AM - 01:30 AM	43.1	36.1
08:10 PM - 08:15 PM	51.7	42.4	10:50 PM - 10:55 PM	46.9	38.3	01:30 AM - 01:35 AM	45.3	36.3
08:15 PM - 08:20 PM	50.4	41.3	10:55 PM - 11:00 PM	49.9	37.6	01:35 AM - 01:40 AM	46.9	34.8
08:20 PM - 08:25 PM	53.6	41.7	11:00 PM - 11:05 PM	56.2	36.9	01:40 AM - 01:45 AM	48.9	35.4
08:25 PM - 08:30 PM	57.9	40.3	11:05 PM - 11:10 PM	42.1	37.8	01:45 AM - 01:50 AM	37.6	34.7
08:30 PM - 08:35 PM	56.5	40.8	11:10 PM - 11:15 PM	42.2	37.3	01:50 AM - 01:55 AM	42.7	35.1
08:35 PM - 08:40 PM	53.6	39.7	11:15 PM - 11:20 PM	44.4	38.6	01:55 AM - 02:00 AM	40.6	34.7
08:40 PM - 08:45 PM	53.6	39.9	11:20 PM - 11:25 PM	47.7	38.9	02:00 AM - 02:05 AM	40.6	34.5
08:45 PM - 08:50 PM	51.5	39.9	11:25 PM - 11:30 PM	44.1	39.2	02:05 AM - 02:10 AM	38.7	34.5
08:50 PM - 08:55 PM	50.8	39.1	11:30 PM - 11:35 PM	42.4	38.0	02:10 AM - 02:15 AM	38.9	34.3
08:55 PM - 09:00 PM	49.8	39.4	11:35 PM - 11:40 PM	42.2	38.1	02:15 AM - 02:20 AM	40.3	34.7
09:00 PM - 09:05 PM	50.8	39.7	11:40 PM - 11:45 PM	52.1	38.4	02:20 AM - 02:25 AM	37.3	34.6
09:05 PM - 09:10 PM	48.0	38.7	11:45 PM - 11:50 PM	44.6	38.5	02:25 AM - 02:30 AM	46.9	34.5
09:10 PM - 09:15 PM	48.2	39.3	11:50 PM - 11:55 PM	47.5	38.7	02:30 AM - 02:35 AM	38.9	35.4
09:15 PM - 09:20 PM	49.3	39.5	11:55 PM - 12:00 AM	46.4	38.0	02:35 AM - 02:40 AM	46.8	34.5
09:20 PM - 09:25 PM	51.0	39.7	12:00 AM - 12:05 AM	47.8	36.8	02:40 AM - 02:45 AM	37.8	34.5
09:25 PM - 09:30 PM	52.9	39.1	12:05 AM - 12:10 AM	42.4	36.1	02:45 AM - 02:50 AM	35.7	33.8
09:30 PM - 09:35 PM	51.3	38.8	12:10 AM - 12:15 AM	43.0	36.3	02:50 AM - 02:55 AM	39.4	34.0
09:35 PM - 09:40 PM	45.3	38.8	12:15 AM - 12:20 AM	43.9	36.7	02:55 AM - 03:00 AM	41.5	34.5
09:40 PM - 09:45 PM	49.8	41.1	12:20 AM - 12:25 AM	43.7	37.6	03:00 AM - 03:05 AM	37.9	34.5
09:45 PM - 09:50 PM	47.1	40.4	12:25 AM - 12:30 AM	41.0	36.6	03:05 AM - 03:10 AM	42.0	34.7
09:50 PM - 09:55 PM	46.5	37.8	12:30 AM - 12:35 AM	43.8	36.8	03:10 AM - 03:15 AM	41.7	34.7
09:55 PM - 10:00 PM	45.3	39.0	12:35 AM - 12:40 AM	48.9	37.5	03:15 AM - 03:20 AM	44.5	34.4
10:00 PM - 10:05 PM	44.4	38.3	12:40 AM - 12:45 AM	48.2	36.5	03:20 AM - 03:25 AM	37.5	35.0
10:05 PM - 10:10 PM	50.8	38.3	12:45 AM - 12:50 AM	42.7	35.4	03:25 AM - 03:30 AM	37.1	34.4
10:10 PM - 10:15 PM	52.3	38.8	12:50 AM - 12:55 AM	46.9	35.6	03:30 AM - 03:35 AM	38.4	33.5
10:15 PM - 10:20 PM	47.5	37.8	12:55 AM - 01:00 AM	41.4	35.7	03:35 AM - 03:40 AM	37.0	33.8
10:20 PM - 10:25 PM	43.9	38.0	01:00 AM - 01:05 AM	46.6	36.2	03:40 AM - 03:45 AM	49.0	35.3
10:25 PM - 10:30 PM	45.1	37.9	01:05 AM - 01:10 AM	40.1	35.9	03:45 AM - 03:50 AM	37.8	35.0
10:30 PM - 10:35 PM	46.2	39.4	01:10 AM - 01:15 AM	38.9	36.1	03:50 AM - 03:55 AM	38.5	35.7
10:35 PM - 10:40 PM	46.9	38.2	01:15 AM - 01:20 AM	56.2	35.7	03:55 AM - 04:00 AM	41.7	34.0

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Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022969-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample Number 2450167-9
Parameter Noise Level (Leq 5 min)
Location N2 : ลิตัดบุรัสลิตลาน
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	40.0	32.8	06:40 AM - 06:45 AM	50.5	40.8	09:20 AM - 09:25 AM	58.8	41.0
04:05 AM - 04:10 AM	35.7	32.3	06:45 AM - 06:50 AM	62.0	43.5	09:25 AM - 09:30 AM	52.8	38.9
04:10 AM - 04:15 AM	35.5	32.9	06:50 AM - 06:55 AM	54.7	43.5	09:30 AM - 09:35 AM	56.2	42.4
04:15 AM - 04:20 AM	37.7	33.2	06:55 AM - 07:00 AM	52.4	43.2	09:35 AM - 09:40 AM	56.6	45.4
04:20 AM - 04:25 AM	42.0	38.0	07:00 AM - 07:05 AM	49.3	41.6	09:40 AM - 09:45 AM	54.1	38.3
04:25 AM - 04:30 AM	49.6	38.7	07:05 AM - 07:10 AM	57.5	44.4	09:45 AM - 09:50 AM	55.9	41.3
04:30 AM - 04:35 AM	43.4	39.3	07:10 AM - 07:15 AM	56.7	40.0	09:50 AM - 09:55 AM	55.9	45.1
04:35 AM - 04:40 AM	43.2	36.6	07:15 AM - 07:20 AM	52.6	41.2	09:55 AM - 10:00 AM	53.5	43.1
04:40 AM - 04:45 AM	39.3	35.5	07:20 AM - 07:25 AM	69.6	41.2	10:00 AM - 10:05 AM	59.3	44.1
04:45 AM - 04:50 AM	39.8	36.1	07:25 AM - 07:30 AM	69.1	42.4	10:05 AM - 10:10 AM	56.3	40.6
04:50 AM - 04:55 AM	41.2	35.7	07:30 AM - 07:35 AM	55.1	45.7	10:10 AM - 10:15 AM	53.0	40.3
04:55 AM - 05:00 AM	43.5	35.7	07:35 AM - 07:40 AM	57.1	43.9	10:15 AM - 10:20 AM	51.5	39.3
05:00 AM - 05:05 AM	40.9	36.2	07:40 AM - 07:45 AM	52.3	41.6	10:20 AM - 10:25 AM	49.9	39.6
05:05 AM - 05:10 AM	44.3	36.0	07:45 AM - 07:50 AM	53.6	42.2	10:25 AM - 10:30 AM	58.8	46.4
05:10 AM - 05:15 AM	53.0	35.4	07:50 AM - 07:55 AM	52.2	41.8	10:30 AM - 10:35 AM	52.8	45.3
05:15 AM - 05:20 AM	44.4	34.6	07:55 AM - 08:00 AM	56.3	40.7	10:35 AM - 10:40 AM	55.4	44.7
05:20 AM - 05:25 AM	42.5	34.4	08:00 AM - 08:05 AM	54.3	44.3	10:40 AM - 10:45 AM	59.7	46.6
05:25 AM - 05:30 AM	43.7	35.3	08:05 AM - 08:10 AM	54.7	40.7	10:45 AM - 10:50 AM	53.9	45.0
05:30 AM - 05:35 AM	49.5	35.8	08:10 AM - 08:15 AM	55.2	37.6	10:50 AM - 10:55 AM	53.0	45.2
05:35 AM - 05:40 AM	49.1	36.6	08:15 AM - 08:20 AM	55.1	41.0	10:55 AM - 11:00 AM	51.5	44.0
05:40 AM - 05:45 AM	56.6	41.5	08:20 AM - 08:25 AM	60.4	50.7	11:00 AM - 11:05 AM	57.3	44.4
05:45 AM - 05:50 AM	56.3	40.3	08:25 AM - 08:30 AM	59.4	45.5	11:05 AM - 11:10 AM	53.4	44.3
05:50 AM - 05:55 AM	51.9	40.8	08:30 AM - 08:35 AM	61.1	45.3	11:10 AM - 11:15 AM	59.5	46.5
05:55 AM - 06:00 AM	54.4	38.6	08:35 AM - 08:40 AM	55.0	46.9	11:15 AM - 11:20 AM	52.9	44.9
06:00 AM - 06:05 AM	52.6	41.1	08:40 AM - 08:45 AM	60.8	42.9	11:20 AM - 11:25 AM	55.6	45.1
06:05 AM - 06:10 AM	60.6	39.5	08:45 AM - 08:50 AM	59.9	44.9	11:25 AM - 11:30 AM	55.4	45.5
06:10 AM - 06:15 AM	54.5	44.5	08:50 AM - 08:55 AM	54.8	41.9	11:30 AM - 11:35 AM	50.6	43.4
06:15 AM - 06:20 AM	52.4	40.0	08:55 AM - 09:00 AM	54.3	40.6	11:35 AM - 11:40 AM	52.6	43.5
06:20 AM - 06:25 AM	53.9	43.8	09:00 AM - 09:05 AM	54.2	48.2	11:40 AM - 11:45 AM	55.5	44.7
06:25 AM - 06:30 AM	48.0	40.9	09:05 AM - 09:10 AM	55.7	39.4	11:45 AM - 11:50 AM	54.3	44.9
06:30 AM - 06:35 AM	52.1	42.8	09:10 AM - 09:15 AM	50.6	37.9	11:50 AM - 11:55 AM	53.3	43.8
06:35 AM - 06:40 AM	50.7	41.0	09:15 AM - 09:20 AM	54.3	39.8	11:55 AM - 12:00 PM	56.0	47.0

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Approved by
Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022970-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample Number 2450167-10
Parameter Noise Level (Leq 5 min)
Location N2 : ลิตัดบุรัสลิตลาน
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	58.7	47.8	02:40 PM - 02:45 PM	48.5	40.5	05:20 PM - 05:25 PM	61.1	45.6
12:05 PM - 12:10 PM	57.8	51.4	02:45 PM - 02:50 PM	53.9	42.2	05:25 PM - 05:30 PM	63.6	49.5
12:10 PM - 12:15 PM	61.3	52.5	02:50 PM - 02:55 PM	56.9	43.2	05:30 PM - 05:35 PM	70.6	50.8
12:15 PM - 12:20 PM	62.3	52.0	02:55 PM - 03:00 PM	49.7	40.3	05:35 PM - 05:40 PM	67.5	45.9
12:20 PM - 12:25 PM	54.9	46.5	03:00 PM - 03:05 PM	50.7	39.7	05:40 PM - 05:45 PM	53.4	43.9
12:25 PM - 12:30 PM	57.7	47.8	03:05 PM - 03:10 PM	52.0	40.9	05:45 PM - 05:50 PM	52.8	42.7
12:30 PM - 12:35 PM	53.1	46.3	03:10 PM - 03:15 PM	51.6	43.3	05:50 PM - 05:55 PM	50.1	41.4
12:35 PM - 12:40 PM	54.7	45.7	03:15 PM - 03:20 PM	58.9	40.8	05:55 PM - 06:00 PM	55.8	42.7
12:40 PM - 12:45 PM	57.2	45.9	03:20 PM - 03:25 PM	57.3	43.2	06:00 PM - 06:05 PM	59.5	43.1
12:45 PM - 12:50 PM	53.3	41.0	03:25 PM - 03:30 PM	56.2	41.7	06:05 PM - 06:10 PM	56.8	43.3
12:50 PM - 12:55 PM	57.7	43.4	03:30 PM - 03:35 PM	54.8	38.5	06:10 PM - 06:15 PM	53.5	43.7
12:55 PM - 01:00 PM	52.3	41.2	03:35 PM - 03:40 PM	50.9	38.2	06:15 PM - 06:20 PM	57.4	47.5
01:00 PM - 01:05 PM	60.6	51.0	03:40 PM - 03:45 PM	48.8	39.8	06:20 PM - 06:25 PM	56.3	49.8
01:05 PM - 01:10 PM	56.1	41.0	03:45 PM - 03:50 PM	53.2	44.1	06:25 PM - 06:30 PM	56.1	48.4
01:10 PM - 01:15 PM	56.5	40.6	03:50 PM - 03:55 PM	51.9	45.5	06:30 PM - 06:35 PM	57.1	52.2
01:15 PM - 01:20 PM	53.5	39.9	03:55 PM - 04:00 PM	51.8	45.4	06:35 PM - 06:40 PM	57.6	52.4
01:20 PM - 01:25 PM	54.1	41.2	04:00 PM - 04:05 PM	50.6	44.3	06:40 PM - 06:45 PM	63.8	46.9
01:25 PM - 01:30 PM	57.1	39.3	04:05 PM - 04:10 PM	52.6	45.5	06:45 PM - 06:50 PM	57.2	52.2
01:30 PM - 01:35 PM	52.2	41.4	04:10 PM - 04:15 PM	50.3	43.3	06:50 PM - 06:55 PM	54.0	45.9
01:35 PM - 01:40 PM	52.7	40.2	04:15 PM - 04:20 PM	55.3	51.3	06:55 PM - 07:00 PM	57.2	45.4
01:40 PM - 01:45 PM	52.6	39.4	04:20 PM - 04:25 PM	57.8	52.6	07:00 PM - 07:05 PM	53.1	45.5
01:45 PM - 01:50 PM	57.6	40.1	04:25 PM - 04:30 PM	61.5	52.3	07:05 PM - 07:10 PM	53.3	45.9
01:50 PM - 01:55 PM	52.6	39.2	04:30 PM - 04:35 PM	54.3	45.8	07:10 PM - 07:15 PM	55.0	46.6
01:55 PM - 02:00 PM	48.6	38.3	04:35 PM - 04:40 PM	51.6	42.7	07:15 PM - 07:20 PM	55.9	46.2
02:00 PM - 02:05 PM	51.4	37.9	04:40 PM - 04:45 PM	63.2	45.7	07:20 PM - 07:25 PM	55.4	47.9
02:05 PM - 02:10 PM	56.3	37.9	04:45 PM - 04:50 PM	60.5	45.9	07:25 PM - 07:30 PM	53.8	45.1
02:10 PM - 02:15 PM	48.5	39.3	04:50 PM - 04:55 PM	65.8	51.0	07:30 PM - 07:35 PM	59.2	46.2
02:15 PM - 02:20 PM	57.4	39.0	04:55 PM - 05:00 PM	62.0	47.8	07:35 PM - 07:40 PM	56.7	44.4
02:20 PM - 02:25 PM	58.1	39.7	05:00 PM - 05:05 PM	67.1	45.3	07:40 PM - 07:45 PM	54.5	51.6
02:25 PM - 02:30 PM	56.8	37.9	05:05 PM - 05:10 PM	61.3	44.1	07:45 PM - 07:50 PM	57.3	51.8
02:30 PM - 02:35 PM	47.6	40.1	05:10 PM - 05:15 PM	61.9	44.9	07:50 PM - 07:55 PM	56.3	51.7
02:35 PM - 02:40 PM	52.7	41.3	05:15 PM - 05:20 PM	57.0	44.5	07:55 PM - 08:00 PM	62.1	52.0

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Approved by
Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022970-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-10
Parameter Noise Level (Leq 5 min)
Location N2 : สนับสนุนสังคม
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31 - Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	56.6	51.3	10:40 PM - 10:45 PM	50.2	36.7	01:20 AM - 01:25 AM	40.8	35.0
08:05 PM - 08:10 PM	56.4	51.4	10:45 PM - 10:50 PM	44.3	35.7	01:25 AM - 01:30 AM	55.9	34.5
08:10 PM - 08:15 PM	54.8	51.2	10:50 PM - 10:55 PM	50.7	36.5	01:30 AM - 01:35 AM	41.7	34.1
08:15 PM - 08:20 PM	51.9	51.2	10:55 PM - 11:00 PM	58.2	37.5	01:35 AM - 01:40 AM	40.4	34.3
08:20 PM - 08:25 PM	56.6	51.1	11:00 PM - 11:05 PM	46.7	37.7	01:40 AM - 01:45 AM	47.2	34.1
08:25 PM - 08:30 PM	58.9	51.0	11:05 PM - 11:10 PM	43.0	36.7	01:45 AM - 01:50 AM	38.2	33.5
08:30 PM - 08:35 PM	61.1	42.8	11:10 PM - 11:15 PM	54.5	37.6	01:50 AM - 01:55 AM	36.3	33.1
08:35 PM - 08:40 PM	54.8	38.8	11:15 PM - 11:20 PM	42.3	37.2	01:55 AM - 02:00 AM	36.5	34.1
08:40 PM - 08:45 PM	49.6	39.4	11:20 PM - 11:25 PM	50.1	37.1	02:00 AM - 02:05 AM	37.0	34.1
08:45 PM - 08:50 PM	50.4	39.6	11:25 PM - 11:30 PM	43.3	36.4	02:05 AM - 02:10 AM	38.4	33.8
08:50 PM - 08:55 PM	50.9	41.6	11:30 PM - 11:35 PM	52.1	37.2	02:10 AM - 02:15 AM	37.2	33.0
08:55 PM - 09:00 PM	48.2	38.5	11:35 PM - 11:40 PM	44.9	36.5	02:15 AM - 02:20 AM	38.3	34.6
09:00 PM - 09:05 PM	49.1	39.3	11:40 PM - 11:45 PM	45.0	36.0	02:20 AM - 02:25 AM	38.1	34.7
09:05 PM - 09:10 PM	48.9	39.0	11:45 PM - 11:50 PM	47.7	36.3	02:25 AM - 02:30 AM	42.7	35.4
09:10 PM - 09:15 PM	50.0	38.6	11:50 PM - 11:55 PM	44.0	36.6	02:30 AM - 02:35 AM	37.7	34.8
09:15 PM - 09:20 PM	49.8	37.9	11:55 PM - 12:00 AM	45.7	37.3	02:35 AM - 02:40 AM	61.3	35.8
09:20 PM - 09:25 PM	51.9	37.2	12:00 AM - 12:05 AM	42.1	36.1	02:40 AM - 02:45 AM	40.1	35.3
09:25 PM - 09:30 PM	47.9	35.7	12:05 AM - 12:10 AM	44.5	37.2	02:45 AM - 02:50 AM	38.9	34.7
09:30 PM - 09:35 PM	54.7	38.0	12:10 AM - 12:15 AM	42.9	36.9	02:50 AM - 02:55 AM	41.4	34.7
09:35 PM - 09:40 PM	56.9	39.2	12:15 AM - 12:20 AM	53.4	36.5	02:55 AM - 03:00 AM	41.6	34.7
09:40 PM - 09:45 PM	50.2	37.8	12:20 AM - 12:25 AM	41.5	36.2	03:00 AM - 03:05 AM	37.1	34.3
09:45 PM - 09:50 PM	46.4	38.5	12:25 AM - 12:30 AM	43.6	37.6	03:05 AM - 03:10 AM	36.7	34.4
09:50 PM - 09:55 PM	49.7	38.5	12:30 AM - 12:35 AM	41.8	36.3	03:10 AM - 03:15 AM	39.0	35.6
09:55 PM - 10:00 PM	46.6	39.0	12:35 AM - 12:40 AM	40.1	37.6	03:15 AM - 03:20 AM	40.6	35.6
10:00 PM - 10:05 PM	45.3	39.1	12:40 AM - 12:45 AM	44.3	35.5	03:20 AM - 03:25 AM	39.6	35.0
10:05 PM - 10:10 PM	49.4	39.6	12:45 AM - 12:50 AM	40.6	34.6	03:25 AM - 03:30 AM	38.7	34.6
10:10 PM - 10:15 PM	45.8	39.3	12:50 AM - 12:55 AM	44.2	35.0	03:30 AM - 03:35 AM	44.2	35.1
10:15 PM - 10:20 PM	46.2	39.0	12:55 AM - 01:00 AM	43.7	35.1	03:35 AM - 03:40 AM	39.7	35.2
10:20 PM - 10:25 PM	49.6	38.7	01:00 AM - 01:05 AM	40.0	34.6	03:40 AM - 03:45 AM	37.0	34.7
10:25 PM - 10:30 PM	47.4	39.7	01:05 AM - 01:10 AM	37.8	35.1	03:45 AM - 03:50 AM	39.9	34.3
10:30 PM - 10:35 PM	44.8	39.8	01:10 AM - 01:15 AM	39.5	35.5	03:50 AM - 03:55 AM	40.0	34.5
10:35 PM - 10:40 PM	55.5	39.6	01:15 AM - 01:20 AM	38.1	35.2	03:55 AM - 04:00 AM	36.8	34.8

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022970-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-10
Parameter Noise Level (Leq 5 min)
Location N2 : สนับสนุนสังคม
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	48.6	35.3	06:40 AM - 06:45 AM	63.0	47.0	09:20 AM - 09:25 AM	56.7	44.4
04:05 AM - 04:10 AM	44.6	36.4	06:45 AM - 06:50 AM	54.6	43.4	09:25 AM - 09:30 AM	57.3	45.2
04:10 AM - 04:15 AM	49.5	36.9	06:50 AM - 06:55 AM	54.3	43.2	09:30 AM - 09:35 AM	56.2	47.7
04:15 AM - 04:20 AM	51.1	45.4	06:55 AM - 07:00 AM	60.7	47.7	09:35 AM - 09:40 AM	59.1	48.0
04:20 AM - 04:25 AM	62.1	50.0	07:00 AM - 07:05 AM	63.2	59.0	09:40 AM - 09:45 AM	54.5	44.4
04:25 AM - 04:30 AM	58.3	42.4	07:05 AM - 07:10 AM	64.2	59.8	09:45 AM - 09:50 AM	58.0	46.0
04:30 AM - 04:35 AM	50.4	43.1	07:10 AM - 07:15 AM	63.4	56.9	09:50 AM - 09:55 AM	57.9	42.1
04:35 AM - 04:40 AM	53.2	42.2	07:15 AM - 07:20 AM	67.9	57.9	09:55 AM - 10:00 AM	53.7	42.9
04:40 AM - 04:45 AM	44.3	41.7	07:20 AM - 07:25 AM	62.9	58.1	10:00 AM - 10:05 AM	57.4	44.3
04:45 AM - 04:50 AM	44.6	41.2	07:25 AM - 07:30 AM	59.1	52.9	10:05 AM - 10:10 AM	57.9	44.7
04:50 AM - 04:55 AM	44.2	40.8	07:30 AM - 07:35 AM	57.9	49.0	10:10 AM - 10:15 AM	59.5	46.8
04:55 AM - 05:00 AM	46.0	41.1	07:35 AM - 07:40 AM	58.0	53.0	10:15 AM - 10:20 AM	57.2	46.1
05:00 AM - 05:05 AM	48.0	42.3	07:40 AM - 07:45 AM	64.6	56.6	10:20 AM - 10:25 AM	52.6	42.5
05:05 AM - 05:10 AM	46.6	41.6	07:45 AM - 07:50 AM	65.1	61.9	10:25 AM - 10:30 AM	56.3	44.2
05:10 AM - 05:15 AM	50.3	42.1	07:50 AM - 07:55 AM	65.0	61.4	10:30 AM - 10:35 AM	57.4	44.4
05:15 AM - 05:20 AM	47.0	41.6	07:55 AM - 08:00 AM	65.1	62.5	10:35 AM - 10:40 AM	54.5	47.0
05:20 AM - 05:25 AM	50.6	42.6	08:00 AM - 08:05 AM	56.8	49.0	10:40 AM - 10:45 AM	54.9	50.1
05:25 AM - 05:30 AM	59.0	43.0	08:05 AM - 08:10 AM	57.5	46.5	10:45 AM - 10:50 AM	53.6	45.3
05:30 AM - 05:35 AM	50.1	43.2	08:10 AM - 08:15 AM	56.3	47.3	10:50 AM - 10:55 AM	53.7	44.7
05:35 AM - 05:40 AM	49.6	39.9	08:15 AM - 08:20 AM	60.1	51.5	10:55 AM - 11:00 AM	52.3	43.4
05:40 AM - 05:45 AM	51.9	41.1	08:20 AM - 08:25 AM	60.1	51.5	11:00 AM - 11:05 AM	52.1	42.2
05:45 AM - 05:50 AM	57.2	45.3	08:25 AM - 08:30 AM	56.8	44.8	11:05 AM - 11:10 AM	52.7	42.4
05:50 AM - 05:55 AM	52.3	41.1	08:30 AM - 08:35 AM	58.0	45.1	11:10 AM - 11:15 AM	55.0	42.3
05:55 AM - 06:00 AM	55.8	42.2	08:35 AM - 08:40 AM	55.5	42.7	11:15 AM - 11:20 AM	52.4	42.4
06:00 AM - 06:05 AM	54.9	42.3	08:40 AM - 08:45 AM	57.9	46.5	11:20 AM - 11:25 AM	52.4	42.6
06:05 AM - 06:10 AM	51.2	41.7	08:45 AM - 08:50 AM	57.1	44.6	11:25 AM - 11:30 AM	52.2	43.1
06:10 AM - 06:15 AM	57.0	42.0	08:50 AM - 08:55 AM	60.0	50.7	11:30 AM - 11:35 AM	54.7	44.4
06:15 AM - 06:20 AM	55.4	44.7	08:55 AM - 09:00 AM	57.6	48.8	11:35 AM - 11:40 AM	53.9	43.5
06:20 AM - 06:25 AM	62.2	45.6	09:00 AM - 09:05 AM	58.5	42.0	11:40 AM - 11:45 AM	56.3	44.4
06:25 AM - 06:30 AM	56.2	42.6	09:05 AM - 09:10 AM	57.2	44.5	11:45 AM - 11:50 AM	56.1	43.6
06:30 AM - 06:35 AM	55.5	44.3	09:10 AM - 09:15 AM	54.8	44.6	11:50 AM - 11:55 AM	55.2	42.4
06:35 AM - 06:40 AM	55.3	44.0	09:15 AM - 09:20 AM	64.5	43.2	11:55 AM - 12:00 PM	56.9	45.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022971-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-11
Parameter Noise Level (Leq 5 min)
Location N2 : สนับสนุนสังคม
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	57.5	45.2	02:40 PM - 02:45 PM	53.3	40.0	05:20 PM - 05:25 PM	58.0	51.2
12:05 PM - 12:10 PM	62.7	44.6	02:45 PM - 02:50 PM	52.9	38.4	05:25 PM - 05:30 PM	57.0	45.9
12:10 PM - 12:15 PM	62.8	49.5	02:50 PM - 02:55 PM	51.3	39.0	05:30 PM - 05:35 PM	51.9	45.3
12:15 PM - 12:20 PM	62.7	61.2	02:55 PM - 03:00 PM	58.9	40.5	05:35 PM - 05:40 PM	55.3	46.1
12:20 PM - 12:25 PM	61.7	57.8	03:00 PM - 03:05 PM	55.3	38.1	05:40 PM - 05:45 PM	62.8	45.8
12:25 PM - 12:30 PM	61.4	59.6	03:05 PM - 03:10 PM	55.7	41.5	05:45 PM - 05:50 PM	56.6	46.3
12:30 PM - 12:35 PM	62.2	60.5	03:10 PM - 03:15 PM	63.8	46.0	05:50 PM - 05:55 PM	58.0	47.8
12:35 PM - 12:40 PM	60.5	46.1	03:15 PM - 03:20 PM	52.6	38.4	05:55 PM - 06:00 PM	58.1	46.6
12:40 PM - 12:45 PM	58.8	42.4	03:20 PM - 03:25 PM	60.1	40.7	06:00 PM - 06:05 PM	57.0	47.4
12:45 PM - 12:50 PM	54.3	38.5	03:25 PM - 03:30 PM	52.4	40.6	06:05 PM - 06:10 PM	56.0	47.1
12:50 PM - 12:55 PM	47.6	37.9	03:30 PM - 03:35 PM	52.6	39.2	06:10 PM - 06:15 PM	58.0	51.2
12:55 PM - 01:00 PM	55.4	40.0	03:35 PM - 03:40 PM	53.1	40.2	06:15 PM - 06:20 PM	60.4	54.0
01:00 PM - 01:05 PM	49.1	38.3	03:40 PM - 03:45 PM	55.0	40.2	06:20 PM - 06:25 PM	59.9	52.7
01:05 PM - 01:10 PM	48.6	36.2	03:45 PM - 03:50 PM	63.9	42.6	06:25 PM - 06:30 PM	60.4	51.0
01:10 PM - 01:15 PM	49.8	39.0	03:50 PM - 03:55 PM	61.5	39.7	06:30 PM - 06:35 PM	59.1	50.0
01:15 PM - 01:20 PM	57.2	41.7	03:55 PM - 04:00 PM	61.3	44.2	06:35 PM - 06:40 PM	57.0	48.3
01:20 PM - 01:25 PM	55.8	41.2	04:00 PM - 04:05 PM	60.5	48.6	06:40 PM - 06:45 PM	61.8	40.0
01:25 PM - 01:30 PM	57.7	41.6	04:05 PM - 04:10 PM	54.6	45.8	06:45 PM - 06:50 PM	59.7	45.7
01:30 PM - 01:35 PM	51.6	38.9	04:10 PM - 04:15 PM	53.5	42.3	06:50 PM - 06:55 PM	54.8	46.5
01:35 PM - 01:40 PM	53.7	38.4	04:15 PM - 04:20 PM	57.0	45.1	06:55 PM - 07:00 PM	58.0	46.5
01:40 PM - 01:45 PM	66.9	48.3	04:20 PM - 04:25 PM	52.1	43.6	07:00 PM - 07:05 PM	56.9	44.7
01:45 PM - 01:50 PM	57.4	46.7	04:25 PM - 04:30 PM	59.6	44.4	07:05 PM - 07:10 PM	55.9	42.3
01:50 PM - 01:55 PM	55.6	47.6	04:30 PM - 04:35 PM	53.2	45.4	07:10 PM - 07:15 PM	65.9	64.9
01:55 PM - 02:00 PM	59.0	50.8	04:35 PM - 04:40 PM	55.2	47.1	07:15 PM - 07:20 PM	66.6	64.2
02:00 PM - 02:05 PM	65.0	53.3	04:40 PM - 04:45 PM	56.6	48.0	07:20 PM - 07:25 PM	64.3	64.2
02:05 PM - 02:10 PM	56.2	41.1	04:45 PM - 04:50 PM	56.3	47.4	07:25 PM - 07:30 PM	59.4	42.5
02:10 PM - 02:15 PM	54.0	41.9	04:50 PM - 04:55 PM	59.1	47.4	07:30 PM - 07:35 PM	58.4	43.1
02:15 PM - 02:20 PM	52.7	40.1	04:55 PM - 05:00 PM	57.7	46.1	07:35 PM - 07:40 PM	51.9	43.5
02:20 PM - 02:25 PM	55.4	41.1	05:00 PM - 05:05 PM	54.0	44.4	07:40 PM - 07:45 PM	49.5	43.1
02:25 PM - 02:30 PM	46.6	40.5	05:05 PM - 05:10 PM	56.3	46.2	07:45 PM - 07:50 PM	55.1	44.4
02:30 PM - 02:35 PM	55.2	38.9	05:10 PM - 05:15 PM	50.9	49.9	07:50 PM - 07:55 PM	54.9	46.1
02:35 PM - 02:40 PM	51.6	40.7	05:15 PM - 05:20 PM	59.0	49.3	07:55 PM - 08:00 PM	59.1	45.6

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022971-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-11
Parameter Noise Level (Leq 5 min)
Location N2 : สนับสนุนสังคม
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01 - Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	59.9	45.3	10:40 PM - 10:45 PM	47.4	41.9	01:20 AM - 01:25 AM	43.4	38.1
08:05 PM - 08:10 PM	56.2	46.4	10:45 PM - 10:50 PM	51.9	42.0	01:25 AM - 01:30 AM	46.4	37.4
08:10 PM - 08:15 PM	51.7	47.4	10:50 PM - 10:55 PM	50.5	43.0	01:30 AM - 01:35 AM	41.9	37.7
08:15 PM - 08:20 PM	62.2	44.4	10:55 PM - 11:00 PM	50.1	42.6	01:35 AM - 01:40 AM	41.8	38.3
08:20 PM - 08:25 PM	57.3	46.5	11:00 PM - 11:05 PM	59.0	46.0	01:40 AM - 01:45 AM	41.5	38.7
08:25 PM - 08:30 PM	51.9	40.1	11:05 PM - 11:10 PM	50.9	48.0	01:45 AM - 01:50 AM	41.4	37.9
08:30 PM - 08:35 PM	54.4	39.9	11:10 PM - 11:15 PM	57.1	47.9	01:50 AM - 01:55 AM	44.7	38.1
08:35 PM - 08:40 PM	53.5	41.3	11:15 PM - 11:20 PM	47.8	46.2	01:55 AM - 02:00 AM	42.6	40.8
08:40 PM - 08:45 PM	53.4	41.3	11:20 PM - 11:25 PM	50.7	47.9	02:00 AM - 02:05 AM	44.3	40.1
08:45 PM - 08:50 PM	50.2	41.8	11:25 PM - 11:30 PM	50.6	48.8	02:05 AM - 02:10 AM	44.5	39.9
08:50 PM - 08:55 PM	49.8	40.6	11:30 PM - 11:35 PM	51.2	49.4	02:10 AM - 02:15 AM	42.7	38.9
08:55 PM - 09:00 PM	52.7	42.1	11:35 PM - 11:40 PM	54.7	52.0	02:15 AM - 02:20 AM	44.5	39.2
09:00 PM - 09:05 PM	59.0	42.3	11:40 PM - 11:45 PM	53.7	50.9	02:20 AM - 02:25 AM	40.9	38.5
09:05 PM - 09:10 PM	59.5	43.6	11:45 PM - 11:50 PM	50.1	47.2	02:25 AM - 02:30 AM	39.7	38.1
09:10 PM - 09:15 PM	56.0	41.2	11:50 PM - 11:55 PM	54.5	45.9	02:30 AM - 02:35 AM	61.5	41.1
09:15 PM - 09:20 PM	54.6	40.9	11:55 PM - 12:00 AM	47.0	44.8	02:35 AM - 02:40 AM	43.6	38.6
09:20 PM - 09:25 PM	51.8	41.4	12:00 AM - 12:05 AM	51.2	47.3	02:40 AM - 02:45 AM	43.3	38.2
09:25 PM - 09:30 PM	49.7	40.7	12:05 AM - 12:10 AM	54.1	51.8	02:45 AM - 02:50 AM	43.0	37.6
09:30 PM - 09:35 PM	53.1	41.1	12:10 AM - 12:15 AM	56.0	54.0	02:50 AM - 02:55 AM	39.7	37.9
09:35 PM - 09:40 PM	53.4	40.2	12:15 AM - 12:20 AM	56.7	53.4	02:55 AM - 03:00 AM	43.5	38.4
09:40 PM - 09:45 PM	54.6	39.5	12:20 AM - 12:25 AM	56.8	55.1	03:00 AM - 03:05 AM	40.0	38.1
09:45 PM - 09:50 PM	56.6	39.0	12:25 AM - 12:30 AM	55.1	52.3	03:05 AM - 03:10 AM	40.6	38.1
09:50 PM - 09:55 PM	50.6	39.9	12:30 AM - 12:35 AM	52.6	50.4	03:10 AM - 03:15 AM	41.7	38.2
09:55 PM - 10:00 PM	50.0	39.9	12:35 AM - 12:40 AM	51.8	47.8	03:15 AM - 03:20 AM	50.1	38.6
10:00 PM - 10:05 PM	59.8	39.7	12:40 AM - 12:45 AM	53.0	46.6	03:20 AM - 03:25 AM	43.6	38.3
10:05 PM - 10:10 PM	54.4	40.8	12:45 AM - 12:50 AM	51.9	46.2	03:25 AM - 03:30 AM	43.1	38.1
10:10 PM - 10:15 PM	46.0	40.5	12:50 AM - 12:55 AM	49.3	46.1	03:30 AM - 03:35 AM	47.3	38.5
10:15 PM - 10:20 PM	48.0	40.0	12:55 AM - 01:00 AM	47.4	43.9	03:35 AM - 03:40 AM	39.5	37.7
10:20 PM - 10:25 PM	51.9	40.5	01:00 AM - 01:05 AM	48.1	43.6	03:40 AM - 03:45 AM	40.7	37.8
10:25 PM - 10:30 PM	45.6	39.8	01:05 AM - 01:10 AM	46.2	43.2	03:45 AM - 03:50 AM	39.6	37.8
10:30 PM - 10:35 PM	46.2	40.8	01:10 AM - 01:15 AM	45.6	42.3	03:50 AM - 03:55 AM	42.1	37.6
10:35 PM - 10:40 PM	47.4	41.8	01:15 AM - 01:20 AM	44.8	41.1	03:55 AM - 04:00 AM	41.2	38.4

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Approved by
Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022971-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-11
Parameter Noise Level (Leq 5 min)
Location NZ : ผลิตภัณฑ์สยาม
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	40.8	37.8	06:00 AM - 06:45 AM	59.6	44.7	09:20 AM - 09:25 AM	57.4	47.4
04:05 AM - 04:10 AM	40.3	37.6	06:45 AM - 06:50 AM	58.0	47.2	09:25 AM - 09:30 AM	62.1	51.9
04:10 AM - 04:15 AM	45.1	38.0	06:50 AM - 06:55 AM	60.1	45.0	09:30 AM - 09:35 AM	61.8	48.8
04:15 AM - 04:20 AM	50.5	37.4	06:55 AM - 07:00 AM	57.8	40.4	09:35 AM - 09:40 AM	60.3	45.9
04:20 AM - 04:25 AM	43.0	37.8	07:00 AM - 07:05 AM	59.8	47.8	09:40 AM - 09:45 AM	59.2	45.8
04:25 AM - 04:30 AM	48.6	37.8	07:05 AM - 07:10 AM	56.5	41.6	09:45 AM - 09:50 AM	59.2	48.2
04:30 AM - 04:35 AM	40.7	37.2	07:10 AM - 07:15 AM	59.1	46.2	09:50 AM - 09:55 AM	57.4	46.8
04:35 AM - 04:40 AM	50.8	36.9	07:15 AM - 07:20 AM	55.9	41.4	09:55 AM - 10:00 AM	55.8	45.4
04:40 AM - 04:45 AM	65.4	40.2	07:20 AM - 07:25 AM	51.9	43.9	10:00 AM - 10:05 AM	54.0	46.0
04:45 AM - 04:50 AM	46.0	40.1	07:25 AM - 07:30 AM	53.9	39.9	10:05 AM - 10:10 AM	57.9	49.3
04:50 AM - 04:55 AM	51.5	40.6	07:30 AM - 07:35 AM	52.9	41.2	10:10 AM - 10:15 AM	56.4	47.9
04:55 AM - 05:00 AM	51.1	40.5	07:35 AM - 07:40 AM	57.6	38.6	10:15 AM - 10:20 AM	58.8	49.0
05:00 AM - 05:05 AM	43.1	39.4	07:40 AM - 07:45 AM	54.1	44.1	10:20 AM - 10:25 AM	62.7	51.2
05:05 AM - 05:10 AM	44.1	39.7	07:45 AM - 07:50 AM	58.8	47.4	10:25 AM - 10:30 AM	60.1	50.7
05:10 AM - 05:15 AM	48.1	39.2	07:50 AM - 07:55 AM	58.4	47.6	10:30 AM - 10:35 AM	59.6	50.8
05:15 AM - 05:20 AM	67.3	38.6	07:55 AM - 08:00 AM	57.2	45.2	10:35 AM - 10:40 AM	53.9	49.8
05:20 AM - 05:25 AM	45.7	38.8	08:00 AM - 08:05 AM	51.2	41.5	10:40 AM - 10:45 AM	65.6	55.1
05:25 AM - 05:30 AM	54.6	40.3	08:05 AM - 08:10 AM	54.6	40.8	10:45 AM - 10:50 AM	62.9	51.1
05:30 AM - 05:35 AM	49.1	39.8	08:10 AM - 08:15 AM	50.5	42.1	10:50 AM - 10:55 AM	63.2	50.9
05:35 AM - 05:40 AM	54.9	41.5	08:15 AM - 08:20 AM	54.5	41.6	10:55 AM - 11:00 AM	62.4	48.4
05:40 AM - 05:45 AM	53.3	41.8	08:20 AM - 08:25 AM	52.6	42.6	11:00 AM - 11:05 AM	56.7	45.6
05:45 AM - 05:50 AM	50.9	41.4	08:25 AM - 08:30 AM	54.4	44.0	11:05 AM - 11:10 AM	54.7	47.5
05:50 AM - 05:55 AM	55.0	42.7	08:30 AM - 08:35 AM	55.8	45.3	11:10 AM - 11:15 AM	62.3	51.2
05:55 AM - 06:00 AM	55.7	42.9	08:35 AM - 08:40 AM	55.6	42.2	11:15 AM - 11:20 AM	62.4	50.7
06:00 AM - 06:05 AM	53.0	42.5	08:40 AM - 08:45 AM	52.5	42.5	11:20 AM - 11:25 AM	63.7	44.6
06:05 AM - 06:10 AM	55.2	43.4	08:45 AM - 08:50 AM	55.4	45.1	11:25 AM - 11:30 AM	58.2	48.6
06:10 AM - 06:15 AM	49.3	40.9	08:50 AM - 08:55 AM	54.1	44.8	11:30 AM - 11:35 AM	63.9	53.3
06:15 AM - 06:20 AM	55.7	42.4	08:55 AM - 09:00 AM	58.6	45.4	11:35 AM - 11:40 AM	61.4	49.4
06:20 AM - 06:25 AM	53.4	42.1	09:00 AM - 09:05 AM	52.1	44.9	11:40 AM - 11:45 AM	53.2	40.6
06:25 AM - 06:30 AM	52.8	39.7	09:05 AM - 09:10 AM	54.1	46.2	11:45 AM - 11:50 AM	54.1	43.5
06:30 AM - 06:35 AM	60.0	46.8	09:10 AM - 09:15 AM	62.7	44.6	11:50 AM - 11:55 AM	56.5	44.5
06:35 AM - 06:40 AM	60.1	51.1	09:15 AM - 09:20 AM	58.5	45.2	11:55 AM - 12:00 PM	58.4	45.7

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Approved by
Sarayuth Jitsranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022972-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-12
Parameter Noise Level (Leq 5 min)
Location NZ : ผลิตภัณฑ์สยาม
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	56.0	47.0	02:40 PM - 02:45 PM	50.8	39.5	05:20 PM - 05:25 PM	56.3	44.7
12:05 PM - 12:10 PM	56.6	45.2	02:45 PM - 02:50 PM	59.1	42.8	05:25 PM - 05:30 PM	52.9	43.9
12:10 PM - 12:15 PM	52.3	41.6	02:50 PM - 02:55 PM	52.6	40.6	05:30 PM - 05:35 PM	53.8	44.7
12:15 PM - 12:20 PM	64.4	44.6	02:55 PM - 03:00 PM	51.2	42.1	05:35 PM - 05:40 PM	53.7	44.5
12:20 PM - 12:25 PM	52.1	44.4	03:00 PM - 03:05 PM	52.9	41.7	05:40 PM - 05:45 PM	58.3	44.9
12:25 PM - 12:30 PM	54.0	44.1	03:05 PM - 03:10 PM	56.0	42.6	05:45 PM - 05:50 PM	54.5	45.2
12:30 PM - 12:35 PM	56.2	46.7	03:10 PM - 03:15 PM	54.9	41.6	05:50 PM - 05:55 PM	53.5	46.3
12:35 PM - 12:40 PM	56.4	51.5	03:15 PM - 03:20 PM	52.7	40.2	05:55 PM - 06:00 PM	56.0	45.3
12:40 PM - 12:45 PM	59.8	54.4	03:20 PM - 03:25 PM	53.7	40.7	06:00 PM - 06:05 PM	58.1	45.6
12:45 PM - 12:50 PM	58.2	43.5	03:25 PM - 03:30 PM	56.2	41.5	06:05 PM - 06:10 PM	56.0	46.8
12:50 PM - 12:55 PM	52.6	41.7	03:30 PM - 03:35 PM	51.6	41.9	06:10 PM - 06:15 PM	56.3	46.3
12:55 PM - 01:00 PM	58.6	43.7	03:35 PM - 03:40 PM	54.9	42.3	06:15 PM - 06:20 PM	55.9	46.0
01:00 PM - 01:05 PM	57.5	44.8	03:40 PM - 03:45 PM	66.4	45.5	06:20 PM - 06:25 PM	55.6	48.6
01:05 PM - 01:10 PM	57.0	43.7	03:45 PM - 03:50 PM	47.8	42.3	06:25 PM - 06:30 PM	58.6	48.5
01:10 PM - 01:15 PM	53.5	38.9	03:50 PM - 03:55 PM	55.0	43.2	06:30 PM - 06:35 PM	58.1	49.6
01:15 PM - 01:20 PM	57.0	39.8	03:55 PM - 04:00 PM	59.2	43.8	06:35 PM - 06:40 PM	57.1	50.5
01:20 PM - 01:25 PM	53.0	41.2	04:00 PM - 04:05 PM	62.2	42.6	06:40 PM - 06:45 PM	67.1	48.9
01:25 PM - 01:30 PM	50.7	41.1	04:05 PM - 04:10 PM	51.9	42.8	06:45 PM - 06:50 PM	55.9	48.8
01:30 PM - 01:35 PM	52.6	40.6	04:10 PM - 04:15 PM	53.5	43.3	06:50 PM - 06:55 PM	55.7	48.3
01:35 PM - 01:40 PM	50.5	38.7	04:15 PM - 04:20 PM	49.7	43.2	06:55 PM - 07:00 PM	53.7	48.8
01:40 PM - 01:45 PM	49.3	41.0	04:20 PM - 04:25 PM	55.6	44.5	07:00 PM - 07:05 PM	55.1	47.3
01:45 PM - 01:50 PM	49.1	40.2	04:25 PM - 04:30 PM	57.8	42.0	07:05 PM - 07:10 PM	54.3	46.9
01:50 PM - 01:55 PM	50.6	40.2	04:30 PM - 04:35 PM	57.3	42.6	07:10 PM - 07:15 PM	59.2	46.2
01:55 PM - 02:00 PM	49.6	42.4	04:35 PM - 04:40 PM	59.4	43.9	07:15 PM - 07:20 PM	57.7	45.4
02:00 PM - 02:05 PM	50.9	41.7	04:40 PM - 04:45 PM	59.7	41.5	07:20 PM - 07:25 PM	55.6	47.2
02:05 PM - 02:10 PM	53.5	41.5	04:45 PM - 04:50 PM	52.5	41.1	07:25 PM - 07:30 PM	59.9	47.8
02:10 PM - 02:15 PM	47.9	39.7	04:50 PM - 04:55 PM	50.8	42.0	07:30 PM - 07:35 PM	55.3	47.2
02:15 PM - 02:20 PM	56.4	41.2	04:55 PM - 05:00 PM	56.2	44.0	07:35 PM - 07:40 PM	57.3	46.4
02:20 PM - 02:25 PM	52.5	40.9	05:00 PM - 05:05 PM	53.5	45.2	07:40 PM - 07:45 PM	51.9	45.9
02:25 PM - 02:30 PM	54.9	41.9	05:05 PM - 05:10 PM	57.8	45.5	07:45 PM - 07:50 PM	55.3	47.5
02:30 PM - 02:35 PM	56.4	41.6	05:10 PM - 05:15 PM	53.4	43.7	07:50 PM - 07:55 PM	54.9	47.9
02:35 PM - 02:40 PM	50.2	42.3	05:15 PM - 05:20 PM	61.1	46.9	07:55 PM - 08:00 PM	59.5	45.8

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Approved by
Sarayuth Jitsranont
Assistant General Manager

Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022972-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-12
Parameter Noise Level (Leq 5 min)
Location NZ : ผลิตภัณฑ์สยาม
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02 - Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	59.9	45.1	10:40 PM - 10:45 PM	50.7	40.9	01:20 AM - 01:25 AM	43.5	37.5
08:05 PM - 08:10 PM	56.3	45.5	10:45 PM - 10:50 PM	56.9	40.7	01:25 AM - 01:30 AM	44.6	38.6
08:10 PM - 08:15 PM	53.2	44.9	10:50 PM - 10:55 PM	48.4	40.8	01:30 AM - 01:35 AM	46.8	37.8
08:15 PM - 08:20 PM	51.9	43.8	10:55 PM - 11:00 PM	51.4	40.3	01:35 AM - 01:40 AM	48.4	37.3
08:20 PM - 08:25 PM	55.1	44.2	11:00 PM - 11:05 PM	57.7	39.4	01:40 AM - 01:45 AM	42.4	37.9
08:25 PM - 08:30 PM	59.4	47.8	11:05 PM - 11:10 PM	43.6	40.3	01:45 AM - 01:50 AM	39.1	37.7
08:30 PM - 08:35 PM	58.0	43.3	11:10 PM - 11:15 PM	43.2	39.8	01:50 AM - 01:55 AM	44.2	37.6
08:35 PM - 08:40 PM	55.1	42.2	11:15 PM - 11:20 PM	45.9	41.1	01:55 AM - 02:00 AM	45.1	37.2
08:40 PM - 08:45 PM	55.1	42.4	11:20 PM - 11:25 PM	45.2	41.4	02:00 AM - 02:05 AM	42.1	37.0
08:45 PM - 08:50 PM	55.0	42.4	11:25 PM - 11:30 PM	45.6	41.7	02:05 AM - 02:10 AM	40.2	37.0
08:50 PM - 08:55 PM	52.3	41.6	11:30 PM - 11:35 PM	43.9	40.5	02:10 AM - 02:15 AM	40.4	36.8
08:55 PM - 09:00 PM	51.3	41.9	11:35 PM - 11:40 PM	43.8	40.6	02:15 AM - 02:20 AM	44.8	37.2
09:00 PM - 09:05 PM	52.3	42.2	11:40 PM - 11:45 PM	53.6	40.9	02:20 AM - 02:25 AM	39.8	37.1
09:05 PM - 09:10 PM	49.5	41.2	11:45 PM - 11:50 PM	46.1	41.0	02:25 AM - 02:30 AM	48.4	37.0
09:10 PM - 09:15 PM	49.7	41.8	11:50 PM - 11:55 PM	49.0	41.2	02:30 AM - 02:35 AM	40.4	37.9
09:15 PM - 09:20 PM	50.8	42.0	11:55 PM - 12:00 AM	47.9	40.5	02:35 AM - 02:40 AM	48.3	37.0
09:20 PM - 09:25 PM	52.5	42.2	12:00 AM - 12:05 AM	49.3	39.3	02:40 AM - 02:45 AM	39.7	37.0
09:25 PM - 09:30 PM	54.4	41.6	12:05 AM - 12:10 AM	43.9	38.6	02:45 AM - 02:50 AM	39.7	36.3
09:30 PM - 09:35 PM	52.8	41.3	12:10 AM - 12:15 AM	44.5	38.8	02:50 AM - 02:55 AM	40.9	36.5
09:35 PM - 09:40 PM	46.8	41.3	12:15 AM - 12:20 AM	45.4	39.2	02:55 AM - 03:00 AM	43.0	37.0
09:40 PM - 09:45 PM	51.3	43.6	12:20 AM - 12:25 AM	45.2	40.1	03:00 AM - 03:05 AM	39.4	37.0
09:45 PM - 09:50 PM	48.6	42.9	12:25 AM - 12:30 AM	42.5	39.1	03:05 AM - 03:10 AM	43.5	37.2
09:50 PM - 09:55 PM	48.0	40.3	12:30 AM - 12:35 AM	45.3	39.3	03:10 AM - 03:15 AM	43.2	37.2
09:55 PM - 10:00 PM	46.8	41.5	12:35 AM - 12:40 AM	50.4	40.0	03:15 AM - 03:20 AM	46.0	36.9
10:00 PM - 10:05 PM	45.9	40.8	12:40 AM - 12:45 AM	45.7	39.8	03:20 AM - 03:25 AM	39.0	37.5
10:05 PM - 10:10 PM	52.3	40.8	12:45 AM - 12:50 AM	44.2	37.9	03:25 AM - 03:30 AM	38.6	36.9
10:10 PM - 10:15 PM	53.8	41.3	12:50 AM - 12:55 AM	48.4	38.1	03:30 AM - 03:35 AM	39.9	36.6
10:15 PM - 10:20 PM	49.0	40.3	12:55 AM - 01:00 AM	42.9	38.2	03:35 AM - 03:40 AM	38.5	36.3
10:20 PM - 10:25 PM	45.4	40.5	01:00 AM - 01:05 AM	48.1	38.7	03:40 AM - 03:45 AM	39.5	37.6
10:25 PM - 10:30 PM	46.6	40.4	01:05 AM - 01:10 AM	41.6	38.4	03:45 AM - 03:50 AM	39.7	37.5
10:30 PM - 10:35 PM	47.2	41.6	01:10 AM - 01:15 AM	40.4	38.6	03:50 AM - 03:55 AM	40.0	38.2
10:35 PM - 10:40 PM	48.4	40.7	01:15 AM - 01:20 AM	42.7	38.2	03:55 AM - 04:00 AM	40.2	36.5

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Approved by
Sarayuth Jitsranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022972-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-12
Parameter Noise Level (Leq 5 min)
Location NZ : ผลิตภัณฑ์สยาม
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	41.5	35.3	06:40 AM - 06:45 AM	52.0	43.3	09:20 AM - 09:25 AM	60.3	43.5
04:05 AM - 04:10 AM	37.2	34.8	06:45 AM - 06:50 AM	63.5	46.0	09:25 AM - 09:30 AM	54.3	41.4
04:10 AM - 04:15 AM	37.0	35.4	06:50 AM - 06:55 AM	56.2	46.0	09:30 AM - 09:35 AM	57.7	44.9
04:15 AM - 04:20 AM	39.2	35.7	06:55 AM - 07:00 AM	53.9	45.7	09:35 AM - 09:40 AM	58.1	47.9
04:20 AM - 04:25 AM	40.5	40.5	07:00 AM - 07:05 AM	50.8	44.1	09:40 AM - 09:45 AM	55.6	48.8
04:25 AM - 04:30 AM	51.1	41.2	07:05 AM - 07:10 AM	59.0	46.9	09:45 AM - 09:50 AM	57.4	43.8
04:30 AM - 04:35 AM	64.9	41.6	07:10 AM - 07:15 AM	52.2	42.5	09:50 AM - 09:55 AM	57.4	47.6
04:35 AM - 04:40 AM	44.7	39.1	07:15 AM - 07:20 AM	54.1	41.7	09:55 AM - 10:00 AM	55.0	45.6
04:40 AM - 04:45 AM	40.8	38.0	07:20 AM - 07:25 AM	70.5	41.7	10:00 AM - 10:05 AM	60.8	46.6
04:45 AM - 04:50 AM	41.3	38.6	07:25 AM - 07:30 AM	70.8	44.9	10:05 AM - 10:10 AM	57.8	47.1
04:50 AM - 04:55 AM	42.7	38.7	07:30 AM - 07:35 AM	56.6	48.2	10:10 AM - 10:15 AM	54.5	42.8
04:55 AM - 05:00 AM	45.0	39.2	07:35 AM - 07:40 AM	58.6	46.4	10:15 AM - 10:20 AM	53.0	41.8
05:00 AM - 05:05 AM	42.4	39.7	07:40 AM - 07:45 AM	53.8	44.1	10:20 AM - 10:25 AM	51.4	42.1
05:05 AM - 05:10 AM	45.8	38.5	07:45 AM - 07:50 AM	55.1	44.7	10:25 AM - 10:30 AM	60.3	48.9
05:10 AM - 05:15 AM	54.5	37.9	07:50 AM - 07:55 AM	53.7	44.3	10:30 AM - 10:35 AM	54.3	47.8
05:15 AM - 05:20 AM	45.9	37.1	07:55 AM - 08:00 AM	57.8	43.2	10:35 AM - 10:40 AM	56.9	47.2
05:20 AM - 05:25 AM	44.0	36.9	08:00 AM - 08:05 AM	55.8	46.8	10:40 AM - 10:45 AM	61.2	49.1
05:25 AM - 05:30 AM	45.2	37.8	08:05 AM - 08:10 AM	56.2	43.2	10:45 AM - 10:50 AM	55.4	47.5
05:30 AM - 05:35 AM	51.6	38.3	08:10 AM - 08:15 AM	56.7	40.1	10:50 AM - 10:55 AM	54.4	47.7
05:35 AM - 05:40 AM	50.6	39.1	08:15 AM - 08:20 AM	56.6	43.5	10:55 AM - 11:00 AM	53.0	46.5
05:40 AM - 05:45 AM	58.1	44.0	08:20 AM - 08:25 AM	61.9	53.2	11:00 AM - 11:05 AM	58.8	46.9
05:45 AM - 05:50 AM	57.8	42.8	08:25 AM - 08:30 AM	60.9	48.0	11:05 AM - 11:10 AM	54.8	46.5
05:50 AM - 05:55 AM	53.4	43.3	08:30 AM - 08:35 AM	62.6	47.8	11:10 AM - 11:15 AM	60.9	48.9
05:55 AM - 06:00 AM	55.9	46.5	08:35 AM - 08:40 AM	56.5	43.4	11:15 AM - 11:20 AM	54.3	47.3
06:00 AM - 06:05 AM	54.1	43.6	08:40 AM - 08:45 AM	62.3	45.4	11:20 AM - 11:25 AM	57.0	47.5
06:05 AM - 06:10 AM	62.1	42.0	08:45 AM - 08:50 AM	61.4	47.4	11:25 AM - 11:30 AM	56.8	47.9
06:10 AM - 06:15 AM	58.5	47.0	08:50 AM - 08:55 AM	56.3	44.4	11:30 AM - 11:35 AM	52.0	45.8
06:15 AM - 06:20 AM	53.9	42.5	08:55 AM - 09:00 AM	55.8	43.1	11:35 AM - 11:40 AM	59.0	45.9
06:20 AM - 06:25 AM	55.4	41.3	09:00 AM - 09:05 AM	53.7	43.2	11:40 AM - 11:45 AM	56.9	47.1
06:25 AM - 06:30 AM	49.5	43.4	09:05 AM - 09:10 AM	57.2	42.1	11:45 AM - 11:50 AM	53.7	47.3
06:30 AM - 06:35 AM	53.6	48.5	09:10 AM - 09:15 AM	58.1	40.4	11:50 AM - 11:55 AM	54.7	46.2
06:35 AM - 06:40 AM	52.2	40.5	09:15 AM - 09:20 AM	55.8	42.3	11:55 AM - 12:00 PM	57.4	45.4

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Approved by
Sarayuth Jitsranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022973-1

Sample Number 2450167-13
Parameter Noise Level (Leq 5 min)
Location N2 : สถานีสูบน้ำดิบ
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	60.1	50.2	02:40 PM - 02:45 PM	49.9	42.9	05:20 PM - 05:25 PM	62.5	48.0
12:05 PM - 12:10 PM	59.2	53.8	02:45 PM - 02:50 PM	55.3	45.6	05:25 PM - 05:30 PM	65.0	51.9
12:10 PM - 12:15 PM	62.7	54.9	02:50 PM - 02:55 PM	58.3	45.6	05:30 PM - 05:35 PM	63.5	52.0
12:15 PM - 12:20 PM	63.7	54.4	02:55 PM - 03:00 PM	55.1	42.7	05:35 PM - 05:40 PM	55.9	51.7
12:20 PM - 12:25 PM	56.3	48.9	03:00 PM - 03:05 PM	52.1	42.1	05:40 PM - 05:45 PM	54.8	46.3
12:25 PM - 12:30 PM	59.1	50.2	03:05 PM - 03:10 PM	53.4	43.3	05:45 PM - 05:50 PM	54.2	45.1
12:30 PM - 12:35 PM	54.5	48.7	03:10 PM - 03:15 PM	53.0	45.7	05:50 PM - 05:55 PM	51.5	43.8
12:35 PM - 12:40 PM	56.1	48.1	03:15 PM - 03:20 PM	60.3	43.2	05:55 PM - 06:00 PM	57.2	45.1
12:40 PM - 12:45 PM	58.6	48.3	03:20 PM - 03:25 PM	58.7	45.6	06:00 PM - 06:05 PM	60.9	45.5
12:45 PM - 12:50 PM	54.7	43.4	03:25 PM - 03:30 PM	57.6	44.1	06:05 PM - 06:10 PM	58.2	45.7
12:50 PM - 12:55 PM	59.1	43.8	03:30 PM - 03:35 PM	56.2	40.9	06:10 PM - 06:15 PM	54.9	46.1
12:55 PM - 01:00 PM	51.9	43.6	03:35 PM - 03:40 PM	52.1	40.6	06:15 PM - 06:20 PM	58.8	49.9
01:00 PM - 01:05 PM	62.0	53.4	03:40 PM - 03:45 PM	50.2	42.2	06:20 PM - 06:25 PM	57.7	52.2
01:05 PM - 01:10 PM	57.5	43.4	03:45 PM - 03:50 PM	64.6	46.5	06:25 PM - 06:30 PM	57.5	50.8
01:10 PM - 01:15 PM	57.9	43.0	03:50 PM - 03:55 PM	53.3	47.9	06:30 PM - 06:35 PM	58.5	54.6
01:15 PM - 01:20 PM	54.9	42.3	03:55 PM - 04:00 PM	53.2	47.8	06:35 PM - 06:40 PM	59.0	54.8
01:20 PM - 01:25 PM	55.5	43.6	04:00 PM - 04:05 PM	52.0	46.7	06:40 PM - 06:45 PM	65.2	49.3
01:25 PM - 01:30 PM	53.5	41.7	04:05 PM - 04:10 PM	54.0	47.9	06:45 PM - 06:50 PM	58.6	54.6
01:30 PM - 01:35 PM	53.6	43.8	04:10 PM - 04:15 PM	51.7	45.7	06:50 PM - 06:55 PM	55.4	48.3
01:35 PM - 01:40 PM	54.1	42.7	04:15 PM - 04:20 PM	56.7	53.7	06:55 PM - 07:00 PM	58.6	47.8
01:40 PM - 01:45 PM	54.0	41.8	04:20 PM - 04:25 PM	59.2	55.0	07:00 PM - 07:05 PM	54.5	47.9
01:45 PM - 01:50 PM	59.0	42.5	04:25 PM - 04:30 PM	62.9	54.7	07:05 PM - 07:10 PM	54.7	48.3
01:50 PM - 01:55 PM	53.4	41.6	04:30 PM - 04:35 PM	55.7	48.2	07:10 PM - 07:15 PM	56.4	49.0
01:55 PM - 02:00 PM	50.0	40.7	04:35 PM - 04:40 PM	53.0	46.1	07:15 PM - 07:20 PM	57.3	48.6
02:00 PM - 02:05 PM	52.8	40.3	04:40 PM - 04:45 PM	64.6	48.1	07:20 PM - 07:25 PM	56.8	50.3
02:05 PM - 02:10 PM	57.7	40.3	04:45 PM - 04:50 PM	62.3	46.4	07:25 PM - 07:30 PM	55.2	47.5
02:10 PM - 02:15 PM	49.9	41.7	04:50 PM - 04:55 PM	59.2	47.4	07:30 PM - 07:35 PM	60.6	48.6
02:15 PM - 02:20 PM	58.8	41.4	04:55 PM - 05:00 PM	63.4	50.2	07:35 PM - 07:40 PM	58.1	46.8
02:20 PM - 02:25 PM	59.5	42.1	05:00 PM - 05:05 PM	68.5	47.7	07:40 PM - 07:45 PM	55.9	54.0
02:25 PM - 02:30 PM	58.2	40.3	05:05 PM - 05:10 PM	62.7	46.5	07:45 PM - 07:50 PM	58.5	54.2
02:30 PM - 02:35 PM	49.0	42.5	05:10 PM - 05:15 PM	63.3	47.3	07:50 PM - 07:55 PM	57.7	54.1
02:35 PM - 02:40 PM	54.1	43.7	05:15 PM - 05:20 PM	58.4	46.9	07:55 PM - 08:00 PM	63.5	54.4

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022973-1

Sample Number 2450167-13
Parameter Noise Level (Leq 5 min)
Location N2 : สถานีสูบน้ำดิบ
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03 - Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
08:00 PM - 08:05 PM	68.0	53.7	10:40 PM - 10:45 PM	51.6	39.1	01:20 AM - 01:25 AM	42.2	37.4
08:05 PM - 08:10 PM	57.8	53.8	10:45 PM - 10:50 PM	45.7	38.1	01:25 AM - 01:30 AM	57.3	36.9
08:10 PM - 08:15 PM	56.2	53.6	10:50 PM - 10:55 PM	52.1	38.9	01:30 AM - 01:35 AM	43.1	36.5
08:15 PM - 08:20 PM	55.3	53.6	10:55 PM - 11:00 PM	59.6	39.9	01:35 AM - 01:40 AM	41.8	36.7
08:20 PM - 08:25 PM	58.0	53.5	11:00 PM - 11:05 PM	48.1	40.1	01:40 AM - 01:45 AM	48.6	36.5
08:25 PM - 08:30 PM	60.3	53.4	11:05 PM - 11:10 PM	44.4	39.1	01:45 AM - 01:50 AM	39.6	35.9
08:30 PM - 08:35 PM	62.5	45.2	11:10 PM - 11:15 PM	55.9	40.0	01:50 AM - 01:55 AM	37.7	35.5
08:35 PM - 08:40 PM	56.2	41.2	11:15 PM - 11:20 PM	43.7	39.6	01:55 AM - 02:00 AM	37.9	36.5
08:40 PM - 08:45 PM	51.0	41.8	11:20 PM - 11:25 PM	51.5	39.5	02:00 AM - 02:05 AM	38.4	36.5
08:45 PM - 08:50 PM	51.8	42.0	11:25 PM - 11:30 PM	44.7	38.8	02:05 AM - 02:10 AM	39.8	36.2
08:50 PM - 08:55 PM	52.3	44.0	11:30 PM - 11:35 PM	52.5	39.6	02:10 AM - 02:15 AM	38.6	35.4
08:55 PM - 09:00 PM	49.8	40.9	11:35 PM - 11:40 PM	46.3	38.9	02:15 AM - 02:20 AM	39.7	37.0
09:00 PM - 09:05 PM	50.5	41.7	11:40 PM - 11:45 PM	46.4	38.4	02:20 AM - 02:25 AM	39.5	37.1
09:05 PM - 09:10 PM	50.3	41.4	11:45 PM - 11:50 PM	49.1	38.7	02:25 AM - 02:30 AM	44.1	37.8
09:10 PM - 09:15 PM	51.4	41.0	11:50 PM - 11:55 PM	45.4	39.0	02:30 AM - 02:35 AM	39.1	37.2
09:15 PM - 09:20 PM	51.2	40.3	11:55 PM - 12:00 AM	47.1	39.7	02:35 AM - 02:40 AM	62.7	38.2
09:20 PM - 09:25 PM	53.3	39.6	12:00 AM - 12:05 AM	42.5	38.5	02:40 AM - 02:45 AM	41.5	37.7
09:25 PM - 09:30 PM	49.3	38.1	12:05 AM - 12:10 AM	45.9	39.6	02:45 AM - 02:50 AM	40.3	37.1
09:30 PM - 09:35 PM	56.1	40.4	12:10 AM - 12:15 AM	44.3	39.3	02:50 AM - 02:55 AM	42.8	37.1
09:35 PM - 09:40 PM	58.3	41.6	12:15 AM - 12:20 AM	54.8	38.9	02:55 AM - 03:00 AM	43.0	37.1
09:40 PM - 09:45 PM	51.6	40.2	12:20 AM - 12:25 AM	42.9	38.6	03:00 AM - 03:05 AM	38.5	36.7
09:45 PM - 09:50 PM	47.8	40.9	12:25 AM - 12:30 AM	45.0	40.0	03:05 AM - 03:10 AM	38.1	36.8
09:50 PM - 09:55 PM	51.1	40.9	12:30 AM - 12:35 AM	43.2	38.7	03:10 AM - 03:15 AM	40.4	38.0
09:55 PM - 10:00 PM	48.0	41.4	12:35 AM - 12:40 AM	41.5	40.0	03:15 AM - 03:20 AM	42.0	38.0
10:00 PM - 10:05 PM	46.9	41.5	12:40 AM - 12:45 AM	45.7	37.9	03:20 AM - 03:25 AM	41.0	37.4
10:05 PM - 10:10 PM	50.8	42.0	12:45 AM - 12:50 AM	42.0	37.0	03:25 AM - 03:30 AM	40.1	37.0
10:10 PM - 10:15 PM	47.2	41.7	12:50 AM - 12:55 AM	45.6	37.4	03:30 AM - 03:35 AM	45.6	37.5
10:15 PM - 10:20 PM	47.6	41.4	12:55 AM - 01:00 AM	45.1	37.5	03:35 AM - 03:40 AM	41.1	37.6
10:20 PM - 10:25 PM	51.0	39.1	01:00 AM - 01:05 AM	41.4	37.0	03:40 AM - 03:45 AM	38.6	37.1
10:25 PM - 10:30 PM	48.8	42.1	01:05 AM - 01:10 AM	39.2	37.5	03:45 AM - 03:50 AM	41.3	36.7
10:30 PM - 10:35 PM	46.2	42.2	01:10 AM - 01:15 AM	40.9	37.9	03:50 AM - 03:55 AM	41.4	36.9
10:35 PM - 10:40 PM	56.9	42.0	01:15 AM - 01:20 AM	39.5	37.6	03:55 AM - 04:00 AM	38.2	37.2

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022973-1

Sample Number 2450167-13
Parameter Noise Level (Leq 5 min)
Location N2 : สถานีสูบน้ำดิบ
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
04:00 AM - 04:05 AM	50.0	37.7	06:40 AM - 06:45 AM	64.4	49.4	09:20 AM - 09:25 AM	58.1	46.8
04:05 AM - 04:10 AM	46.0	38.8	06:45 AM - 06:50 AM	56.0	45.8	09:25 AM - 09:30 AM	58.7	47.7
04:10 AM - 04:15 AM	50.9	39.3	06:50 AM - 06:55 AM	55.7	45.6	09:30 AM - 09:35 AM	57.6	50.1
04:15 AM - 04:20 AM	52.5	48.8	06:55 AM - 07:00 AM	62.1	50.1	09:35 AM - 09:40 AM	60.5	50.4
04:20 AM - 04:25 AM	61.5	52.4	07:00 AM - 07:05 AM	64.6	61.4	09:40 AM - 09:45 AM	53.9	46.8
04:25 AM - 04:30 AM	59.7	44.8	07:05 AM - 07:10 AM	65.6	62.2	09:45 AM - 09:50 AM	59.4	48.4
04:30 AM - 04:35 AM	51.8	45.5	07:10 AM - 07:15 AM	64.8	59.3	09:50 AM - 09:55 AM	59.3	44.5
04:35 AM - 04:40 AM	54.6	44.6	07:15 AM - 07:20 AM	69.3	60.3	09:55 AM - 10:00 AM	55.3	45.3
04:40 AM - 04:45 AM	45.7	44.1	07:20 AM - 07:25 AM	64.3	60.5	10:00 AM - 10:05 AM	58.8	46.7
04:45 AM - 04:50 AM	46.0	43.6	07:25 AM - 07:30 AM	60.5	55.3	10:05 AM - 10:10 AM	59.3	47.1
04:50 AM - 04:55 AM	45.6	43.2	07:30 AM - 07:35 AM	59.3	51.4	10:10 AM - 10:15 AM	60.9	49.2
04:55 AM - 05:00 AM	47.4	43.5	07:35 AM - 07:40 AM	59.4	55.4	10:15 AM - 10:20 AM	58.6	48.5
05:00 AM - 05:05 AM	49.4	44.7	07:40 AM - 07:45 AM	66.0	59.0	10:20 AM - 10:25 AM	54.0	44.9
05:05 AM - 05:10 AM	48.0	44.0	07:45 AM - 07:50 AM	66.5	64.3	10:25 AM - 10:30 AM	57.7	46.6
05:10 AM - 05:15 AM	51.7	44.5	07:50 AM - 07:55 AM	66.4	63.8	10:30 AM - 10:35 AM	58.8	46.8
05:15 AM - 05:20 AM	48.4	44.0	07:55 AM - 08:00 AM	66.5	64.9	10:35 AM - 10:40 AM	55.9	49.4
05:20 AM - 05:25 AM	52.0	45.0	08:00 AM - 08:05 AM	58.2	51.4	10:40 AM - 10:45 AM	56.3	52.5
05:25 AM - 05:30 AM	60.4	45.4	08:05 AM - 08:10 AM	58.9	48.9	10:45 AM - 10:50 AM	55.0	47.7
05:30 AM - 05:35 AM	51.5	44.6	08:10 AM - 08:15 AM	57.7	45.7	10:50 AM - 10:55 AM	55.1	47.1
05:35 AM - 05:40 AM	51.0	42.3	08:15 AM - 08:20 AM	61.5	53.9	10:55 AM - 11:00 AM	53.9	45.8
05:40 AM - 05:45 AM	53.3	43.5	08:20 AM - 08:25 AM	61.5	53.9	11:00 AM - 11:05 AM	53.5	44.6
05:45 AM - 05:50 AM	58.6	47.7	08:25 AM - 08:30 AM	58.2	47.2	11:05 AM - 11:10 AM	54.1	44.8
05:50 AM - 05:55 AM	53.7	43.5	08:30 AM - 08:35 AM	59.4	47.5	11:10 AM - 11:15 AM	56.4	44.7
05:55 AM - 06:00 AM	58.2	44.6	08:35 AM - 08:40 AM	56.9	45.1	11:15 AM - 11:20 AM	52.8	44.8
06:00 AM - 06:05 AM	56.3	44.7	08:40 AM - 08:45 AM	59.3	48.9	11:20 AM - 11:25 AM	53.8	45.0
06:05 AM - 06:10 AM	52.6	44.1	08:45 AM - 08:50 AM	58.5	47.2	11:25 AM - 11:30 AM	53.8	45.5
06:10 AM - 06:15 AM	58.4	44.4	08:50 AM - 08:55 AM	61.4	53.3	11:30 AM - 11:35 AM	56.1	46.8
06:15 AM - 06:20 AM	56.8	47.1	08:55 AM - 09:00 AM	59.0	51.2	11:35 AM - 11:40 AM	55.3	45.9
06:20 AM - 06:25 AM	63.6	48.0	09:00 AM - 09:05 AM	59.9	44.4	11:40 AM - 11:45 AM	57.7	46.8
06:25 AM - 06:30 AM	57.6	45.0	09:05 AM - 09:10 AM	58.6	46.9	11:45 AM - 11:50 AM	57.7	46.0
06:30 AM - 06:35 AM	56.9	46.7	09:10 AM - 09:15 AM	56.2	47.0	11:50 AM - 11:55 AM	57.6	44.6
06:35 AM - 06:40 AM	56.7	46.4	09:15 AM - 09:20 AM	65.0	45.7	11:55 AM - 12:00 PM	58.3	46.2

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Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022974-1

Sample Number 2450167-14
Parameter Noise Level (Leq 5 min)
Location N2 : สถานีสูบน้ำดิบ
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
12:00 PM - 12:05 PM	58.9	47.6	02:40 PM - 02:45 PM	51.8	46.3	05:20 PM - 05:25 PM	61.9	44.1
12:05 PM - 12:10 PM	64.1	47.0	02:45 PM - 02:50 PM	53.6	47.3	05:25 PM - 05:30 PM	55.9	45.3
12:10 PM - 12:15 PM	64.2	51.9	02:50 PM - 02:55 PM	58.1	46.0	05:30 PM - 05:35 PM	56.0	46.5
12:15 PM - 12:20 PM	54.1	53.6	02:55 PM - 03:00 PM	53.1	45.2	05:35 PM - 05:40 PM	61.7	46.5
12:20 PM - 12:25 PM	63.1	60.2	03:00 PM - 03:05 PM	60.6	46.5	05:40 PM - 05:45 PM	62.8	46.1
12:25 PM - 12:30 PM	62.8	62.0	03:05 PM - 03:10 PM	54.2	47.3	05:45 PM - 05:50 PM	65.7	48.7
12:30 PM - 12:35 PM	63.6	62.9	03:10 PM - 03:15 PM	53.7	45.5	05:50 PM - 05:55 PM	66.3	47.7
12:35 PM - 12:40 PM	61.9	48.5	03:15 PM - 03:20 PM	54.4	45.2	05:55 PM - 06:00 PM	59.8	43.4
12:40 PM - 12:45 PM	60.2	44.8	03:20 PM - 03:25 PM	55.8	47.4	06:00 PM - 06:05 PM	58.9	45.6
12:45 PM - 12:50 PM	53.7	40.9	03:25 PM - 03:30 PM	56.2	47.7	06:05 PM - 06:10 PM	54.9	44.6
12:50 PM - 12:55 PM	49.6	40.3	03:30 PM - 03:35 PM	53.3	44.6	06:10 PM - 06:15 PM	59.5	45.7
12:55 PM - 01:00 PM	56.8	42.4	03:35 PM - 03:40 PM	55.0	47.0	06:15 PM - 06:20 PM	58.3	48.6
01:00 PM - 01:05 PM	50.5	40.7	03:40 PM - 03:45 PM	57.3	47.9	06:20 PM - 06:25 PM	57.6	45.3
01:05 PM - 01:10 PM	50.0	38.6	03:45 PM - 03:50 PM	56.6	47.3	06:25 PM - 06:30 PM	59.7	46.8
01:10 PM - 01:15 PM	51.2	41.4	03:50 PM - 03:55 PM	55.9	43.2	06:30 PM - 06:35 PM	59.3	48.1
01:15 PM - 01:20 PM	58.6	44.1	03:55 PM - 04:00 PM	57.8	47.4	06:35 PM - 06:40 PM	56.8	44.6
01:20 PM - 01:25 PM	57.2	43.6	04:00 PM - 04:05 PM	59.9	47.0	06:40 PM - 06:45 PM	56.4	47.0
01:25 PM - 01:30 PM	59.1	44.0	04:05 PM - 04:10 PM	56.5	47.4	06:45 PM - 06:50 PM	57.5	46.9
01:30 PM - 01:35 PM	53.0	41.3	04:10 PM - 04:15 PM	57.6	49.7	06:50 PM - 06:55 PM	61.8	47.1
01:35 PM - 01:40 PM	55.1	40.8	04:15 PM - 04:20 PM	58.5	49.1	06:55 PM - 07:00 PM	54.9	46.6
01:40 PM - 01:45 PM	58.6	42.6	04:20 PM - 04:25 PM	57.9	51.3	07:00 PM - 07:05 PM	55.1	46.3
01:45 PM - 01:50 PM	62.1	44.1	04:25 PM - 04:30 PM	60.8	52.5	07:05 PM - 07:10 PM	60.2	49.8
01:50 PM - 01:55 PM	56.7	43.2	04:30 PM - 04:35 PM	59.0	50.7	07:10 PM - 07:15 PM	57.2	51.7
01:55 PM - 02:00 PM	54.6	44.4	04:35 PM - 04:40 PM	60.0	50.2	07:15 PM - 07:20 PM	61.9	51.2
02:00 PM - 02:05 PM	54.6	42.2	04:40 PM - 04:45 PM	60.8	46.7	07:20 PM - 07:25 PM	58.9	50.7
02:05 PM - 02:10 PM	51.3	43.8	04:45 PM - 04:50 PM	61.4	49.0	07:25 PM - 07:30 PM	55.9	51.3
02:10 PM - 02:15 PM	57.6	47.3	04:50 PM - 04:55 PM	57.5	43.7	07:30 PM - 07:35 PM	61.8	51.2
02:15 PM - 02:20 PM	55.7	47.7	04:55 PM - 05:00 PM	66.3	55.2	07:35 PM - 07:40 PM	56.8	53.1
02:20 PM - 02:25 PM	56.0	48.5	05:00 PM - 05:05 PM	57.2	56.8	07:40 PM - 07:45 PM	56.4	53.8
02:25 PM - 02:30 PM	55.4	41.1	05:05 PM - 05:10 PM	66.9	56.7	07:45 PM - 07:50 PM	57.7	52.0
02:30 PM - 02:35 PM	53.7	45.1	05:10 PM - 05:15 PM	67.0	48.6	07:50 PM - 07:55 PM	56.0	52.4
02:35 PM - 02:40 PM	55.0	46.6	05:15 PM - 05:20 PM	61.5	47.1	07:55 PM - 08:00 PM	57.2	49.0

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022974-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-14
Parameter Noise Level (Leq 5 min)
Location N2 : มัสยิดบุรัลลักษณ
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 04, 2024	Leq	L90	Jun 04 - Jun 05, 2024	Leq	L90	Jun 05, 2024	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 PM - 08:05 PM	53.4	46.1	10:40 PM - 10:45 PM	44.8	36.7	01:20 AM - 01:25 AM	43.9	35.4
08:05 PM - 08:10 PM	52.4	44.7	10:45 PM - 10:50 PM	48.5	36.3	01:25 AM - 01:30 AM	37.6	35.3
08:10 PM - 08:15 PM	54.5	43.7	10:50 PM - 10:55 PM	49.7	36.4	01:30 AM - 01:35 AM	40.1	35.4
08:15 PM - 08:20 PM	56.6	44.3	10:55 PM - 11:00 PM	42.1	36.0	01:35 AM - 01:40 AM	48.6	34.5
08:20 PM - 08:25 PM	55.2	42.1	11:00 PM - 11:05 PM	48.0	36.8	01:40 AM - 01:45 AM	42.9	34.4
08:25 PM - 08:30 PM	52.9	43.8	11:05 PM - 11:10 PM	39.6	36.2	01:45 AM - 01:50 AM	47.9	33.9
08:30 PM - 08:35 PM	64.3	45.2	11:10 PM - 11:15 PM	38.2	36.3	01:50 AM - 01:55 AM	39.3	33.6
08:35 PM - 08:40 PM	61.0	42.2	11:15 PM - 11:20 PM	45.4	36.5	01:55 AM - 02:00 AM	35.4	33.4
08:40 PM - 08:45 PM	55.5	39.6	11:20 PM - 11:25 PM	43.3	36.3	02:00 AM - 02:05 AM	36.3	33.5
08:45 PM - 08:50 PM	56.8	40.4	11:25 PM - 11:30 PM	40.9	36.4	02:05 AM - 02:10 AM	35.5	32.9
08:50 PM - 08:55 PM	57.1	40.5	11:30 PM - 11:35 PM	46.6	36.5	02:10 AM - 02:15 AM	41.9	33.2
08:55 PM - 09:00 PM	56.1	39.8	11:35 PM - 11:40 PM	52.0	36.7	02:15 AM - 02:20 AM	46.9	34.1
09:00 PM - 09:05 PM	53.2	41.0	11:40 PM - 11:45 PM	41.3	35.4	02:20 AM - 02:25 AM	37.6	34.5
09:05 PM - 09:10 PM	54.9	41.0	11:45 PM - 11:50 PM	53.8	35.3	02:25 AM - 02:30 AM	56.4	35.2
09:10 PM - 09:15 PM	55.3	42.3	11:50 PM - 11:55 PM	49.7	34.4	02:30 AM - 02:35 AM	37.9	35.3
09:15 PM - 09:20 PM	47.8	38.2	11:55 PM - 12:00 AM	44.5	34.1	02:35 AM - 02:40 AM	39.1	35.5
09:20 PM - 09:25 PM	49.9	38.0	12:00 AM - 12:05 AM	43.9	34.5	02:40 AM - 02:45 AM	37.9	36.0
09:25 PM - 09:30 PM	48.4	38.1	12:05 AM - 12:10 AM	49.8	35.2	02:45 AM - 02:50 AM	38.0	36.4
09:30 PM - 09:35 PM	53.0	38.8	12:10 AM - 12:15 AM	41.5	34.6	02:50 AM - 02:55 AM	43.5	35.9
09:35 PM - 09:40 PM	55.0	39.5	12:15 AM - 12:20 AM	47.6	35.4	02:55 AM - 03:00 AM	37.9	36.5
09:40 PM - 09:45 PM	42.7	37.7	12:20 AM - 12:25 AM	51.5	34.3	03:00 AM - 03:05 AM	39.9	36.5
09:45 PM - 09:50 PM	52.6	38.0	12:25 AM - 12:30 AM	44.6	35.0	03:05 AM - 03:10 AM	38.5	36.3
09:50 PM - 09:55 PM	48.8	38.4	12:30 AM - 12:35 AM	40.8	35.3	03:10 AM - 03:15 AM	44.3	38.3
09:55 PM - 10:00 PM	54.1	39.3	12:35 AM - 12:40 AM	47.8	36.3	03:15 AM - 03:20 AM	40.3	37.0
10:00 PM - 10:05 PM	48.2	38.7	12:40 AM - 12:45 AM	43.4	35.9	03:20 AM - 03:25 AM	38.8	36.7
10:05 PM - 10:10 PM	50.8	38.5	12:45 AM - 12:50 AM	41.2	35.5	03:25 AM - 03:30 AM	41.4	36.8
10:10 PM - 10:15 PM	52.3	38.1	12:50 AM - 12:55 AM	42.8	35.8	03:30 AM - 03:35 AM	40.1	36.8
10:15 PM - 10:20 PM	49.5	38.2	12:55 AM - 01:00 AM	39.3	35.7	03:35 AM - 03:40 AM	39.8	37.4
10:20 PM - 10:25 PM	43.6	37.3	01:00 AM - 01:05 AM	40.0	36.1	03:40 AM - 03:45 AM	41.3	37.0
10:25 PM - 10:30 PM	52.7	37.7	01:05 AM - 01:10 AM	47.2	35.9	03:45 AM - 03:50 AM	45.8	37.1
10:30 PM - 10:35 PM	57.6	36.9	01:10 AM - 01:15 AM	40.4	36.2	03:50 AM - 03:55 AM	38.2	36.5
10:35 PM - 10:40 PM	50.7	37.5	01:15 AM - 01:20 AM	41.4	35.8	03:55 AM - 04:00 AM	41.5	36.6

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022974-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-14
Parameter Noise Level (Leq 5 min)
Location N2 : มัสยิดบุรัลลักษณ
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 623390

Jun 05, 2024	Leq	L90	Jun 05, 2024	Leq	L90	Jun 05, 2024	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 AM - 04:05 AM	57.6	37.0	06:40 AM - 06:45 AM	58.8	54.1	09:20 AM - 09:25 AM	52.4	41.5
04:05 AM - 04:10 AM	50.5	46.9	06:45 AM - 06:50 AM	60.3	53.6	09:25 AM - 09:30 AM	55.2	41.8
04:10 AM - 04:15 AM	52.8	48.8	06:50 AM - 06:55 AM	65.3	53.8	09:30 AM - 09:35 AM	58.5	46.7
04:15 AM - 04:20 AM	42.7	37.0	06:55 AM - 07:00 AM	57.7	53.5	09:35 AM - 09:40 AM	56.2	45.5
04:20 AM - 04:25 AM	62.6	37.3	07:00 AM - 07:05 AM	53.9	46.2	09:40 AM - 09:45 AM	53.9	40.7
04:25 AM - 04:30 AM	65.3	44.9	07:05 AM - 07:10 AM	63.7	48.4	09:45 AM - 09:50 AM	54.0	41.2
04:30 AM - 04:35 AM	40.2	45.2	07:10 AM - 07:15 AM	56.3	44.5	09:50 AM - 09:55 AM	55.2	43.7
04:35 AM - 04:40 AM	40.7	45.1	07:15 AM - 07:20 AM	61.5	47.9	09:55 AM - 10:00 AM	59.0	43.4
04:40 AM - 04:45 AM	51.8	44.6	07:20 AM - 07:25 AM	54.7	46.3	10:00 AM - 10:05 AM	53.9	40.8
04:45 AM - 04:50 AM	48.5	44.4	07:25 AM - 07:30 AM	58.5	47.0	10:05 AM - 10:10 AM	57.7	44.8
04:50 AM - 04:55 AM	46.6	44.7	07:30 AM - 07:35 AM	57.2	44.6	10:10 AM - 10:15 AM	60.0	53.6
04:55 AM - 05:00 AM	51.6	44.3	07:35 AM - 07:40 AM	58.2	46.7	10:15 AM - 10:20 AM	57.4	50.0
05:00 AM - 05:05 AM	58.5	45.2	07:40 AM - 07:45 AM	57.9	48.1	10:20 AM - 10:25 AM	60.0	49.4
05:05 AM - 05:10 AM	52.3	42.9	07:45 AM - 07:50 AM	58.6	47.2	10:25 AM - 10:30 AM	61.0	51.6
05:10 AM - 05:15 AM	47.1	39.6	07:50 AM - 07:55 AM	61.6	46.0	10:30 AM - 10:35 AM	59.5	48.2
05:15 AM - 05:20 AM	44.2	39.0	07:55 AM - 08:00 AM	55.1	44.6	10:35 AM - 10:40 AM	56.4	46.8
05:20 AM - 05:25 AM	53.7	40.6	08:00 AM - 08:05 AM	53.8	44.0	10:40 AM - 10:45 AM	54.7	46.0
05:25 AM - 05:30 AM	47.4	39.8	08:05 AM - 08:10 AM	56.3	44.7	10:45 AM - 10:50 AM	55.1	46.4
05:30 AM - 05:35 AM	45.6	39.3	08:10 AM - 08:15 AM	55.5	44.7	10:50 AM - 10:55 AM	54.0	46.5
05:35 AM - 05:40 AM	47.0	40.4	08:15 AM - 08:20 AM	57.8	45.2	10:55 AM - 11:00 AM	51.8	39.0
05:40 AM - 05:45 AM	51.5	41.6	08:20 AM - 08:25 AM	51.4	44.3	11:00 AM - 11:05 AM	53.0	41.5
05:45 AM - 05:50 AM	56.0	45.1	08:25 AM - 08:30 AM	54.7	45.4	11:05 AM - 11:10 AM	56.8	41.2
05:50 AM - 05:55 AM	55.7	43.7	08:30 AM - 08:35 AM	60.9	48.7	11:10 AM - 11:15 AM	51.7	38.6
05:55 AM - 06:00 AM	59.6	49.7	08:35 AM - 08:40 AM	54.7	44.7	11:15 AM - 11:20 AM	55.5	42.6
06:00 AM - 06:05 AM	57.6	45.3	08:40 AM - 08:45 AM	54.4	45.2	11:20 AM - 11:25 AM	57.8	51.4
06:05 AM - 06:10 AM	59.2	45.2	08:45 AM - 08:50 AM	56.5	45.9	11:25 AM - 11:30 AM	55.2	47.8
06:10 AM - 06:15 AM	56.1	44.6	08:50 AM - 08:55 AM	54.8	45.1	11:30 AM - 11:35 AM	57.8	47.2
06:15 AM - 06:20 AM	56.2	44.9	08:55 AM - 09:00 AM	55.1	46.1	11:35 AM - 11:40 AM	58.8	49.4
06:20 AM - 06:25 AM	58.7	46.7	09:00 AM - 09:05 AM	64.1	48.2	11:40 AM - 11:45 AM	57.3	46.0
06:25 AM - 06:30 AM	59.7	48.5	09:05 AM - 09:10 AM	61.0	49.2	11:45 AM - 11:50 AM	54.2	44.6
06:30 AM - 06:35 AM	59.1	51.8	09:10 AM - 09:15 AM	53.2	41.3	11:50 AM - 11:55 AM	52.5	42.8
06:35 AM - 06:40 AM	59.7	51.1	09:15 AM - 09:20 AM	57.2	45.9	11:55 AM - 12:00 PM	52.9	44.2

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022975-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-15
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่ฉิน 5
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 29, 2024	Leq	L90	May 29, 2024	Leq	L90	May 29, 2024	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
10:00 AM - 10:05 AM	44.0	41.4	12:40 PM - 12:45 PM	51.7	42.6	03:20 PM - 03:25 PM	43.0	38.3
10:05 AM - 10:10 AM	47.7	40.7	12:45 PM - 12:50 PM	47.1	42.6	03:25 PM - 03:30 PM	46.3	37.4
10:10 AM - 10:15 AM	45.2	40.9	12:50 PM - 12:55 PM	46.4	39.9	03:30 PM - 03:35 PM	44.9	35.9
10:15 AM - 10:20 AM	48.0	41.3	12:55 PM - 01:00 PM	46.5	41.4	03:35 PM - 03:40 PM	46.3	36.6
10:20 AM - 10:25 AM	49.4	42.7	01:00 PM - 01:05 PM	47.2	42.9	03:40 PM - 03:45 PM	44.8	38.5
10:25 AM - 10:30 AM	48.2	41.4	01:05 PM - 01:10 PM	41.3	38.8	03:45 PM - 03:50 PM	42.7	38.9
10:30 AM - 10:35 AM	47.1	41.9	01:10 PM - 01:15 PM	44.3	40.7	03:50 PM - 03:55 PM	45.0	38.8
10:35 AM - 10:40 AM	43.2	39.9	01:15 PM - 01:20 PM	54.4	42.9	03:55 PM - 04:00 PM	43.7	39.6
10:40 AM - 10:45 AM	45.4	39.8	01:20 PM - 01:25 PM	52.8	40.9	04:00 PM - 04:05 PM	43.7	40.8
10:45 AM - 10:50 AM	44.6	39.8	01:25 PM - 01:30 PM	44.5	40.1	04:05 PM - 04:10 PM	46.1	40.8
10:50 AM - 10:55 AM	46.2	41.1	01:30 PM - 01:35 PM	45.0	41.7	04:10 PM - 04:15 PM	43.4	40.7
10:55 AM - 11:00 AM	43.1	40.1	01:35 PM - 01:40 PM	44.9	41.4	04:15 PM - 04:20 PM	43.8	40.3
11:00 AM - 11:05 AM	45.1	42.2	01:40 PM - 01:45 PM	45.2	40.4	04:20 PM - 04:25 PM	46.9	41.5
11:05 AM - 11:10 AM	43.8	41.0	01:45 PM - 01:50 PM	47.2	41.3	04:25 PM - 04:30 PM	49.8	41.0
11:10 AM - 11:15 AM	45.0	41.4	01:50 PM - 01:55 PM	48.5	41.0	04:30 PM - 04:35 PM	44.0	39.6
11:15 AM - 11:20 AM	43.5	40.4	01:55 PM - 02:00 PM	44.5	40.6	04:35 PM - 04:40 PM	45.5	41.0
11:20 AM - 11:25 AM	50.9	40.8	02:00 PM - 02:05 PM	43.4	40.1	04:40 PM - 04:45 PM	45.9	42.1
11:25 AM - 11:30 AM	49.5	40.2	02:05 PM - 02:10 PM	45.6	38.6	04:45 PM - 04:50 PM	45.5	41.6
11:30 AM - 11:35 AM	47.2	42.7	02:10 PM - 02:15 PM	43.8	40.1	04:50 PM - 04:55 PM	46.8	41.7
11:35 AM - 11:40 AM	46.3	42.1	02:15 PM - 02:20 PM	44.6	39.7	04:55 PM - 05:00 PM	46.1	42.9
11:40 AM - 11:45 AM	46.5	41.5	02:20 PM - 02:25 PM	43.6	37.8	05:00 PM - 05:05 PM	49.1	44.9
11:45 AM - 11:50 AM	50.5	44.5	02:25 PM - 02:30 PM	51.4	39.4	05:05 PM - 05:10 PM	46.1	43.4
11:50 AM - 11:55 AM	50.0	42.7	02:30 PM - 02:35 PM	48.9	41.4	05:10 PM - 05:15 PM	47.2	44.6
11:55 AM - 12:00 PM	49.5	42.8	02:35 PM - 02:40 PM	42.7	37.7	05:15 PM - 05:20 PM	46.8	42.9
12:00 PM - 12:05 PM	51.5	43.2	02:40 PM - 02:45 PM	48.1	37.9	05:20 PM - 05:25 PM	45.9	42.1
12:05 PM - 12:10 PM	46.6	42.0	02:45 PM - 02:50 PM	46.9	39.8	05:25 PM - 05:30 PM	47.3	43.2
12:10 PM - 12:15 PM	45.6	42.3	02:50 PM - 02:55 PM	45.1	39.2	05:30 PM - 05:35 PM	47.4	42.1
12:15 PM - 12:20 PM	49.5	43.1	02:55 PM - 03:00 PM	43.7	38.5	05:35 PM - 05:40 PM	49.8	42.6
12:20 PM - 12:25 PM	50.0	42.5	03:00 PM - 03:05 PM	45.1	40.1	05:40 PM - 05:45 PM	46.5	43.6
12:25 PM - 12:30 PM	46.7	41.3	03:05 PM - 03:10 PM	42.6	38.8	05:45 PM - 05:50 PM	47.5	43.3
12:30 PM - 12:35 PM	43.0	40.9	03:10 PM - 03:15 PM	45.6	37.0	05:50 PM - 05:55 PM	47.2	42.5
12:35 PM - 12:40 PM	47.0	42.1	03:15 PM - 03:20 PM	48.7	37.9	05:55 PM - 06:00 PM	45.1	42.2

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Approved by
Sarayuth Jittranont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022975-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-15
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่ฉิน 5
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 29, 2024	Leq	L90	May 29, 2024	Leq	L90	May 29 - May 30, 2024	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 PM - 06:05 PM	45.7	41.8	08:40 PM - 08:45 PM	47.5	46.4	11:20 PM - 11:25 PM	47.7	47.0
06:05 PM - 06:10 PM	45.1	41.4	08:45 PM - 08:50 PM	47.7	46.8	11:25 PM - 11:30 PM	48.4	47.5
06:10 PM - 06:15 PM	46.6	43.3	08:50 PM - 08:55 PM	47.2	46.3	11:30 PM - 11:35 PM	49.2	47.8
06:15 PM - 06:20 PM	49.6	44.0	08:55 PM - 09:00 PM	46.9	45.8	11:35 PM - 11:40 PM	48.2	47.4
06:20 PM - 06:25 PM	45.4	42.7	09:00 PM - 09:05 PM	47.0	45.8	11:40 PM - 11:45 PM	47.1	46.3
06:25 PM - 06:30 PM	47.3	43.4	09:05 PM - 09:10 PM	47.2	45.4	11:45 PM - 11:50 PM	47.4	46.4
06:30 PM - 06:35 PM	46.6	43.1	09:10 PM - 09:15 PM	47.2	45.7	11:50 PM - 11:55 PM	49.1	46.2
06:35 PM - 06:40 PM	46.8	43.9	09:15 PM - 09:20 PM	46.2	45.0	11:55 PM - 12:00 AM	48.3	46.7
06:40 PM - 06:45 PM	46.3	43.9	09:20 PM - 09:25 PM	45.7	44.6	12:00 AM - 12:05 AM	46.8	45.8
06:45 PM - 06:50 PM	45.2	42.7	09:25 PM - 09:30 PM	46.9	46.0	12:05 AM - 12:10 AM	48.9	45.7
06:50 PM - 06:55 PM	43.0	41.8	09:30 PM - 09:35 PM	47.2	46.1	12:10 AM - 12:15 AM	47.0	45.6
06:55 PM - 07:00 PM	43.0	41.3	09:35 PM - 09:40 PM	47.5	46.5	12:15 AM - 12:20 AM	47.0	46.1
07:00 PM - 07:05 PM	50.5	42.8	09:40 PM - 09:45 PM	47.0	46.2	12:20 AM - 12:25 AM	47.3	46.1
07:05 PM - 07:10 PM	48.7	44.9	09:45 PM - 09:50 PM	46.9	46.3	12:25 AM - 12:30 AM	46.6	45.7
07:10 PM - 07:15 PM	48.4	46.5	09:50 PM - 09:55 PM	47.5	46.6	12:30 AM - 12:35 AM	46.3	45.6
07:15 PM - 07:20 PM	49.2	47.9	09:55 PM - 10:00 PM	47.1	44.9	12:35 AM - 12:40 AM	46.2	45.2
07:20 PM - 07:25 PM	50.0	48.6	10:00 PM - 10:05 PM	45.5	44.2	12:40 AM - 12:45 AM	46.4	45.7
07:25 PM - 07:30 PM	49.6	49.2	10:05 PM - 10:10 PM	46.0	45.1	12:45 AM - 12:50 AM	45.5	44.5
07:30 PM - 07:35 PM	50.1	49.1	10:10 PM - 10:15 PM	46.5	45.7	12:50 AM - 12:55 AM	45.7	44.8
07:35 PM - 07:40 PM	50.7	49.2	10:15 PM - 10:20 PM	46.6	45.8	12:55 AM - 01:00 AM	45.3	44.5
07:40 PM - 07:45 PM	49.7	49.0	10:20 PM - 10:25 PM	45.9	45.2	01:00 AM - 01:05 AM	49.7	45.1
07:45 PM - 07:50 PM	49.7	48.8	10:25 PM - 10:30 PM	49.2	45.4	01:05 AM - 01:10 AM	45.9	44.9
07:50 PM - 07:55 PM	49.6	48.5	10:30 PM - 10:35 PM	47.7	46.0	01:10 AM - 01:15 AM	45.4	44.7
07:55 PM - 08:00 PM	48.8	47.4	10:35 PM - 10:40 PM	47.5	46.2	01:15 AM - 01:20 AM	45.2	44.1
08:00 PM - 08:05 PM	49.0	47.4	10:40 PM - 10:45 PM	47.2	46.6	01:20 AM - 01:25 AM	44.3	43.6
08:05 PM - 08:10 PM	52.4	48.2	10:45 PM - 10:50 PM	49.5	47.0	01:25 AM - 01:30 AM	44.1	43.1
08:10 PM - 08:15 PM	50.1	48.2	10:50 PM - 10:55 PM	47.7	46.9	01:30 AM - 01:35 AM	44.4	43.6
08:15 PM - 08:20 PM	48.9	48.0	10:55 PM - 11:00 PM	47.8	47.0	01:35 AM - 01:40 AM	45.3	44.3
08:20 PM - 08:25 PM	47.9	47.3	11:00 PM - 11:05 PM	49.4	47.4	01:40 AM - 01:45 AM	45.4	44.5
08:25 PM - 08:30 PM	50.8	48.0	11:05 PM - 11:10 PM	49.2	47.1	01:45 AM - 01:50 AM	45.2	44.4
08:30 PM - 08:35 PM	48.5	45.5	11:10 PM - 11:15 PM	48.6	47.1	01:50 AM - 01:55 AM	44.6	43.6
08:35 PM - 08:40 PM	46.8	45.4	11:15 PM - 11:20 PM	47.8	46.8	01:55 AM - 02:00 AM	44.4	43.5

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022975-1

Sample Number 2450167-15
Parameter Noise Level (Leq 5 min)
Location RI : หมู่บ้านไร่นา 5
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	44.2	43.2	04:40 AM - 04:45 AM	42.1	40.7	07:20 AM - 07:25 AM	48.5	43.5
02:05 AM - 02:10 AM	44.1	43.4	04:45 AM - 04:50 AM	41.4	40.0	07:25 AM - 07:30 AM	49.9	43.1
02:10 AM - 02:15 AM	44.4	43.6	04:50 AM - 04:55 AM	45.2	40.2	07:30 AM - 07:35 AM	50.9	42.4
02:15 AM - 02:20 AM	44.2	42.6	04:55 AM - 05:00 AM	45.4	40.1	07:35 AM - 07:40 AM	47.4	42.3
02:20 AM - 02:25 AM	44.4	42.8	05:00 AM - 05:05 AM	44.0	40.7	07:40 AM - 07:45 AM	56.7	42.6
02:25 AM - 02:30 AM	47.9	42.9	05:05 AM - 05:10 AM	47.4	41.2	07:45 AM - 07:50 AM	50.0	42.6
02:30 AM - 02:35 AM	44.8	43.2	05:10 AM - 05:15 AM	47.8	42.6	07:50 AM - 07:55 AM	49.0	42.9
02:35 AM - 02:40 AM	52.4	47.5	05:15 AM - 05:20 AM	48.6	44.2	07:55 AM - 08:00 AM	48.5	42.6
02:40 AM - 02:45 AM	56.2	45.6	05:20 AM - 05:25 AM	48.8	43.1	08:00 AM - 08:05 AM	50.1	43.6
02:45 AM - 02:50 AM	44.5	43.7	05:25 AM - 05:30 AM	48.6	43.2	08:05 AM - 08:10 AM	46.8	43.3
02:50 AM - 02:55 AM	44.9	44.1	05:30 AM - 05:35 AM	50.4	43.1	08:10 AM - 08:15 AM	47.4	43.3
02:55 AM - 03:00 AM	45.0	43.6	05:35 AM - 05:40 AM	49.7	43.7	08:15 AM - 08:20 AM	49.0	43.3
03:00 AM - 03:05 AM	44.9	43.1	05:40 AM - 05:45 AM	49.3	44.4	08:20 AM - 08:25 AM	46.5	42.9
03:05 AM - 03:10 AM	44.2	42.9	05:45 AM - 05:50 AM	50.4	45.2	08:25 AM - 08:30 AM	50.1	43.4
03:10 AM - 03:15 AM	42.7	41.4	05:50 AM - 05:55 AM	49.3	44.9	08:30 AM - 08:35 AM	46.6	42.6
03:15 AM - 03:20 AM	42.5	41.1	05:55 AM - 06:00 AM	48.4	43.9	08:35 AM - 08:40 AM	48.8	40.5
03:20 AM - 03:25 AM	42.8	41.7	06:00 AM - 06:05 AM	47.1	44.1	08:40 AM - 08:45 AM	48.6	43.0
03:25 AM - 03:30 AM	42.4	41.6	06:05 AM - 06:10 AM	55.0	44.6	08:45 AM - 08:50 AM	46.6	44.5
03:30 AM - 03:35 AM	42.9	41.9	06:10 AM - 06:15 AM	56.8	44.4	08:50 AM - 08:55 AM	47.8	43.5
03:35 AM - 03:40 AM	44.2	42.2	06:15 AM - 06:20 AM	50.4	44.6	08:55 AM - 09:00 AM	45.0	42.3
03:40 AM - 03:45 AM	46.6	39.1	06:20 AM - 06:25 AM	55.1	44.4	09:00 AM - 09:05 AM	46.9	42.9
03:45 AM - 03:50 AM	48.3	40.2	06:25 AM - 06:30 AM	49.9	45.1	09:05 AM - 09:10 AM	50.2	43.8
03:50 AM - 03:55 AM	44.7	40.9	06:30 AM - 06:35 AM	53.7	44.6	09:10 AM - 09:15 AM	47.3	42.2
03:55 AM - 04:00 AM	43.3	41.4	06:35 AM - 06:40 AM	56.8	44.8	09:15 AM - 09:20 AM	46.6	42.3
04:00 AM - 04:05 AM	43.7	42.5	06:40 AM - 06:45 AM	48.0	44.7	09:20 AM - 09:25 AM	46.4	41.7
04:05 AM - 04:10 AM	44.1	43.1	06:45 AM - 06:50 AM	50.0	44.5	09:25 AM - 09:30 AM	43.7	41.4
04:10 AM - 04:15 AM	44.2	43.3	06:50 AM - 06:55 AM	49.8	44.5	09:30 AM - 09:35 AM	48.4	42.4
04:15 AM - 04:20 AM	43.9	42.9	06:55 AM - 07:00 AM	49.0	44.2	09:35 AM - 09:40 AM	49.0	41.7
04:20 AM - 04:25 AM	44.6	41.9	07:00 AM - 07:05 AM	47.5	43.6	09:40 AM - 09:45 AM	48.6	43.6
04:25 AM - 04:30 AM	45.7	40.9	07:05 AM - 07:10 AM	50.7	44.3	09:45 AM - 09:50 AM	49.9	43.7
04:30 AM - 04:35 AM	41.3	40.3	07:10 AM - 07:15 AM	51.0	43.5	09:50 AM - 09:55 AM	46.0	41.8
04:35 AM - 04:40 AM	41.4	40.1	07:15 AM - 07:20 AM	48.6	42.5	09:55 AM - 10:00 AM	44.1	41.4

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Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022976-1

Sample Number 2450167-16
Parameter Noise Level (Leq 5 min)
Location RI : หมู่บ้านไร่นา 5
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	47.6	42.7	12:40 PM - 12:45 PM	45.9	39.2	03:20 PM - 03:25 PM	43.3	38.6
10:05 AM - 10:10 AM	45.8	42.2	12:45 PM - 12:50 PM	45.1	39.8	03:25 PM - 03:30 PM	42.9	38.7
10:10 AM - 10:15 AM	44.6	40.4	12:50 PM - 12:55 PM	42.4	37.6	03:30 PM - 03:35 PM	43.7	41.0
10:15 AM - 10:20 AM	49.8	41.7	12:55 PM - 01:00 PM	42.3	37.9	03:35 PM - 03:40 PM	49.3	41.7
10:20 AM - 10:25 AM	47.5	42.2	01:00 PM - 01:05 PM	43.5	39.5	03:40 PM - 03:45 PM	46.3	42.8
10:25 AM - 10:30 AM	43.0	39.5	01:05 PM - 01:10 PM	42.1	40.0	03:45 PM - 03:50 PM	56.4	43.6
10:30 AM - 10:35 AM	45.5	41.7	01:10 PM - 01:15 PM	43.4	39.3	03:50 PM - 03:55 PM	46.5	42.0
10:35 AM - 10:40 AM	44.5	40.7	01:15 PM - 01:20 PM	44.5	38.3	03:55 PM - 04:00 PM	52.8	43.6
10:40 AM - 10:45 AM	46.8	41.0	01:20 PM - 01:25 PM	46.9	39.1	04:00 PM - 04:05 PM	50.7	42.9
10:45 AM - 10:50 AM	49.5	41.2	01:25 PM - 01:30 PM	46.5	39.6	04:05 PM - 04:10 PM	49.5	42.1
10:50 AM - 10:55 AM	45.2	41.5	01:30 PM - 01:35 PM	46.2	41.3	04:10 PM - 04:15 PM	49.9	41.0
10:55 AM - 11:00 AM	47.8	40.9	01:35 PM - 01:40 PM	46.1	42.0	04:15 PM - 04:20 PM	47.8	41.8
11:00 AM - 11:05 AM	45.9	39.8	01:40 PM - 01:45 PM	48.9	45.6	04:20 PM - 04:25 PM	49.1	40.6
11:05 AM - 11:10 AM	44.3	39.0	01:45 PM - 01:50 PM	43.3	41.2	04:25 PM - 04:30 PM	51.3	39.2
11:10 AM - 11:15 AM	45.8	41.0	01:50 PM - 01:55 PM	44.9	41.9	04:30 PM - 04:35 PM	48.7	39.7
11:15 AM - 11:20 AM	47.9	40.1	01:55 PM - 02:00 PM	47.8	39.9	04:35 PM - 04:40 PM	44.3	39.5
11:20 AM - 11:25 AM	47.3	40.1	02:00 PM - 02:05 PM	46.1	41.3	04:40 PM - 04:45 PM	45.5	40.7
11:25 AM - 11:30 AM	46.9	40.1	02:05 PM - 02:10 PM	46.7	41.3	04:45 PM - 04:50 PM	43.8	40.1
11:30 AM - 11:35 AM	41.2	38.5	02:10 PM - 02:15 PM	44.4	40.5	04:50 PM - 04:55 PM	44.3	41.1
11:35 AM - 11:40 AM	44.4	39.1	02:15 PM - 02:20 PM	44.0	39.1	04:55 PM - 05:00 PM	45.2	42.0
11:40 AM - 11:45 AM	48.3	40.0	02:20 PM - 02:25 PM	44.1	39.3	05:00 PM - 05:05 PM	46.2	43.0
11:45 AM - 11:50 AM	49.1	41.0	02:25 PM - 02:30 PM	47.7	40.4	05:05 PM - 05:10 PM	45.9	43.8
11:50 AM - 11:55 AM	46.5	40.9	02:30 PM - 02:35 PM	42.0	38.9	05:10 PM - 05:15 PM	50.3	43.1
11:55 AM - 12:00 PM	46.5	41.9	02:35 PM - 02:40 PM	45.6	40.1	05:15 PM - 05:20 PM	47.3	43.6
12:00 PM - 12:05 PM	44.4	40.9	02:40 PM - 02:45 PM	44.7	41.7	05:20 PM - 05:25 PM	47.5	45.0
12:05 PM - 12:10 PM	44.1	39.1	02:45 PM - 02:50 PM	44.1	40.8	05:25 PM - 05:30 PM	46.9	44.7
12:10 PM - 12:15 PM	49.5	39.8	02:50 PM - 02:55 PM	44.1	40.6	05:30 PM - 05:35 PM	46.5	43.1
12:15 PM - 12:20 PM	47.2	40.3	02:55 PM - 03:00 PM	48.9	42.3	05:35 PM - 05:40 PM	48.3	45.3
12:20 PM - 12:25 PM	47.8	42.0	03:00 PM - 03:05 PM	45.1	40.8	05:40 PM - 05:45 PM	50.3	45.7
12:25 PM - 12:30 PM	48.0	39.5	03:05 PM - 03:10 PM	42.5	38.5	05:45 PM - 05:50 PM	48.4	45.8
12:30 PM - 12:35 PM	48.8	38.3	03:10 PM - 03:15 PM	44.6	39.7	05:50 PM - 05:55 PM	47.4	44.2
12:35 PM - 12:40 PM	45.5	37.9	03:15 PM - 03:20 PM	44.3	41.4	05:55 PM - 06:00 PM	46.6	43.3

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Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022976-1

Sample Number 2450167-16
Parameter Noise Level (Leq 5 min)
Location RI : หมู่บ้านไร่นา 5
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30 - May 31, 2024 Time	Leq dB(A)	L90 dB(A)
05:00 PM - 05:05 PM	46.2	43.3	08:40 PM - 08:45 PM	49.1	46.9	11:20 PM - 11:25 PM	47.3	45.7
05:05 PM - 05:10 PM	45.4	43.3	08:45 PM - 08:50 PM	48.0	46.9	11:25 PM - 11:30 PM	47.3	46.0
05:10 PM - 05:15 PM	47.0	44.7	08:50 PM - 08:55 PM	47.5	45.3	11:30 PM - 11:35 PM	47.1	44.8
05:15 PM - 05:20 PM	47.2	43.1	08:55 PM - 09:00 PM	49.1	44.5	11:35 PM - 11:40 PM	46.5	44.6
05:20 PM - 05:25 PM	52.9	42.8	09:00 PM - 09:05 PM	47.0	44.0	11:40 PM - 11:45 PM	47.2	45.5
05:25 PM - 05:30 PM	47.9	43.9	09:05 PM - 09:10 PM	47.3	44.7	11:45 PM - 11:50 PM	47.0	45.8
05:30 PM - 05:35 PM	46.6	43.0	09:10 PM - 09:15 PM	49.9	46.5	11:50 PM - 11:55 PM	47.1	45.7
05:35 PM - 05:40 PM	52.4	43.6	09:15 PM - 09:20 PM	48.3	45.8	11:55 PM - 12:00 AM	45.4	44.5
05:40 PM - 05:45 PM	45.9	42.7	09:20 PM - 09:25 PM	46.7	44.4	12:00 AM - 12:05 AM	46.5	45.1
05:45 PM - 05:50 PM	47.1	44.2	09:25 PM - 09:30 PM	45.2	43.9	12:05 AM - 12:10 AM	49.6	44.9
05:50 PM - 05:55 PM	47.3	43.7	09:30 PM - 09:35 PM	45.4	44.1	12:10 AM - 12:15 AM	46.5	44.7
05:55 PM - 06:00 PM	46.3	41.7	09:35 PM - 09:40 PM	54.2	43.9	12:15 AM - 12:20 AM	49.8	43.6
06:00 PM - 06:05 PM	47.5	44.0	09:40 PM - 09:45 PM	45.4	43.8	12:20 AM - 12:25 AM	45.1	44.2
06:05 PM - 06:10 PM	48.3	45.0	09:45 PM - 09:50 PM	45.4	44.1	12:25 AM - 12:30 AM	44.5	43.2
06:10 PM - 06:15 PM	49.6	47.2	09:50 PM - 09:55 PM	44.9	44.0	12:30 AM - 12:35 AM	43.4	42.2
06:15 PM - 06:20 PM	52.2	51.5	09:55 PM - 10:00 PM	48.4	45.2	12:35 AM - 12:40 AM	43.1	41.8
06:20 PM - 06:25 PM	53.6	49.1	10:00 PM - 10:05 PM	46.1	44.0	12:40 AM - 12:45 AM	42.0	41.0
06:25 PM - 06:30 PM	50.1	49.0	10:05 PM - 10:10 PM	44.9	42.6	12:45 AM - 12:50 AM	43.6	41.3
06:30 PM - 06:35 PM	50.7	49.9	10:10 PM - 10:15 PM	44.7	42.8	12:50 AM - 12:55 AM	46.9	41.8
06:35 PM - 06:40 PM	49.9	48.9	10:15 PM - 10:20 PM	45.8	45.0	12:55 AM - 01:00 AM	44.1	42.4
06:40 PM - 06:45 PM	50.6	49.6	10:20 PM - 10:25 PM	47.4	45.7	01:00 AM - 01:05 AM	45.0	44.1
06:45 PM - 06:50 PM	51.3	50.0	10:25 PM - 10:30 PM	48.2	47.6	01:05 AM - 01:10 AM	46.9	44.5
06:50 PM - 06:55 PM	50.7	49.8	10:30 PM - 10:35 PM	49.6	47.4	01:10 AM - 01:15 AM	45.5	44.6
06:55 PM - 07:00 PM	49.7	47.0	10:35 PM - 10:40 PM	46.3	44.5	01:15 AM - 01:20 AM	45.7	44.1
07:00 PM - 07:05 PM	48.0	46.5	10:40 PM - 10:45 PM	45.0	44.0	01:20 AM - 01:25 AM	44.2	42.2
07:05 PM - 07:10 PM	47.9	46.7	10:45 PM - 10:50 PM	45.1	44.0	01:25 AM - 01:30 AM	46.1	45.2
07:10 PM - 07:15 PM	48.2	46.5	10:50 PM - 10:55 PM	44.9	43.4	01:30 AM - 01:35 AM	46.1	43.0
07:15 PM - 07:20 PM	48.7	46.2	10:55 PM - 11:00 PM	48.0	45.8	01:35 AM - 01:40 AM	45.2	44.1
07:20 PM - 07:25 PM	48.6	46.2	11:00 PM - 11:05 PM	49.3	46.2	01:40 AM - 01:45 AM	44.6	43.4
07:25 PM - 07:30 PM	48.6	46.9	11:05 PM - 11:10 PM	47.9	46.5	01:45 AM - 01:50 AM	45.0	43.4
07:30 PM - 07:35 PM	49.0	47.9	11:10 PM - 11:15 PM	47.4	45.9	01:50 AM - 01:55 AM	45.4	44.7
07:35 PM - 07:40 PM	49.3	48.3	11:15 PM - 11:20 PM	48.0	46.3	01:55 AM - 02:00 AM	45.4	44.7

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022976-1

Sample Number 2450167-16
Parameter Noise Level (Leq 5 min)
Location RI : หมู่บ้านไร่นา 5
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	45.8	43.2	04:40 AM - 04:45 AM	52.3	39.3	07:20 AM - 07:25 AM	57.6	44.5
02:05 AM - 02:10 AM	44.7	42.2	04:45 AM - 04:50 AM	51.0	37.3	07:25 AM - 07:30 AM	58.0	44.2
02:10 AM - 02:15 AM	43.2	44.5	04:50 AM - 04:55 AM	49.7	37.1	07:30 AM - 07:35 AM	57.0	43.7
02:15 AM - 02:20 AM	45.0	41.7	04:55 AM - 05:00 AM	51.3	37.7	07:35 AM - 07:40 AM	56.8	42.7
02:20 AM - 02:25 AM	45.1	41.7	05:00 AM - 05:05 AM	43.8	39.2	07:40 AM - 07:45 AM	54.9	42.0
02:25 AM - 02:30 AM	48.7	45.9	05:05 AM - 05:10 AM	48.9	39.2	07:45 AM - 07:50 AM	56.3	41.7
02:30 AM - 02:35 AM	48.3	45.2	05:10 AM - 05:15 AM	45.2	38.4	07:50 AM - 07:55 AM	53.9	42.2
02:35 AM - 02:40 AM	50.6	45.1	05:15 AM - 05:20 AM	44.4	39.0	07:55 AM - 08:00 AM	48.6	42.4
02:40 AM - 02:45 AM	57.3	45.3	05:20 AM - 05:25 AM	46.1	39.4	08:00 AM - 08:05 AM	54.6	43.7
02:45 AM - 02:50 AM	46.7	46.0	05:25 AM - 05:30 AM	43.2	40.6	08:05 AM - 08:10 AM	49.7	42.9
02:50 AM - 02:55 AM	43.1	44.0	05:30 AM - 05:35 AM	48.0	40.8	08:10 AM - 08:15 AM	49.1	43.6
02:55 AM - 03:00 AM	44.5	43.0	05:35 AM - 05:40 AM	49.0	41.1	08:15 AM - 08:20 AM	49.5	43.5
03:00 AM - 03:05 AM	43.9	41.6	05:40 AM - 05:45 AM	48.4	40.9	08:20 AM - 08:25 AM	52.1	43.4
03:05 AM - 03:10 AM	46.9	44.9	05:45 AM - 05:50 AM	51.2	40.9	08:25 AM - 08:30 AM	48.8	42.4
03:10 AM - 03:15 AM	48.2	46.3	05:50 AM - 05:55 AM	54.3	41.6	08:30 AM - 08:35 AM	50.1	40.8
03:15 AM - 03:20 AM	47.0	46.4	05:55 AM - 06:00 AM	48.4	40.2	08:35 AM - 08:40 AM	50.7	42.1
03:20 AM - 03:25 AM	45.7	42.5	06:00 AM - 06:05 AM	46.2	40.6	08:40 AM - 08:45 AM	46.9	40.8
03:25 AM - 03:30 AM	42.5	40.8	06:05 AM - 06:10 AM	54.4	43.1	08:45 AM - 08:50 AM	45.1	40.7
03:30 AM - 03:35 AM	40.6	39.5	06:10 AM - 06:15 AM	57.2	41.1	08:50 AM - 08:55 AM	45.7	40.7
03:35 AM - 03:40 AM	40.9	38.7	06:15 AM - 06:20 AM	53.8	41.7	08:55 AM - 09:00 AM	45.8	42.1
03:40 AM - 03:45 AM	42.2	39.1	06:20 AM - 06:25 AM	56.8	42.0	09:00 AM - 09:05 AM	49.3	42.3
03:45 AM - 03:50 AM	41.4	39.2	06:25 AM - 06:30 AM	53.2	42.5	09:05 AM - 09:10 AM	47.2	40.4
03:50 AM - 03:55 AM	40.4	39.1	06:30 AM - 06:35 AM	44.8	42.5	09:10 AM - 09:15 AM	45.7	41.7
03:55 AM - 04:00 AM	41.7	39.4	06:35 AM - 06:40 AM	46.5	42.9	09:15 AM - 09:20 AM	46.8	42.1
04:00 AM - 04:05 AM	43.9	40.3	06:40 AM - 06:45 AM	47.7	43.1	09:20 AM - 09:25 AM	47.7	40.6
04:05 AM - 04:10 AM	52.0	42.2	06:45 AM - 06:50 AM	50.6	42.9	09:25 AM - 09:30 AM	48.4	40.9
04:10 AM - 04:15 AM	49.2	41.5	06:50 AM - 06:55 AM	46.0	42.6	09:30 AM - 09:35 AM	45.8	39.8
04:15 AM - 04:20 AM	48.1	40.9	06:55 AM - 07:00 AM	51.8	43.0	09:35 AM - 09:40 AM	45.9	41.2
04:20 AM - 04:25 AM	44.8	41.6	07:00 AM - 07:05 AM	46.1	43.5	09:40 AM - 09:45 AM	49.2	40.7
04:25 AM - 04:30 AM	42.7	41.3	07:05 AM - 07:10 AM	58.9	43.9	09:45 AM - 09:50 AM	47.3	41.4
04:30 AM - 04:35 AM	44.3	42.3	07:10 AM - 07:15 AM	57.4	43.4	09:50 AM - 09:55 AM	47.4	41.6
04:35 AM - 04:40 AM	50.0	41.1	07:15 AM - 07:20 AM	57.9	44.6	09:55 AM - 10:00 AM	45.6	41.4

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022977-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-17
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนา 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	49.1	47.2	12:40 PM - 12:45 PM	41.6	37.7	03:20 PM - 03:25 PM	44.1	41.1
10:05 AM - 10:10 AM	44.1	40.5	12:45 PM - 12:50 PM	41.9	37.3	03:25 PM - 03:30 PM	52.7	41.6
10:10 AM - 10:15 AM	49.2	42.8	12:50 PM - 12:55 PM	44.8	39.6	03:30 PM - 03:35 PM	47.2	42.1
10:15 AM - 10:20 AM	46.1	40.8	12:55 PM - 01:00 PM	43.5	39.1	03:35 PM - 03:40 PM	43.8	41.1
10:20 AM - 10:25 AM	48.5	41.4	01:00 PM - 01:05 PM	45.4	41.2	03:40 PM - 03:45 PM	45.0	40.2
10:25 AM - 10:30 AM	47.6	41.4	01:05 PM - 01:10 PM	42.1	38.9	03:45 PM - 03:50 PM	49.6	40.4
10:30 AM - 10:35 AM	48.1	40.9	01:10 PM - 01:15 PM	43.9	40.0	03:50 PM - 03:55 PM	44.0	40.7
10:35 AM - 10:40 AM	42.1	38.8	01:15 PM - 01:20 PM	45.8	41.4	03:55 PM - 04:00 PM	47.1	42.0
10:40 AM - 10:45 AM	46.9	40.6	01:20 PM - 01:25 PM	46.0	40.8	04:00 PM - 04:05 PM	45.9	41.7
10:45 AM - 10:50 AM	46.5	41.0	01:25 PM - 01:30 PM	45.3	41.8	04:05 PM - 04:10 PM	48.1	41.1
10:50 AM - 10:55 AM	44.4	39.8	01:30 PM - 01:35 PM	46.7	40.4	04:10 PM - 04:15 PM	47.5	40.8
10:55 AM - 11:00 AM	54.0	43.1	01:35 PM - 01:40 PM	50.6	43.5	04:15 PM - 04:20 PM	46.6	40.7
11:00 AM - 11:05 AM	44.4	41.2	01:40 PM - 01:45 PM	49.6	43.7	04:20 PM - 04:25 PM	44.6	40.8
11:05 AM - 11:10 AM	42.9	38.8	01:45 PM - 01:50 PM	49.7	42.2	04:25 PM - 04:30 PM	45.4	40.9
11:10 AM - 11:15 AM	42.3	39.4	01:50 PM - 01:55 PM	48.4	41.9	04:30 PM - 04:35 PM	46.1	42.8
11:15 AM - 11:20 AM	46.4	40.2	01:55 PM - 02:00 PM	47.5	41.4	04:35 PM - 04:40 PM	45.8	41.7
11:20 AM - 11:25 AM	45.6	41.1	02:00 PM - 02:05 PM	47.6	43.1	04:40 PM - 04:45 PM	48.0	41.9
11:25 AM - 11:30 AM	45.2	40.6	02:05 PM - 02:10 PM	46.0	41.8	04:45 PM - 04:50 PM	46.0	41.5
11:30 AM - 11:35 AM	48.9	41.4	02:10 PM - 02:15 PM	45.7	41.3	04:50 PM - 04:55 PM	46.3	42.3
11:35 AM - 11:40 AM	47.4	41.1	02:15 PM - 02:20 PM	46.4	42.5	04:55 PM - 05:00 PM	47.7	42.9
11:40 AM - 11:45 AM	53.1	40.2	02:20 PM - 02:25 PM	45.4	41.7	05:00 PM - 05:05 PM	52.6	42.0
11:45 AM - 11:50 AM	53.7	39.0	02:25 PM - 02:30 PM	49.4	40.7	05:05 PM - 05:10 PM	57.1	43.3
11:50 AM - 11:55 AM	45.4	39.3	02:30 PM - 02:35 PM	47.3	42.0	05:10 PM - 05:15 PM	45.3	42.3
11:55 AM - 12:00 PM	46.2	39.9	02:35 PM - 02:40 PM	47.5	41.9	05:15 PM - 05:20 PM	47.2	43.6
12:00 PM - 12:05 PM	45.4	40.0	02:40 PM - 02:45 PM	46.3	40.7	05:20 PM - 05:25 PM	46.9	43.8
12:05 PM - 12:10 PM	43.1	39.9	02:45 PM - 02:50 PM	44.5	40.0	05:25 PM - 05:30 PM	49.1	43.3
12:10 PM - 12:15 PM	47.2	40.3	02:50 PM - 02:55 PM	49.3	41.4	05:30 PM - 05:35 PM	47.4	43.8
12:15 PM - 12:20 PM	44.0	40.7	02:55 PM - 03:00 PM	46.0	40.9	05:35 PM - 05:40 PM	47.7	44.3
12:20 PM - 12:25 PM	46.2	39.8	03:00 PM - 03:05 PM	45.6	41.4	05:40 PM - 05:45 PM	51.0	43.2
12:25 PM - 12:30 PM	41.2	37.6	03:05 PM - 03:10 PM	44.9	40.4	05:45 PM - 05:50 PM	46.2	42.8
12:30 PM - 12:35 PM	47.8	38.3	03:10 PM - 03:15 PM	46.2	42.7	05:50 PM - 05:55 PM	46.3	42.8
12:35 PM - 12:40 PM	45.6	39.0	03:15 PM - 03:20 PM	46.3	41.7	05:55 PM - 06:00 PM	48.3	42.5

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022977-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-17
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนา 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31 - Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	50.4	43.4	08:40 PM - 08:45 PM	48.0	45.2	11:20 PM - 11:25 PM	42.9	41.2
06:05 PM - 06:10 PM	50.9	42.3	08:45 PM - 08:50 PM	48.7	45.4	11:25 PM - 11:30 PM	43.7	43.0
06:10 PM - 06:15 PM	47.8	42.2	08:50 PM - 08:55 PM	45.7	44.6	11:30 PM - 11:35 PM	44.5	43.2
06:15 PM - 06:20 PM	46.2	42.7	08:55 PM - 09:00 PM	46.8	45.6	11:35 PM - 11:40 PM	45.5	44.3
06:20 PM - 06:25 PM	47.2	42.3	09:00 PM - 09:05 PM	47.3	46.2	11:40 PM - 11:45 PM	46.9	45.8
06:25 PM - 06:30 PM	49.5	43.3	09:05 PM - 09:10 PM	46.8	46.1	11:45 PM - 11:50 PM	47.5	46.7
06:30 PM - 06:35 PM	46.6	43.4	09:10 PM - 09:15 PM	47.1	45.9	11:50 PM - 11:55 PM	48.2	47.2
06:35 PM - 06:40 PM	45.4	42.9	09:15 PM - 09:20 PM	46.3	45.5	11:55 PM - 12:00 AM	48.8	47.9
06:40 PM - 06:45 PM	50.8	45.9	09:20 PM - 09:25 PM	46.1	45.5	12:00 AM - 12:05 AM	49.0	47.7
06:45 PM - 06:50 PM	50.8	45.9	09:25 PM - 09:30 PM	46.8	45.5	12:05 AM - 12:10 AM	48.1	47.2
06:50 PM - 06:55 PM	49.8	44.4	09:30 PM - 09:35 PM	45.9	45.2	12:10 AM - 12:15 AM	48.8	47.8
06:55 PM - 07:00 PM	54.9	46.3	09:35 PM - 09:40 PM	45.7	45.0	12:15 AM - 12:20 AM	49.8	48.8
07:00 PM - 07:05 PM	50.3	46.7	09:40 PM - 09:45 PM	45.7	45.0	12:20 AM - 12:25 AM	49.4	48.7
07:05 PM - 07:10 PM	48.6	46.9	09:45 PM - 09:50 PM	45.9	45.3	12:25 AM - 12:30 AM	49.1	48.3
07:10 PM - 07:15 PM	49.9	47.8	09:50 PM - 09:55 PM	46.3	45.3	12:30 AM - 12:35 AM	48.6	47.9
07:15 PM - 07:20 PM	49.8	47.6	09:55 PM - 10:00 PM	46.1	45.5	12:35 AM - 12:40 AM	49.0	48.2
07:20 PM - 07:25 PM	50.3	49.3	10:00 PM - 10:05 PM	46.1	45.4	12:40 AM - 12:45 AM	49.1	48.3
07:25 PM - 07:30 PM	50.7	49.8	10:05 PM - 10:10 PM	45.4	43.4	12:45 AM - 12:50 AM	49.2	48.0
07:30 PM - 07:35 PM	50.7	49.9	10:10 PM - 10:15 PM	46.6	44.1	12:50 AM - 12:55 AM	49.3	47.9
07:35 PM - 07:40 PM	49.2	48.3	10:15 PM - 10:20 PM	46.4	43.7	12:55 AM - 01:00 AM	48.4	47.4
07:40 PM - 07:45 PM	49.0	48.0	10:20 PM - 10:25 PM	46.4	45.6	01:00 AM - 01:05 AM	48.4	47.5
07:45 PM - 07:50 PM	48.8	47.1	10:25 PM - 10:30 PM	46.8	46.1	01:05 AM - 01:10 AM	48.4	47.3
07:50 PM - 07:55 PM	54.3	46.2	10:30 PM - 10:35 PM	46.5	45.7	01:10 AM - 01:15 AM	47.9	47.1
07:55 PM - 08:00 PM	47.4	45.8	10:35 PM - 10:40 PM	46.7	45.7	01:15 AM - 01:20 AM	48.7	47.8
08:00 PM - 08:05 PM	45.9	44.5	10:40 PM - 10:45 PM	46.2	44.9	01:20 AM - 01:25 AM	48.8	47.8
08:05 PM - 08:10 PM	48.6	47.2	10:45 PM - 10:50 PM	44.1	41.9	01:25 AM - 01:30 AM	48.7	47.8
08:10 PM - 08:15 PM	49.7	48.2	10:50 PM - 10:55 PM	42.1	41.0	01:30 AM - 01:35 AM	49.6	48.6
08:15 PM - 08:20 PM	58.1	49.4	10:55 PM - 11:00 PM	44.2	41.8	01:35 AM - 01:40 AM	49.9	49.1
08:20 PM - 08:25 PM	48.9	44.8	11:00 PM - 11:05 PM	47.2	45.8	01:40 AM - 01:45 AM	50.8	49.8
08:25 PM - 08:30 PM	47.5	45.8	11:05 PM - 11:10 PM	47.2	46.4	01:45 AM - 01:50 AM	48.7	44.2
08:30 PM - 08:35 PM	46.5	44.6	11:10 PM - 11:15 PM	46.3	44.6	01:50 AM - 01:55 AM	50.2	49.3
08:35 PM - 08:40 PM	46.4	44.7	11:15 PM - 11:20 PM	43.2	40.1	01:55 AM - 02:00 AM	50.4	49.6

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Approved by
Sarayuth Jittranont
Assistant General Manager

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RIGHT SOLUTIONS

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022977-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-17
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนา 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	50.4	49.7	04:40 AM - 04:45 AM	42.6	41.5	07:20 AM - 07:25 AM	48.5	44.8
02:05 AM - 02:10 AM	50.1	49.2	04:45 AM - 04:50 AM	49.5	42.2	07:25 AM - 07:30 AM	49.9	45.1
02:10 AM - 02:15 AM	49.3	48.4	04:50 AM - 04:55 AM	43.0	42.0	07:30 AM - 07:35 AM	53.4	44.2
02:15 AM - 02:20 AM	49.1	48.2	04:55 AM - 05:00 AM	42.8	41.8	07:35 AM - 07:40 AM	56.1	43.7
02:20 AM - 02:25 AM	49.3	48.4	05:00 AM - 05:05 AM	46.0	41.3	07:40 AM - 07:45 AM	54.1	42.7
02:25 AM - 02:30 AM	49.4	48.5	05:05 AM - 05:10 AM	46.1	45.3	07:45 AM - 07:50 AM	54.1	42.3
02:30 AM - 02:35 AM	49.8	49.1	05:10 AM - 05:15 AM	46.2	45.2	07:50 AM - 07:55 AM	51.7	47.6
02:35 AM - 02:40 AM	49.8	48.9	05:15 AM - 05:20 AM	46.2	44.8	07:55 AM - 08:00 AM	56.5	41.3
02:40 AM - 02:45 AM	49.5	48.8	05:20 AM - 05:25 AM	46.6	45.1	08:00 AM - 08:05 AM	57.8	42.1
02:45 AM - 02:50 AM	49.3	48.3	05:25 AM - 05:30 AM	46.5	45.5	08:05 AM - 08:10 AM	54.6	42.0
02:50 AM - 02:55 AM	50.1	47.9	05:30 AM - 05:35 AM	45.4	44.4	08:10 AM - 08:15 AM	52.8	43.1
02:55 AM - 03:00 AM	48.1	46.9	05:35 AM - 05:40 AM	43.7	42.9	08:15 AM - 08:20 AM	57.4	43.3
03:00 AM - 03:05 AM	47.8	46.5	05:40 AM - 05:45 AM	45.1	43.3	08:20 AM - 08:25 AM	57.6	42.1
03:05 AM - 03:10 AM	46.8	45.7	05:45 AM - 05:50 AM	47.8	43.1	08:25 AM - 08:30 AM	52.8	41.5
03:10 AM - 03:15 AM	47.8	46.4	05:50 AM - 05:55 AM	46.0	42.7	08:30 AM - 08:35 AM	45.8	41.6
03:15 AM - 03:20 AM	46.8	45.2	05:55 AM - 06:00 AM	44.2	42.4	08:35 AM - 08:40 AM	46.6	41.7
03:20 AM - 03:25 AM	46.9	45.6	06:00 AM - 06:05 AM	43.5	41.9	08:40 AM - 08:45 AM	48.2	42.9
03:25 AM - 03:30 AM	46.3	44.3	06:05 AM - 06:10 AM	42.2	41.3	08:45 AM - 08:50 AM	53.2	42.6
03:30 AM - 03:35 AM	45.3	43.6	06:10 AM - 06:15 AM	43.2	40.9	08:50 AM - 08:55 AM	47.2	43.4
03:35 AM - 03:40 AM	46.6	45.5	06:15 AM - 06:20 AM	48.8	42.8	08:55 AM - 09:00 AM	46.8	42.8
03:40 AM - 03:45 AM	46.0	44.3	06:20 AM - 06:25 AM	47.2	43.2	09:00 AM - 09:05 AM	52.5	43.2
03:45 AM - 03:50 AM	46.9	45.9	06:25 AM - 06:30 AM	44.5	43.7	09:05 AM - 09:10 AM	45.5	42.3
03:50 AM - 03:55 AM	46.1	45.2	06:30 AM - 06:35 AM	45.3	43.7	09:10 AM - 09:15 AM	51.8	43.1
03:55 AM - 04:00 AM	45.5	44.4	06:35 AM - 06:40 AM	45.1	43.6	09:15 AM - 09:20 AM	55.7	42.7
04:00 AM - 04:05 AM	44.2	43.3	06:40 AM - 06:45 AM	58.3	43.4	09:20 AM - 09:25 AM	52.5	43.6
04:05 AM - 04:10 AM	44.4	43.1	06:45 AM - 06:50 AM	59.6	42.8	09:25 AM - 09:30 AM	53.1	44.7
04:10 AM - 04:15 AM	43.4	42.4	06:50 AM - 06:55 AM	49.2	43.5	09:30 AM - 09:35 AM	50.4	43.8
04:15 AM - 04:20 AM	42.5	41.6	06:55 AM - 07:00 AM	47.8	44.3	09:35 AM - 09:40 AM	49.1	44.6
04:20 AM - 04:25 AM	42.3	41.3	07:00 AM - 07:05 AM	50.2	45.3	09:40 AM - 09:45 AM	47.6	45.6
04:25 AM - 04:30 AM	42.4	41.3	07:05 AM - 07:10 AM	50.7	45.3	09:45 AM - 09:50 AM	53.0	44.4
04:30 AM - 04:35 AM	42.5	41.3	07:10 AM - 07:15 AM	52.6	44.3	09:50 AM - 09:55 AM	52.6	43.5
04:35 AM - 04:40 AM	42.2	41.2	07:15 AM - 07:20 AM	49.2	44.4	09:55 AM - 10:00 AM	55.8	44.3

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Approved by
Sarayuth Jittranont
Assistant General Manager

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RIGHT SOLUTIONS

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022978-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-18
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนา 5
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	57.0	43.7	12:40 PM - 12:45 PM	43.9	41.0	03:20 PM - 03:25 PM	46.9	41.9
10:05 AM - 10:10 AM	56.2	43.1	12:45 PM - 12:50 PM	47.7	43.1	03:25 PM - 03:30 PM	47.4	41.4
10:10 AM - 10:15 AM	50.4	44.2	12:50 PM - 12:55 PM	49.2	42.3	03:30 PM - 03:35 PM	45.6	42.5
10:15 AM - 10:20 AM	52.8	44.4	12:55 PM - 01:00 PM	56.4	43.2	03:35 PM - 03:40 PM	46.3	41.2
10:20 AM - 10:25 AM	47.7	43.8	01:00 PM - 01:05 PM	49.9	43.8	03:40 PM - 03:45 PM	44.0	40.7
10:25 AM - 10:30 AM	48.6	43.2	01:05 PM - 01:10 PM	46.4	42.6	03:45 PM - 03:50 PM	44.6	40.4
10:30 AM - 10:35 AM	46.3	42.1	01:10 PM - 01:15 PM	46.1	43.0	03:50 PM - 03:55 PM	44.3	39.2
10:35 AM - 10:40 AM	43.6	42.8	01:15 PM - 01:20 PM	49.3	44.6	03:55 PM - 04:00 PM	43.8	39.5
10:40 AM - 10:45 AM	46.1	41.3	01:20 PM - 01:25 PM	54.6	46.6	04:00 PM - 04:05 PM	43.2	40.1
10:45 AM - 10:50 AM	46.9	42.5	01:25 PM - 01:30 PM	48.6	44.3	04:05 PM - 04:10 PM	46.3	40.3
10:50 AM - 10:55 AM	53.1	43.5	01:30 PM - 01:35 PM	48.8	44.1	04:10 PM - 04:15 PM	45.8	41.1
10:55 AM - 11:00 AM	52.2	42.5	01:35 PM - 01:40 PM	48.9	45.6	04:15 PM - 04:20 PM	43.4	40.5
11:00 AM - 11:05 AM	47.6	42.4	01:40 PM - 01:45 PM	45.9	42.4	04:20 PM - 04:25 PM	46.0	40.3
11:05 AM - 11:10 AM	44.4	41.4	01:45 PM - 01:50 PM	46.6	43.9	04:25 PM - 04:30 PM	47.6	40.4
11:10 AM - 11:15 AM	45.6	41.8	01:50 PM - 01:55 PM	49.1	44.1	04:30 PM - 04:35 PM	46.0	40.3
11:15 AM - 11:20 AM	44.5	41.5	01:55 PM - 02:00 PM	50.1	45.0	04:35 PM - 04:40 PM	44.2	40.6
11:20 AM - 11:25 AM	48.9	42.7	02:00 PM - 02:05 PM	47.4	44.8	04:40 PM - 04:45 PM	44.5	41.3
11:25 AM - 11:30 AM	48.7	43.7	02:05 PM - 02:10 PM	50.1	44.3	04:45 PM - 04:50 PM	42.8	40.2
11:30 AM - 11:35 AM	47.5	42.7	02:10 PM - 02:15 PM	50.8	43.9	04:50 PM - 04:55 PM	42.9	40.8
11:35 AM - 11:40 AM	47.3	43.5	02:15 PM - 02:20 PM	46.6	41.7	04:55 PM - 05:00 PM	45.4	41.4
11:40 AM - 11:45 AM	47.7	43.6	02:20 PM - 02:25 PM	46.4	42.5	05:00 PM - 05:05 PM	44.4	41.6
11:45 AM - 11:50 AM	44.0	41.5	02:25 PM - 02:30 PM	46.6	42.3	05:05 PM - 05:10 PM	46.3	42.6
11:50 AM - 11:55 AM	55.7	42.8	02:30 PM - 02:35 PM	47.9	44.4	05:10 PM - 05:15 PM	46.3	43.0
11:55 AM - 12:00 PM	59.8	43.6	02:35 PM - 02:40 PM	48.1	43.3	05:15 PM - 05:20 PM	48.1	43.8
12:00 PM - 12:05 PM	47.8	42.4	02:40 PM - 02:45 PM	51.4	43.6	05:20 PM - 05:25 PM	48.2	42.2
12:05 PM - 12:10 PM	51.2	43.2	02:45 PM - 02:50 PM	49.0	43.7	05:25 PM - 05:30 PM	44.7	41.6
12:10 PM - 12:15 PM	52.9	44.4	02:50 PM - 02:55 PM	44.6	41.5	05:30 PM - 05:35 PM	45.2	42.0
12:15 PM - 12:20 PM	46.1	41.5	02:55 PM - 03:00 PM	48.5	42.0	05:35 PM - 05:40 PM	51.3	42.6
12:20 PM - 12:25 PM	47.9	43.0	03:00 PM - 03:05 PM	49.1	41.6	05:40 PM - 05:45 PM	49.7	43.6
12:25 PM - 12:30 PM	46.6	43.0	03:05 PM - 03:10 PM	44.6	41.2	05:45 PM - 05:50 PM	44.6	42.1
12:30 PM - 12:35 PM	47.7	41.5	03:10 PM - 03:15 PM	44.5	41.3	05:50 PM - 05:55 PM	44.8	41.5
12:35 PM - 12:40 PM	43.7	41.3	03:15 PM - 03:20 PM	46.5	41.7	05:55 PM - 06:00 PM	47.5	43.3

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Sarayuth Jittranont
Assistant General Manager

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RIGHT SOLUTIONS

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022978-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-18
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนก 5
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01 - Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	46.2	42.0	08:40 PM - 08:45 PM	48.7	47.8	11:20 PM - 11:25 PM	47.5	45.7
06:05 PM - 06:10 PM	45.1	42.4	08:45 PM - 08:50 PM	48.6	47.7	11:25 PM - 11:30 PM	47.0	44.8
06:10 PM - 06:15 PM	45.4	42.7	08:50 PM - 08:55 PM	48.4	47.6	11:30 PM - 11:35 PM	47.2	45.0
06:15 PM - 06:20 PM	44.4	42.3	08:55 PM - 09:00 PM	48.6	47.5	11:35 PM - 11:40 PM	46.1	44.7
06:20 PM - 06:25 PM	46.4	43.6	09:00 PM - 09:05 PM	48.5	47.6	11:40 PM - 11:45 PM	46.3	44.5
06:25 PM - 06:30 PM	48.3	43.5	09:05 PM - 09:10 PM	48.2	47.3	11:45 PM - 11:50 PM	45.2	43.8
06:30 PM - 06:35 PM	47.1	44.6	09:10 PM - 09:15 PM	48.7	46.9	11:50 PM - 11:55 PM	45.8	44.4
06:35 PM - 06:40 PM	47.1	44.3	09:15 PM - 09:20 PM	48.9	46.8	11:55 PM - 12:00 AM	46.2	44.6
06:40 PM - 06:45 PM	48.1	44.0	09:20 PM - 09:25 PM	48.2	47.0	12:00 AM - 12:05 AM	45.9	44.6
06:45 PM - 06:50 PM	45.6	43.2	09:25 PM - 09:30 PM	48.6	47.1	12:05 AM - 12:10 AM	46.1	44.7
06:50 PM - 06:55 PM	48.4	42.8	09:30 PM - 09:35 PM	47.8	46.7	12:10 AM - 12:15 AM	45.6	44.1
06:55 PM - 07:00 PM	47.7	43.3	09:35 PM - 09:40 PM	47.2	45.8	12:15 AM - 12:20 AM	46.3	45.1
07:00 PM - 07:05 PM	48.9	45.1	09:40 PM - 09:45 PM	47.3	46.2	12:20 AM - 12:25 AM	45.5	44.2
07:05 PM - 07:10 PM	48.8	47.5	09:45 PM - 09:50 PM	46.6	45.8	12:25 AM - 12:30 AM	47.5	45.3
07:10 PM - 07:15 PM	50.1	49.2	09:50 PM - 09:55 PM	47.2	46.2	12:30 AM - 12:35 AM	46.3	45.5
07:15 PM - 07:20 PM	50.7	49.7	09:55 PM - 10:00 PM	46.4	45.4	12:35 AM - 12:40 AM	46.1	45.2
07:20 PM - 07:25 PM	50.5	49.4	10:00 PM - 10:05 PM	47.7	45.9	12:40 AM - 12:45 AM	46.8	44.6
07:25 PM - 07:30 PM	50.1	48.9	10:05 PM - 10:10 PM	48.0	46.6	12:45 AM - 12:50 AM	46.8	45.2
07:30 PM - 07:35 PM	50.4	48.9	10:10 PM - 10:15 PM	47.9	47.1	12:50 AM - 12:55 AM	46.8	45.6
07:35 PM - 07:40 PM	49.3	48.0	10:15 PM - 10:20 PM	48.1	47.0	12:55 AM - 01:00 AM	47.1	45.9
07:40 PM - 07:45 PM	49.2	48.1	10:20 PM - 10:25 PM	47.6	46.1	01:00 AM - 01:05 AM	46.6	45.7
07:45 PM - 07:50 PM	49.1	48.2	10:25 PM - 10:30 PM	47.5	45.8	01:05 AM - 01:10 AM	46.7	46.0
07:50 PM - 07:55 PM	48.7	47.9	10:30 PM - 10:35 PM	47.4	45.6	01:10 AM - 01:15 AM	46.4	45.7
07:55 PM - 08:00 PM	48.8	47.1	10:35 PM - 10:40 PM	46.9	45.7	01:15 AM - 01:20 AM	46.1	45.2
08:00 PM - 08:05 PM	49.2	48.1	10:40 PM - 10:45 PM	47.4	45.6	01:20 AM - 01:25 AM	45.6	44.3
08:05 PM - 08:10 PM	48.8	47.8	10:45 PM - 10:50 PM	46.8	45.4	01:25 AM - 01:30 AM	45.3	43.1
08:10 PM - 08:15 PM	48.7	47.9	10:50 PM - 10:55 PM	50.6	46.4	01:30 AM - 01:35 AM	43.5	42.7
08:15 PM - 08:20 PM	48.7	47.9	10:55 PM - 11:00 PM	47.2	45.4	01:35 AM - 01:40 AM	45.3	43.7
08:20 PM - 08:25 PM	48.4	47.1	11:00 PM - 11:05 PM	46.6	44.6	01:40 AM - 01:45 AM	45.9	44.7
08:25 PM - 08:30 PM	48.1	47.4	11:05 PM - 11:10 PM	46.0	44.5	01:45 AM - 01:50 AM	44.6	43.2
08:30 PM - 08:35 PM	48.6	47.8	11:10 PM - 11:15 PM	46.2	44.5	01:50 AM - 01:55 AM	44.3	42.7
08:35 PM - 08:40 PM	48.5	47.7	11:15 PM - 11:20 PM	46.0	44.8	01:55 AM - 02:00 AM	44.8	44.1

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Approved by
Sarayuth Jktranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022978-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-18
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนก 5
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	44.9	44.1	04:40 AM - 04:45 AM	49.2	40.9	07:20 AM - 07:25 AM	50.0	41.4
02:05 AM - 02:10 AM	53.8	44.8	04:45 AM - 04:50 AM	55.0	41.0	07:25 AM - 07:30 AM	45.4	39.1
02:10 AM - 02:15 AM	54.0	46.3	04:50 AM - 04:55 AM	53.2	40.8	07:30 AM - 07:35 AM	45.9	38.8
02:15 AM - 02:20 AM	52.5	45.8	04:55 AM - 05:00 AM	54.3	40.9	07:35 AM - 07:40 AM	47.4	40.1
02:20 AM - 02:25 AM	54.4	42.2	05:00 AM - 05:05 AM	53.4	41.2	07:40 AM - 07:45 AM	48.3	40.6
02:25 AM - 02:30 AM	44.9	44.2	05:05 AM - 05:10 AM	53.0	41.7	07:45 AM - 07:50 AM	47.3	40.7
02:30 AM - 02:35 AM	45.9	44.9	05:10 AM - 05:15 AM	52.8	41.8	07:50 AM - 07:55 AM	48.1	41.8
02:35 AM - 02:40 AM	45.3	44.5	05:15 AM - 05:20 AM	53.9	41.0	07:55 AM - 08:00 AM	46.7	42.6
02:40 AM - 02:45 AM	44.4	42.3	05:20 AM - 05:25 AM	52.5	42.1	08:00 AM - 08:05 AM	46.3	41.5
02:45 AM - 02:50 AM	43.7	41.6	05:25 AM - 05:30 AM	55.5	42.0	08:05 AM - 08:10 AM	47.5	41.1
02:50 AM - 02:55 AM	42.0	41.4	05:30 AM - 05:35 AM	56.2	41.8	08:10 AM - 08:15 AM	49.8	42.0
02:55 AM - 03:00 AM	47.2	40.9	05:35 AM - 05:40 AM	53.0	43.1	08:15 AM - 08:20 AM	47.8	41.6
03:00 AM - 03:05 AM	42.1	41.1	05:40 AM - 05:45 AM	46.0	43.3	08:20 AM - 08:25 AM	50.0	42.7
03:05 AM - 03:10 AM	45.7	43.5	05:45 AM - 05:50 AM	55.4	44.0	08:25 AM - 08:30 AM	48.7	40.8
03:10 AM - 03:15 AM	44.8	43.9	05:50 AM - 05:55 AM	45.5	44.7	08:30 AM - 08:35 AM	48.4	39.6
03:15 AM - 03:20 AM	44.8	43.2	05:55 AM - 06:00 AM	45.7	44.9	08:35 AM - 08:40 AM	45.0	41.3
03:20 AM - 03:25 AM	43.9	41.3	06:00 AM - 06:05 AM	49.1	41.2	08:40 AM - 08:45 AM	45.2	41.6
03:25 AM - 03:30 AM	41.9	40.2	06:05 AM - 06:10 AM	48.3	41.9	08:45 AM - 08:50 AM	45.4	42.6
03:30 AM - 03:35 AM	41.7	40.3	06:10 AM - 06:15 AM	50.2	41.9	08:50 AM - 08:55 AM	47.4	44.0
03:35 AM - 03:40 AM	42.4	41.3	06:15 AM - 06:20 AM	47.8	41.9	08:55 AM - 09:00 AM	45.7	43.4
03:40 AM - 03:45 AM	42.2	40.4	06:20 AM - 06:25 AM	49.4	41.8	09:00 AM - 09:05 AM	47.5	42.7
03:45 AM - 03:50 AM	42.4	41.2	06:25 AM - 06:30 AM	46.4	41.8	09:05 AM - 09:10 AM	48.5	41.2
03:50 AM - 03:55 AM	41.1	39.9	06:30 AM - 06:35 AM	48.7	42.2	09:10 AM - 09:15 AM	46.3	41.4
03:55 AM - 04:00 AM	49.6	40.4	06:35 AM - 06:40 AM	51.7	42.3	09:15 AM - 09:20 AM	58.7	39.9
04:00 AM - 04:05 AM	54.5	41.5	06:40 AM - 06:45 AM	50.3	41.9	09:20 AM - 09:25 AM	47.9	41.4
04:05 AM - 04:10 AM	51.2	41.7	06:45 AM - 06:50 AM	44.8	41.1	09:25 AM - 09:30 AM	48.9	42.8
04:10 AM - 04:15 AM	48.8	41.7	06:50 AM - 06:55 AM	47.9	41.6	09:30 AM - 09:35 AM	45.0	42.1
04:15 AM - 04:20 AM	43.7	41.6	06:55 AM - 07:00 AM	49.3	41.9	09:35 AM - 09:40 AM	46.5	41.5
04:20 AM - 04:25 AM	50.1	41.8	07:00 AM - 07:05 AM	49.9	41.2	09:40 AM - 09:45 AM	48.8	41.2
04:25 AM - 04:30 AM	50.5	42.4	07:05 AM - 07:10 AM	47.9	42.0	09:45 AM - 09:50 AM	46.4	41.4
04:30 AM - 04:35 AM	50.9	42.3	07:10 AM - 07:15 AM	49.0	41.9	09:50 AM - 09:55 AM	44.6	40.1
04:35 AM - 04:40 AM	48.5	41.6	07:15 AM - 07:20 AM	52.3	40.9	09:55 AM - 10:00 AM	47.8	41.4

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Approved by
Sarayuth Jktranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022979-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-19
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนก 5
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	48.0	43.5	12:40 PM - 12:45 PM	47.9	40.6	03:20 PM - 03:25 PM	49.7	43.2
10:05 AM - 10:10 AM	44.2	41.3	12:45 PM - 12:50 PM	51.8	43.5	03:25 PM - 03:30 PM	46.8	42.5
10:10 AM - 10:15 AM	46.5	40.2	12:50 PM - 12:55 PM	49.9	44.2	03:30 PM - 03:35 PM	48.5	42.0
10:15 AM - 10:20 AM	45.0	39.7	12:55 PM - 01:00 PM	47.3	41.0	03:35 PM - 03:40 PM	50.3	42.8
10:20 AM - 10:25 AM	51.4	41.4	01:00 PM - 01:05 PM	49.7	44.7	03:40 PM - 03:45 PM	52.8	42.8
10:25 AM - 10:30 AM	47.0	40.1	01:05 PM - 01:10 PM	48.9	43.0	03:45 PM - 03:50 PM	46.6	42.1
10:30 AM - 10:35 AM	45.7	40.4	01:10 PM - 01:15 PM	46.0	40.3	03:50 PM - 03:55 PM	49.3	43.7
10:35 AM - 10:40 AM	46.3	39.8	01:15 PM - 01:20 PM	45.5	41.7	03:55 PM - 04:00 PM	48.4	43.1
10:40 AM - 10:45 AM	47.7	43.3	01:20 PM - 01:25 PM	47.4	42.5	04:00 PM - 04:05 PM	46.2	42.2
10:45 AM - 10:50 AM	44.3	41.2	01:25 PM - 01:30 PM	49.3	45.4	04:05 PM - 04:10 PM	46.4	42.5
10:50 AM - 10:55 AM	47.4	43.3	01:30 PM - 01:35 PM	47.5	42.3	04:10 PM - 04:15 PM	46.8	41.4
10:55 AM - 11:00 AM	46.6	41.1	01:35 PM - 01:40 PM	44.9	41.4	04:15 PM - 04:20 PM	46.7	41.6
11:00 AM - 11:05 AM	48.9	42.2	01:40 PM - 01:45 PM	46.9	42.7	04:20 PM - 04:25 PM	46.9	41.9
11:05 AM - 11:10 AM	47.8	40.8	01:45 PM - 01:50 PM	56.7	42.3	04:25 PM - 04:30 PM	45.0	40.7
11:10 AM - 11:15 AM	48.1	41.7	01:50 PM - 01:55 PM	46.1	40.8	04:30 PM - 04:35 PM	46.9	40.2
11:15 AM - 11:20 AM	46.0	42.1	01:55 PM - 02:00 PM	47.9	42.6	04:35 PM - 04:40 PM	51.5	40.5
11:20 AM - 11:25 AM	46.2	42.1	02:00 PM - 02:05 PM	49.0	42.9	04:40 PM - 04:45 PM	51.2	41.2
11:25 AM - 11:30 AM	49.2	41.7	02:05 PM - 02:10 PM	52.1	41.0	04:45 PM - 04:50 PM	45.9	42.1
11:30 AM - 11:35 AM	45.4	40.7	02:10 PM - 02:15 PM	49.6	42.9	04:50 PM - 04:55 PM	44.2	41.0
11:35 AM - 11:40 AM	44.6	41.0	02:15 PM - 02:20 PM	49.7	41.8	04:55 PM - 05:00 PM	44.2	40.6
11:40 AM - 11:45 AM	49.5	46.4	02:20 PM - 02:25 PM	58.7	41.5	05:00 PM - 05:05 PM	46.5	41.9
11:45 AM - 11:50 AM	50.0	47.9	02:25 PM - 02:30 PM	53.2	41.2	05:05 PM - 05:10 PM	51.1	42.1
11:50 AM - 11:55 AM	47.9	41.6	02:30 PM - 02:35 PM	47.7	40.5	05:10 PM - 05:15 PM	47.0	42.7
11:55 AM - 12:00 PM	45.9	41.6	02:35 PM - 02:40 PM	45.1	40.0	05:15 PM - 05:20 PM	49.6	41.9
12:00 PM - 12:05 PM	46.3	41.8	02:40 PM - 02:45 PM	46.3	42.3	05:20 PM - 05:25 PM	47.6	42.1
12:05 PM - 12:10 PM	46.6	43.1	02:45 PM - 02:50 PM	46.9	41.9	05:25 PM - 05:30 PM	46.3	42.4
12:10 PM - 12:15 PM	47.2	43.2	02:50 PM - 02:55 PM	50.3	41.6	05:30 PM - 05:35 PM	45.1	42.0
12:15 PM - 12:20 PM	46.3	41.6	02:55 PM - 03:00 PM	48.7	43.6	05:35 PM - 05:40 PM	47.2	42.0
12:20 PM - 12:25 PM	46.2	41.6	03:00 PM - 03:05 PM	49.7	43.2	05:40 PM - 05:45 PM	47.5	43.2
12:25 PM - 12:30 PM	49.7	41.4	03:05 PM - 03:10 PM	47.3	42.3	05:45 PM - 05:50 PM	49.7	43.0
12:30 PM - 12:35 PM	48.1	42.0	03:10 PM - 03:15 PM	49.4	44.6	05:50 PM - 05:55 PM	47.8	42.8
12:35 PM - 12:40 PM	48.1	41.7	03:15 PM - 03:20 PM	54.0	44.2	05:55 PM - 06:00 PM	45.9	42.9

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Sarayuth Jktranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022979-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-19
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านโชนก 5
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02 - Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	46.4	43.9	08:40 PM - 08:45 PM	50.2	48.9	11:20 PM - 11:25 PM	50.2	48.8
06:05 PM - 06:10 PM	47.5	44.2	08:45 PM - 08:50 PM	50.8	48.8	11:25 PM - 11:30 PM	51.0	46.4
06:10 PM - 06:15 PM	47.1	44.4	08:50 PM - 08:55 PM	51.1	50.0	11:30 PM - 11:35 PM	49.1	48.3
06:15 PM - 06:20 PM	46.1	43.7	08:55 PM - 09:00 PM	51.3	50.6	11:35 PM - 11:40 PM	49.1	48.2
06:20 PM - 06:25 PM	50.2	44.4	09:00 PM - 09:05 PM	51.4	50.5	11:40 PM - 11:45 PM	49.5	48.6
06:25 PM - 06:30 PM	48.8	43.9	09:05 PM - 09:10 PM	51.0	49.9	11:45 PM - 11:50 PM	49.0	48.2
06:30 PM - 06:35 PM	49.1	43.8	09:10 PM - 09:15 PM	56.1	49.5	11:50 PM - 11:55 PM	49.4	48.1
06:35 PM - 06:40 PM	44.9	43.0	09:15 PM - 09:20 PM	50.4	49.5	11:55 PM - 12:00 AM	49.0	47.0
06:40 PM - 06:45 PM	44.4	42.2	09:20 PM - 09:25 PM	50.0	47.9	12:00 AM - 12:05 AM	48.6	47.9
06:45 PM - 06:50 PM	46.8	43.2	09:25 PM - 09:30 PM	49.2	47.3	12:05 AM - 12:10 AM	49.1	47.9
06:50 PM - 06:55 PM	47.8	42.1	09:30 PM - 09:35 PM	50.2	49.1	12:10 AM - 12:15 AM	48.8	47.5
06:55 PM - 07:00 PM	44.8	42.2	09:35 PM - 09:40 PM	50.7	49.4	12:15 AM - 12:20 AM	48.0	46.4
07:00 PM - 07:05 PM	48.8	44.1	09:40 PM - 09:45 PM	57.6	49.6	12:20 AM - 12:25 AM	49.6	47.7
07:05 PM - 07:10 PM	56.7	44.7	09:45 PM - 09:50 PM	55.4	49.6	12:25 AM - 12:30 AM	49.4	48.3
07:10 PM - 07:15 PM	50.2	46.5	09:50 PM - 09:55 PM	50.4	49.7	12:30 AM - 12:35 AM	48.4	46.4
07:15 PM - 07:20 PM	56.2	47.6	09:55 PM - 10:00 PM	51.9	49.6	12:35 AM - 12:40 AM	47.7	45.3
07:20 PM - 07:25 PM	56.3	48.6	10:00 PM - 10:05 PM	50.6	49.5	12:40 AM - 12:45 AM	48.1	47.0
07:25 PM - 07:30 PM	50.0	49.0	10:05 PM - 10:10 PM	50.1	49.2	12:45 AM - 12:50 AM	47.8	46.8
07:30 PM - 07:35 PM	53.3	49.0	10:10 PM - 10:15 PM	50.5	49.6	12:50 AM - 12:55 AM	47.2	44.3
07:35 PM - 07:40 PM	50.0	48.6	10:15 PM - 10:20 PM	50.0	49.3	12:55 AM - 01:00 AM	44.7	43.2
07:40 PM - 07:45 PM	50.5	49.1	10:20 PM - 10:25 PM	51.5	49.7	01:00 AM - 01:05 AM	46.5	44.3
07:45 PM - 07:50 PM	50.3	49.5	10:25 PM - 10:30 PM	51.3	49.4	01:05 AM - 01:10 AM	47.1	44.6
07:50 PM - 07:55 PM	50.5	49.5	10:30 PM - 10:35 PM	51.1	50.0	01:10 AM - 01:15 AM	48.1	47.1
07:55 PM - 08:00 PM	49.2	47.7	10:35 PM - 10:40 PM	50.6	49.7	01:15 AM - 01:20 AM	48.0	46.9
08:00 PM - 08:05 PM	50.0	47.8	10:40 PM - 10:45 PM	50.4	49.6	01:20 AM - 01:25 AM	47.8	46.9
08:05 PM - 08:10 PM	49.9	48.0	10:45 PM - 10:50 PM	50.2	49.4	01:25 AM - 01:30 AM	47.9	47.0
08:10 PM - 08:15 PM	49.6	47.7	10:50 PM - 10:55 PM	50.7	49.6	01:30 AM - 01:35 AM	47.8	46.9
08:15 PM - 08:20 PM	48.6	47.5	10:55 PM - 11:00 PM	49.8	49.0	01:35 AM - 01:40 AM	47.8	46.8
08:20 PM - 08:25 PM	49.3	48.2	11:00 PM - 11:05 PM	49.9	47.7	01:40 AM - 01:45 AM	47.8	46.8
08:25 PM - 08:30 PM	49.3	47.5	11:05 PM - 11:10 PM	51.2	48.7	01:45 AM - 01:50 AM	47.7	47.0
08:30 PM - 08:35 PM	49.7	47.7	11:10 PM - 11:15 PM	49.5	47.7	01:50 AM - 01:55 AM	47.7	46.9
08:35 PM - 08:40 PM	52.1	48.5	11:15 PM - 11:20 PM	48.5	46.5	01:55 AM - 02:00 AM	55.4	47.7

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Approved by
Sarayuth Jktranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022979-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-19
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่นา 5
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	55.5	49.2	04:40 AM - 04:45 AM	47.2	40.8	07:20 AM - 07:25 AM	54.1	41.9
02:05 AM - 02:10 AM	49.4	40.9	04:45 AM - 04:50 AM	51.0	40.0	07:25 AM - 07:30 AM	50.4	41.8
02:10 AM - 02:15 AM	47.9	47.1	04:50 AM - 04:55 AM	50.1	38.5	07:30 AM - 07:35 AM	52.1	41.0
02:15 AM - 02:20 AM	47.6	46.7	04:55 AM - 05:00 AM	45.9	38.9	07:35 AM - 07:40 AM	50.8	40.9
02:20 AM - 02:25 AM	47.2	46.1	05:00 AM - 05:05 AM	40.4	38.7	07:40 AM - 07:45 AM	52.4	40.6
02:25 AM - 02:30 AM	47.7	46.4	05:05 AM - 05:10 AM	40.6	38.9	07:45 AM - 07:50 AM	45.9	40.5
02:30 AM - 02:35 AM	46.3	44.8	05:10 AM - 05:15 AM	42.0	39.9	07:50 AM - 07:55 AM	47.1	41.5
02:35 AM - 02:40 AM	45.4	44.3	05:15 AM - 05:20 AM	40.4	39.8	07:55 AM - 08:00 AM	45.8	39.8
02:40 AM - 02:45 AM	46.1	44.2	05:20 AM - 05:25 AM	52.8	40.1	08:00 AM - 08:05 AM	47.6	41.2
02:45 AM - 02:50 AM	44.8	43.8	05:25 AM - 05:30 AM	50.9	40.7	08:05 AM - 08:10 AM	45.6	39.4
02:50 AM - 02:55 AM	46.7	43.8	05:30 AM - 05:35 AM	49.7	41.6	08:10 AM - 08:15 AM	44.2	39.8
02:55 AM - 03:00 AM	46.1	43.8	05:35 AM - 05:40 AM	49.6	41.6	08:15 AM - 08:20 AM	43.7	39.6
03:00 AM - 03:05 AM	44.8	43.0	05:40 AM - 05:45 AM	48.2	42.8	08:20 AM - 08:25 AM	44.3	39.5
03:05 AM - 03:10 AM	43.3	42.4	05:45 AM - 05:50 AM	48.0	42.8	08:25 AM - 08:30 AM	41.9	38.4
03:10 AM - 03:15 AM	43.5	42.5	05:50 AM - 05:55 AM	50.6	42.7	08:30 AM - 08:35 AM	45.0	38.5
03:15 AM - 03:20 AM	42.7	41.9	05:55 AM - 06:00 AM	54.1	42.7	08:35 AM - 08:40 AM	41.8	37.7
03:20 AM - 03:25 AM	43.3	41.9	06:00 AM - 06:05 AM	55.1	41.7	08:40 AM - 08:45 AM	42.3	38.8
03:25 AM - 03:30 AM	42.8	41.7	06:05 AM - 06:10 AM	47.3	42.3	08:45 AM - 08:50 AM	43.0	39.1
03:30 AM - 03:35 AM	44.8	41.9	06:10 AM - 06:15 AM	47.4	42.2	08:50 AM - 08:55 AM	45.1	38.7
03:35 AM - 03:40 AM	52.7	41.5	06:15 AM - 06:20 AM	45.1	41.3	08:55 AM - 09:00 AM	54.9	39.2
03:40 AM - 03:45 AM	49.6	41.5	06:20 AM - 06:25 AM	45.4	40.6	09:00 AM - 09:05 AM	52.0	39.1
03:45 AM - 03:50 AM	42.0	41.9	06:25 AM - 06:30 AM	45.2	41.0	09:05 AM - 09:10 AM	45.6	38.9
03:50 AM - 03:55 AM	42.6	41.5	06:30 AM - 06:35 AM	46.2	42.2	09:10 AM - 09:15 AM	46.1	39.5
03:55 AM - 04:00 AM	41.5	40.6	06:35 AM - 06:40 AM	49.3	42.7	09:15 AM - 09:20 AM	45.2	39.7
04:00 AM - 04:05 AM	48.0	40.8	06:40 AM - 06:45 AM	47.7	42.0	09:20 AM - 09:25 AM	48.6	41.0
04:05 AM - 04:10 AM	48.9	40.2	06:45 AM - 06:50 AM	48.7	41.7	09:25 AM - 09:30 AM	46.3	40.1
04:10 AM - 04:15 AM	40.9	39.8	06:50 AM - 06:55 AM	45.3	41.9	09:30 AM - 09:35 AM	46.2	39.8
04:15 AM - 04:20 AM	49.4	40.6	06:55 AM - 07:00 AM	45.2	42.0	09:35 AM - 09:40 AM	45.3	38.8
04:20 AM - 04:25 AM	43.5	42.9	07:00 AM - 07:05 AM	47.6	42.4	09:40 AM - 09:45 AM	51.7	38.3
04:25 AM - 04:30 AM	47.7	42.8	07:05 AM - 07:10 AM	45.1	42.0	09:45 AM - 09:50 AM	48.7	38.1
04:30 AM - 04:35 AM	49.9	41.9	07:10 AM - 07:15 AM	58.4	41.5	09:50 AM - 09:55 AM	46.7	38.6
04:35 AM - 04:40 AM	47.2	41.9	07:15 AM - 07:20 AM	55.1	42.4	09:55 AM - 10:00 AM	45.0	38.5

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Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022980-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-20
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่นา 5
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	45.8	38.9	12:40 PM - 12:45 PM	43.9	38.1	03:20 PM - 03:25 PM	45.8	42.3
10:05 AM - 10:10 AM	48.8	40.0	12:45 PM - 12:50 PM	46.5	41.7	03:25 PM - 03:30 PM	47.0	41.3
10:10 AM - 10:15 AM	51.6	39.4	12:50 PM - 12:55 PM	44.6	41.8	03:30 PM - 03:35 PM	45.0	40.9
10:15 AM - 10:20 AM	57.8	38.9	12:55 PM - 01:00 PM	41.2	35.2	03:35 PM - 03:40 PM	45.0	39.5
10:20 AM - 10:25 AM	52.7	37.5	01:00 PM - 01:05 PM	41.1	35.4	03:40 PM - 03:45 PM	45.4	42.0
10:25 AM - 10:30 AM	49.3	38.8	01:05 PM - 01:10 PM	44.2	37.0	03:45 PM - 03:50 PM	49.8	42.0
10:30 AM - 10:35 AM	43.3	38.2	01:10 PM - 01:15 PM	43.2	37.2	03:50 PM - 03:55 PM	46.6	43.3
10:35 AM - 10:40 AM	44.9	39.1	01:15 PM - 01:20 PM	41.9	39.4	03:55 PM - 04:00 PM	47.4	40.4
10:40 AM - 10:45 AM	44.9	40.0	01:20 PM - 01:25 PM	42.3	37.8	04:00 PM - 04:05 PM	45.6	40.2
10:45 AM - 10:50 AM	44.4	39.9	01:25 PM - 01:30 PM	42.9	39.9	04:05 PM - 04:10 PM	48.4	39.9
10:50 AM - 10:55 AM	44.6	39.1	01:30 PM - 01:35 PM	42.1	37.8	04:10 PM - 04:15 PM	49.0	41.5
10:55 AM - 11:00 AM	43.9	38.8	01:35 PM - 01:40 PM	43.4	39.5	04:15 PM - 04:20 PM	42.6	39.8
11:00 AM - 11:05 AM	45.0	39.0	01:40 PM - 01:45 PM	43.8	39.9	04:20 PM - 04:25 PM	45.0	41.2
11:05 AM - 11:10 AM	48.8	38.1	01:45 PM - 01:50 PM	43.6	39.9	04:25 PM - 04:30 PM	51.3	39.8
11:10 AM - 11:15 AM	41.3	37.8	01:50 PM - 01:55 PM	43.8	39.0	04:30 PM - 04:35 PM	46.6	41.7
11:15 AM - 11:20 AM	51.3	38.1	01:55 PM - 02:00 PM	39.7	36.5	04:35 PM - 04:40 PM	48.8	41.8
11:20 AM - 11:25 AM	44.3	37.0	02:00 PM - 02:05 PM	44.2	39.0	04:40 PM - 04:45 PM	46.7	41.7
11:25 AM - 11:30 AM	43.4	36.5	02:05 PM - 02:10 PM	47.6	40.2	04:45 PM - 04:50 PM	45.6	41.5
11:30 AM - 11:35 AM	44.9	36.3	02:10 PM - 02:15 PM	43.4	39.8	04:50 PM - 04:55 PM	47.4	41.0
11:35 AM - 11:40 AM	40.8	37.1	02:15 PM - 02:20 PM	47.0	39.0	04:55 PM - 05:00 PM	45.6	42.2
11:40 AM - 11:45 AM	41.8	36.9	02:20 PM - 02:25 PM	51.1	38.9	05:00 PM - 05:05 PM	45.4	42.0
11:45 AM - 11:50 AM	42.9	37.2	02:25 PM - 02:30 PM	42.5	38.9	05:05 PM - 05:10 PM	44.2	40.2
11:50 AM - 11:55 AM	42.7	38.4	02:30 PM - 02:35 PM	42.7	39.3	05:10 PM - 05:15 PM	46.4	40.7
11:55 AM - 12:00 PM	43.3	39.1	02:35 PM - 02:40 PM	47.3	39.1	05:15 PM - 05:20 PM	48.7	42.4
12:00 PM - 12:05 PM	50.7	38.8	02:40 PM - 02:45 PM	45.2	39.1	05:20 PM - 05:25 PM	47.1	41.7
12:05 PM - 12:10 PM	40.7	37.3	02:45 PM - 02:50 PM	45.7	40.8	05:25 PM - 05:30 PM	43.6	40.7
12:10 PM - 12:15 PM	45.3	37.5	02:50 PM - 02:55 PM	45.0	38.9	05:30 PM - 05:35 PM	46.4	40.3
12:15 PM - 12:20 PM	42.2	37.3	02:55 PM - 03:00 PM	51.2	38.5	05:35 PM - 05:40 PM	45.4	40.5
12:20 PM - 12:25 PM	45.8	39.3	03:00 PM - 03:05 PM	43.2	38.9	05:40 PM - 05:45 PM	46.2	41.4
12:25 PM - 12:30 PM	41.4	37.9	03:05 PM - 03:10 PM	45.4	41.0	05:45 PM - 05:50 PM	43.6	40.9
12:30 PM - 12:35 PM	44.4	37.4	03:10 PM - 03:15 PM	50.2	39.3	05:50 PM - 05:55 PM	47.8	41.0
12:35 PM - 12:40 PM	43.4	37.4	03:15 PM - 03:20 PM	49.6	45.6	05:55 PM - 06:00 PM	44.3	40.8

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Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022980-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-20
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่นา 5
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03 - Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	47.6	41.8	08:40 PM - 08:45 PM	48.4	47.3	11:20 PM - 11:25 PM	46.4	45.4
06:05 PM - 06:10 PM	45.3	41.0	08:45 PM - 08:50 PM	48.3	47.6	11:25 PM - 11:30 PM	46.3	45.2
06:10 PM - 06:15 PM	46.3	42.5	08:50 PM - 08:55 PM	49.0	48.0	11:30 PM - 11:35 PM	46.5	45.4
06:15 PM - 06:20 PM	46.9	42.1	08:55 PM - 09:00 PM	48.2	46.5	11:35 PM - 11:40 PM	46.6	45.3
06:20 PM - 06:25 PM	46.3	42.2	09:00 PM - 09:05 PM	53.1	45.9	11:40 PM - 11:45 PM	45.1	45.3
06:25 PM - 06:30 PM	50.9	42.9	09:05 PM - 09:10 PM	47.0	46.0	11:45 PM - 11:50 PM	45.3	44.5
06:30 PM - 06:35 PM	47.5	41.7	09:10 PM - 09:15 PM	49.2	46.3	11:50 PM - 11:55 PM	45.7	44.2
06:35 PM - 06:40 PM	47.5	42.2	09:15 PM - 09:20 PM	47.7	46.2	11:55 PM - 12:00 AM	45.6	44.9
06:40 PM - 06:45 PM	44.4	41.1	09:20 PM - 09:25 PM	46.2	45.0	12:00 AM - 12:05 AM	46.1	45.1
06:45 PM - 06:50 PM	45.8	41.8	09:25 PM - 09:30 PM	47.0	44.6	12:05 AM - 12:10 AM	45.4	44.7
06:50 PM - 06:55 PM	46.7	42.0	09:30 PM - 09:35 PM	44.6	43.8	12:10 AM - 12:15 AM	45.2	44.4
06:55 PM - 07:00 PM	45.1	40.9	09:35 PM - 09:40 PM	46.2	44.0	12:15 AM - 12:20 AM	45.2	44.2
07:00 PM - 07:05 PM	44.8	41.8	09:40 PM - 09:45 PM	48.1	47.2	12:20 AM - 12:25 AM	44.3	41.9
07:05 PM - 07:10 PM	45.3	43.0	09:45 PM - 09:50 PM	47.5	46.4	12:25 AM - 12:30 AM	45.3	42.9
07:10 PM - 07:15 PM	47.7	45.9	09:50 PM - 09:55 PM	49.4	43.7	12:30 AM - 12:35 AM	46.0	44.5
07:15 PM - 07:20 PM	48.7	47.8	09:55 PM - 10:00 PM	47.0	45.7	12:35 AM - 12:40 AM	45.7	44.5
07:20 PM - 07:25 PM	55.2	48.8	10:00 PM - 10:05 PM	47.4	46.1	12:40 AM - 12:45 AM	45.2	44.3
07:25 PM - 07:30 PM	49.7	48.9	10:05 PM - 10:10 PM	48.2	46.4	12:45 AM - 12:50 AM	45.8	44.7
07:30 PM - 07:35 PM	49.7	48.8	10:10 PM - 10:15 PM	48.7	46.6	12:50 AM - 12:55 AM	44.8	42.3
07:35 PM - 07:40 PM	49.5	48.6	10:15 PM - 10:20 PM	48.6	46.6	12:55 AM - 01:00 AM	43.8	41.5
07:40 PM - 07:45 PM	50.4	49.0	10:20 PM - 10:25 PM	48.1	46.5	01:00 AM - 01:05 AM	45.6	44.2
07:45 PM - 07:50 PM	54.4	49.4	10:25 PM - 10:30 PM	47.1	46.0	01:05 AM - 01:10 AM	48.0	44.6
07:50 PM - 07:55 PM	51.6	50.0	10:30 PM - 10:35 PM	46.7	44.3	01:10 AM - 01:15 AM	44.9	44.2
07:55 PM - 08:00 PM	50.3	49.5	10:35 PM - 10:40 PM	48.2	46.1	01:15 AM - 01:20 AM	45.7	44.3
08:00 PM - 08:05 PM	50.4	49.5	10:40 PM - 10:45 PM	47.1	46.2	01:20 AM - 01:25 AM	47.4	46.3
08:05 PM - 08:10 PM	50.2	49.8	10:45 PM - 10:50 PM	46.9	44.7	01:25 AM - 01:30 AM	49.3	43.7
08:10 PM - 08:15 PM	48.8	46.9	10:50 PM - 10:55 PM	47.1	46.2	01:30 AM - 01:35 AM	49.5	43.4
08:15 PM - 08:20 PM	48.3	46.9	10:55 PM - 11:00 PM	47.0	46.1	01:35 AM - 01:40 AM	44.2	43.4
08:20 PM - 08:25 PM	47.7	46.6	11:00 PM - 11:05 PM	46.7	45.9	01:40 AM - 01:45 AM	54.3	43.8
08:25 PM - 08:30 PM	47.5	46.2	11:05 PM - 11:10 PM	46.9	45.9	01:45 AM - 01:50 AM	54.3	46.0
08:30 PM - 08:35 PM	47.4	46.1	11:10 PM - 11:15 PM	47.5	45.6	01:50 AM - 01:55 AM	50.4	47.2
08:35 PM - 08:40 PM	46.9	46.1	11:15 PM - 11:20 PM	46.8	45.6	01:55 AM - 02:00 AM	45.0	44.3

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022980-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-20
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่นา 5
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	45.3	44.5	04:40 AM - 04:45 AM	53.7	38.5	07:20 AM - 07:25 AM	56.0	44.4
02:05 AM - 02:10 AM	44.7	43.9	04:45 AM - 04:50 AM	56.6	38.9	07:25 AM - 07:30 AM	57.1	44.2
02:10 AM - 02:15 AM	44.8	44.0	04:50 AM - 04:55 AM	55.0	39.2	07:30 AM - 07:35 AM	53.7	44.1
02:15 AM - 02:20 AM	44.8	44.1	04:55 AM - 05:00 AM	54.6	38.5	07:35 AM - 07:40 AM	50.7	44.0
02:20 AM - 02:25 AM	44.6	44.0	05:00 AM - 05:05 AM	52.0	38.7	07:40 AM - 07:45 AM	48.2	45.1
02:25 AM - 02:30 AM	44.9	44.1	05:05 AM - 05:10 AM	52.4	39.2	07:45 AM - 07:50 AM	49.5	46.3
02:30 AM - 02:35 AM	44.7	43.9	05:10 AM - 05:15 AM	55.1	40.1	07:50 AM - 07:55 AM	50.1	46.0
02:35 AM - 02:40 AM	43.7	42.5	05:15 AM - 05:20 AM	53.8	40.7	07:55 AM - 08:00 AM	48.9	46.4
02:40 AM - 02:45 AM	44.8	42.9	05:20 AM - 05:25 AM	56.3	41.8	08:00 AM - 08:05 AM	54.5	44.5
02:45 AM - 02:50 AM	43.6	44.8	05:25 AM - 05:30 AM	55.8	41.6	08:05 AM - 08:10 AM	52.9	43.8
02:50 AM - 02:55 AM	42.9	41.1	05:30 AM - 05:35 AM	54.8	42.4	08:10 AM - 08:15 AM	48.7	43.5
02:55 AM - 03:00 AM	43.6	40.9	05:35 AM - 05:40 AM	56.0	42.6	08:15 AM - 08:20 AM	47.2	43.4
03:00 AM - 03:05 AM	44.2	41.2	05:40 AM - 05:45 AM	55.4	42.7	08:20 AM - 08:25 AM	53.2	41.9
03:05 AM - 03:10 AM	42.3	41.6	05:45 AM - 05:50 AM	58.1	44.0	08:25 AM - 08:30 AM	52.6	42.0
03:10 AM - 03:15 AM	42.8	41.3	05:50 AM - 05:55 AM	51.0	43.2	08:30 AM - 08:35 AM	53.9	49.9
03:15 AM - 03:20 AM	42.3	41.1	05:55 AM - 06:00 AM	49.2	42.4	08:35 AM - 08:40 AM	53.2	49.6
03:20 AM - 03:25 AM	42.4	41.4	06:00 AM - 06:05 AM	43.4	41.4	08:40 AM - 08:45 AM	43.1	40.0
03:25 AM - 03:30 AM	43.5	42.0	06:05 AM - 06:10 AM	43.6	41.4	08:45 AM - 08:50 AM	47.1	40.3
03:30 AM - 03:35 AM	54.3	42.2	06:10 AM - 06:15 AM	50.9	40.3	08:50 AM - 08:55 AM	49.6	40.4
03:35 AM - 03:40 AM	56.2	42.0	06:15 AM - 06:20 AM	53.9	43.9	08:55 AM - 09:00 AM	55.0	39.5
03:40 AM - 03:45 AM	42.3	40.7	06:20 AM - 06:25 AM	53.4	43.5	09:00 AM - 09:05 AM	49.5	40.0
03:45 AM - 03:50 AM	42.4	41.8	06:25 AM - 06:30 AM	52.2	44.8	09:05 AM - 09:10 AM	45.8	39.3
03:50 AM - 03:55 AM	42.5	41.7	06:30 AM - 06:35 AM	53.1	44.8	09:10 AM - 09:15 AM	45.2	39.8
03:55 AM - 04:00 AM	42.1	41.2	06:35 AM - 06:40 AM	54.1	43.6	09:15 AM - 09:20 AM	47.5	39.9
04:00 AM - 04:05 AM	50.8	40.5	06:40 AM - 06:45 AM	53.7	43.5	09:20 AM - 09:25 AM	45.5	40.1
04:05 AM - 04:10 AM	48.1	39.8	06:45 AM - 06:50 AM	48.1	44.6	09:25 AM - 09:30 AM	46.6	40.2
04:10 AM - 04:15 AM	40.6	39.5	06:50 AM - 06:55 AM	46.7	44.1	09:30 AM - 09:35 AM	48.8	39.6
04:15 AM - 04:20 AM	51.7	39.1	06:55 AM - 07:00 AM	46.9	44.5	09:35 AM - 09:40 AM	43.5	39.6
04:20 AM - 04:25 AM	52.9	40.3	07:00 AM - 07:05 AM	53.3	46.1	09:40 AM - 09:45 AM	42.7	40.0
04:25 AM - 04:30 AM	54.7	41.1	07:05 AM - 07:10 AM	48.3	45.5	09:45 AM - 09:50 AM	44.0	40.5
04:30 AM - 04:35 AM	47.6	41.5	07:10 AM - 07:15 AM	48.2	44.4	09:50 AM - 09:55 AM	45.8	39.7
04:35 AM - 04:40 AM	57.3	42.1	07:15 AM - 07:20 AM	48.7	45.1	09:55 AM - 10:00 AM	45.6	39.2

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022981-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-21
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่ลิน 5
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	43.4	38.4	12:40 PM - 12:45 PM	40.8	35.3	03:20 PM - 03:25 PM	45.5	41.0
10:05 AM - 10:10 AM	47.2	38.7	12:45 PM - 12:50 PM	40.0	35.4	03:25 PM - 03:30 PM	43.5	39.9
10:10 AM - 10:15 AM	44.4	39.2	12:50 PM - 12:55 PM	41.7	38.7	03:30 PM - 03:35 PM	47.9	42.1
10:15 AM - 10:20 AM	44.2	40.9	12:55 PM - 01:00 PM	46.2	40.1	03:35 PM - 03:40 PM	46.1	42.6
10:20 AM - 10:25 AM	44.4	39.6	01:00 PM - 01:05 PM	43.1	38.6	03:40 PM - 03:45 PM	45.4	43.4
10:25 AM - 10:30 AM	44.3	41.0	01:05 PM - 01:10 PM	46.7	38.5	03:45 PM - 03:50 PM	44.8	41.6
10:30 AM - 10:35 AM	42.8	40.3	01:10 PM - 01:15 PM	43.2	37.2	03:50 PM - 03:55 PM	48.7	43.6
10:35 AM - 10:40 AM	43.3	39.9	01:15 PM - 01:20 PM	42.4	38.5	03:55 PM - 04:00 PM	46.7	42.3
10:40 AM - 10:45 AM	45.2	38.9	01:20 PM - 01:25 PM	42.2	37.3	04:00 PM - 04:05 PM	48.3	41.8
10:45 AM - 10:50 AM	44.0	40.1	01:25 PM - 01:30 PM	41.6	36.0	04:05 PM - 04:10 PM	46.4	41.0
10:50 AM - 10:55 AM	46.3	40.2	01:30 PM - 01:35 PM	44.8	40.2	04:10 PM - 04:15 PM	46.8	42.5
10:55 AM - 11:00 AM	43.3	40.5	01:35 PM - 01:40 PM	45.4	38.2	04:15 PM - 04:20 PM	46.1	41.4
11:00 AM - 11:05 AM	46.8	39.3	01:40 PM - 01:45 PM	42.9	37.9	04:20 PM - 04:25 PM	46.8	41.2
11:05 AM - 11:10 AM	46.2	39.9	01:45 PM - 01:50 PM	41.4	38.3	04:25 PM - 04:30 PM	44.9	40.3
11:10 AM - 11:15 AM	45.9	39.6	01:50 PM - 01:55 PM	43.4	39.8	04:30 PM - 04:35 PM	46.6	41.2
11:15 AM - 11:20 AM	50.4	39.1	01:55 PM - 02:00 PM	41.8	38.3	04:35 PM - 04:40 PM	48.4	41.5
11:20 AM - 11:25 AM	48.6	41.5	02:00 PM - 02:05 PM	44.9	38.4	04:40 PM - 04:45 PM	45.4	40.4
11:25 AM - 11:30 AM	43.3	39.2	02:05 PM - 02:10 PM	42.9	39.1	04:45 PM - 04:50 PM	46.5	40.3
11:30 AM - 11:35 AM	43.6	41.2	02:10 PM - 02:15 PM	43.9	38.3	04:50 PM - 04:55 PM	47.0	40.5
11:35 AM - 11:40 AM	43.8	39.7	02:15 PM - 02:20 PM	44.9	38.0	04:55 PM - 05:00 PM	43.4	40.8
11:40 AM - 11:45 AM	43.3	39.0	02:20 PM - 02:25 PM	43.3	38.6	05:00 PM - 05:05 PM	48.4	41.6
11:45 AM - 11:50 AM	48.7	40.3	02:25 PM - 02:30 PM	42.7	39.1	05:05 PM - 05:10 PM	46.5	42.1
11:50 AM - 11:55 AM	47.3	40.9	02:30 PM - 02:35 PM	48.3	40.5	05:10 PM - 05:15 PM	46.9	43.0
11:55 AM - 12:00 PM	47.4	38.5	02:35 PM - 02:40 PM	43.1	39.8	05:15 PM - 05:20 PM	60.7	41.2
12:00 PM - 12:05 PM	45.3	36.7	02:40 PM - 02:45 PM	46.5	41.7	05:20 PM - 05:25 PM	45.3	41.4
12:05 PM - 12:10 PM	43.1	37.6	02:45 PM - 02:50 PM	44.2	38.9	05:25 PM - 05:30 PM	44.7	40.6
12:10 PM - 12:15 PM	49.7	39.3	02:50 PM - 02:55 PM	45.2	42.3	05:30 PM - 05:35 PM	44.3	39.9
12:15 PM - 12:20 PM	47.4	37.4	02:55 PM - 03:00 PM	43.7	41.2	05:35 PM - 05:40 PM	45.4	40.5
12:20 PM - 12:25 PM	53.6	39.9	03:00 PM - 03:05 PM	48.0	41.7	05:40 PM - 05:45 PM	45.2	40.8
12:25 PM - 12:30 PM	45.4	36.9	03:05 PM - 03:10 PM	47.9	40.0	05:45 PM - 05:50 PM	47.1	40.8
12:30 PM - 12:35 PM	47.1	35.9	03:10 PM - 03:15 PM	45.4	41.1	05:50 PM - 05:55 PM	48.2	41.2
12:35 PM - 12:40 PM	42.6	35.2	03:15 PM - 03:20 PM	45.0	41.7	05:55 PM - 06:00 PM	48.2	41.9

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Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022981-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-21
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่ลิน 5
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04 - Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	45.9	42.4	08:40 PM - 08:45 PM	48.2	46.9	11:20 PM - 11:25 PM	46.9	45.2
06:05 PM - 06:10 PM	47.3	42.8	08:45 PM - 08:50 PM	48.3	47.0	11:25 PM - 11:30 PM	47.7	46.6
06:10 PM - 06:15 PM	49.6	43.1	08:50 PM - 08:55 PM	48.5	47.5	11:30 PM - 11:35 PM	47.2	46.4
06:15 PM - 06:20 PM	47.3	42.3	08:55 PM - 09:00 PM	47.8	46.6	11:35 PM - 11:40 PM	46.7	44.6
06:20 PM - 06:25 PM	45.1	41.8	09:00 PM - 09:05 PM	47.1	46.0	11:40 PM - 11:45 PM	45.7	42.7
06:25 PM - 06:30 PM	47.3	42.4	09:05 PM - 09:10 PM	47.7	45.6	11:45 PM - 11:50 PM	44.0	43.1
06:30 PM - 06:35 PM	43.5	41.4	09:10 PM - 09:15 PM	48.3	46.0	11:50 PM - 11:55 PM	44.4	43.0
06:35 PM - 06:40 PM	47.2	41.4	09:15 PM - 09:20 PM	46.8	45.5	11:55 PM - 12:00 AM	43.6	44.5
06:40 PM - 06:45 PM	43.8	42.0	09:20 PM - 09:25 PM	49.3	45.7	12:00 AM - 12:05 AM	45.4	44.5
06:45 PM - 06:50 PM	48.3	42.2	09:25 PM - 09:30 PM	47.8	45.3	12:05 AM - 12:10 AM	43.1	44.4
06:50 PM - 06:55 PM	44.1	42.1	09:30 PM - 09:35 PM	47.0	45.3	12:10 AM - 12:15 AM	45.5	44.7
06:55 PM - 07:00 PM	44.3	42.1	09:35 PM - 09:40 PM	47.2	45.6	12:15 AM - 12:20 AM	45.8	45.1
07:00 PM - 07:05 PM	51.6	41.0	09:40 PM - 09:45 PM	46.9	45.6	12:20 AM - 12:25 AM	46.5	45.3
07:05 PM - 07:10 PM	44.0	42.0	09:45 PM - 09:50 PM	47.5	46.0	12:25 AM - 12:30 AM	46.1	45.3
07:10 PM - 07:15 PM	49.2	43.8	09:50 PM - 09:55 PM	47.6	46.6	12:30 AM - 12:35 AM	45.4	44.2
07:15 PM - 07:20 PM	50.0	48.5	09:55 PM - 10:00 PM	47.5	46.6	12:35 AM - 12:40 AM	45.5	44.8
07:20 PM - 07:25 PM	50.2	49.0	10:00 PM - 10:05 PM	47.8	46.9	12:40 AM - 12:45 AM	45.0	44.2
07:25 PM - 07:30 PM	51.6	48.7	10:05 PM - 10:10 PM	49.5	48.3	12:45 AM - 12:50 AM	45.5	44.5
07:30 PM - 07:35 PM	50.3	48.5	10:10 PM - 10:15 PM	48.5	46.8	12:50 AM - 12:55 AM	45.9	44.9
07:35 PM - 07:40 PM	49.4	48.5	10:15 PM - 10:20 PM	47.5	46.6	12:55 AM - 01:00 AM	45.4	44.7
07:40 PM - 07:45 PM	54.6	48.8	10:20 PM - 10:25 PM	47.4	46.5	01:00 AM - 01:05 AM	45.7	44.9
07:45 PM - 07:50 PM	50.1	48.8	10:25 PM - 10:30 PM	47.8	46.7	01:05 AM - 01:10 AM	45.9	45.2
07:50 PM - 07:55 PM	49.4	48.7	10:30 PM - 10:35 PM	47.8	46.7	01:10 AM - 01:15 AM	45.1	44.2
07:55 PM - 08:00 PM	49.4	48.6	10:35 PM - 10:40 PM	49.3	47.6	01:15 AM - 01:20 AM	45.6	44.5
08:00 PM - 08:05 PM	49.7	48.6	10:40 PM - 10:45 PM	48.5	47.7	01:20 AM - 01:25 AM	44.3	43.4
08:05 PM - 08:10 PM	49.1	48.0	10:45 PM - 10:50 PM	49.0	48.0	01:25 AM - 01:30 AM	48.8	44.3
08:10 PM - 08:15 PM	54.9	48.2	10:50 PM - 10:55 PM	49.4	48.1	01:30 AM - 01:35 AM	45.7	43.6
08:15 PM - 08:20 PM	49.3	45.8	10:55 PM - 11:00 PM	47.6	46.8	01:35 AM - 01:40 AM	55.2	46.9
08:20 PM - 08:25 PM	47.6	46.4	11:00 PM - 11:05 PM	49.0	47.9	01:40 AM - 01:45 AM	44.7	42.9
08:25 PM - 08:30 PM	46.7	45.9	11:05 PM - 11:10 PM	47.9	47.0	01:45 AM - 01:50 AM	44.0	42.4
08:30 PM - 08:35 PM	47.0	46.0	11:10 PM - 11:15 PM	47.9	47.1	01:50 AM - 01:55 AM	42.7	41.6
08:35 PM - 08:40 PM	47.7	46.2	11:15 PM - 11:20 PM	47.4	45.1	01:55 AM - 02:00 AM	42.7	41.4

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022981-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-21
Parameter Noise Level (Leq 5 min)
Location N3 : หมู่บ้านไร่ลิน 5
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00472130

Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	42.7	41.7	04:40 AM - 04:45 AM	52.8	40.0	07:20 AM - 07:25 AM	51.1	46.1
02:05 AM - 02:10 AM	55.6	42.9	04:45 AM - 04:50 AM	54.7	40.1	07:25 AM - 07:30 AM	50.6	46.3
02:10 AM - 02:15 AM	46.0	45.2	04:50 AM - 04:55 AM	52.2	39.1	07:30 AM - 07:35 AM	50.2	45.2
02:15 AM - 02:20 AM	46.2	45.4	04:55 AM - 05:00 AM	54.9	39.5	07:35 AM - 07:40 AM	49.3	45.0
02:20 AM - 02:25 AM	46.2	45.4	05:00 AM - 05:05 AM	53.8	40.4	07:40 AM - 07:45 AM	48.0	44.1
02:25 AM - 02:30 AM	46.3	45.3	05:05 AM - 05:10 AM	53.6	39.5	07:45 AM - 07:50 AM	50.1	45.1
02:30 AM - 02:35 AM	46.3	44.9	05:10 AM - 05:15 AM	55.1	39.1	07:50 AM - 07:55 AM	50.6	43.4
02:35 AM - 02:40 AM	46.7	45.2	05:15 AM - 05:20 AM	53.5	40.3	07:55 AM - 08:00 AM	46.6	42.2
02:40 AM - 02:45 AM	46.6	45.6	05:20 AM - 05:25 AM	55.4	39.5	08:00 AM - 08:05 AM	46.2	41.8
02:45 AM - 02:50 AM	45.5	44.5	05:25 AM - 05:30 AM	53.2	39.3	08:05 AM - 08:10 AM	47.0	43.1
02:50 AM - 02:55 AM	43.8	43.0	05:30 AM - 05:35 AM	50.2	39.3	08:10 AM - 08:15 AM	49.5	43.6
02:55 AM - 03:00 AM	44.6	43.6	05:35 AM - 05:40 AM	54.8	41.7	08:15 AM - 08:20 AM	46.4	43.0
03:00 AM - 03:05 AM	45.0	43.7	05:40 AM - 05:45 AM	56.9	42.9	08:20 AM - 08:25 AM	52.9	43.7
03:05 AM - 03:10 AM	44.6	43.7	05:45 AM - 05:50 AM	56.1	42.7	08:25 AM - 08:30 AM	58.3	44.8
03:10 AM - 03:15 AM	45.0	44.2	05:50 AM - 05:55 AM	49.1	42.7	08:30 AM - 08:35 AM	46.6	43.7
03:15 AM - 03:20 AM	45.8	44.2	05:55 AM - 06:00 AM	46.4	42.9	08:35 AM - 08:40 AM	46.3	42.9
03:20 AM - 03:25 AM	45.6	44.1	06:00 AM - 06:05 AM	48.6	42.4	08:40 AM - 08:45 AM	46.4	43.4
03:25 AM - 03:30 AM	47.0	46.1	06:05 AM - 06:10 AM	48.3	41.7	08:45 AM - 08:50 AM	47.5	43.3
03:30 AM - 03:35 AM	46.5	44.7	06:10 AM - 06:15 AM	56.2	42.5	08:50 AM - 08:55 AM	46.1	42.9
03:35 AM - 03:40 AM	46.9	45.6	06:15 AM - 06:20 AM	52.3	43.1	08:55 AM - 09:00 AM	46.7	42.9
03:40 AM - 03:45 AM	47.0	46.2	06:20 AM - 06:25 AM	46.8	42.4	09:00 AM - 09:05 AM	43.6	41.4
03:45 AM - 03:50 AM	48.1	45.6	06:25 AM - 06:30 AM	50.9	43.6	09:05 AM - 09:10 AM	43.0	41.1
03:50 AM - 03:55 AM	45.5	43.6	06:30 AM - 06:35 AM	45.8	42.5	09:10 AM - 09:15 AM	44.0	41.4
03:55 AM - 04:00 AM	44.4	43.5	06:35 AM - 06:40 AM	45.9	42.9	09:15 AM - 09:20 AM	44.6	40.4
04:00 AM - 04:05 AM	46.2	44.7	06:40 AM - 06:45 AM	53.3	43.8	09:20 AM - 09:25 AM	45.6	40.0
04:05 AM - 04:10 AM	45.1	43.5	06:45 AM - 06:50 AM	53.3	43.8	09:25 AM - 09:30 AM	47.2	41.1
04:10 AM - 04:15 AM	55.6	43.2	06:50 AM - 06:55 AM	50.0	43.7	09:30 AM - 09:35 AM	47.8	39.6
04:15 AM - 04:20 AM	54.1	42.8	06:55 AM - 07:00 AM	50.9	44.4	09:35 AM - 09:40 AM	58.4	37.5
04:20 AM - 04:25 AM	43.7	42.5	07:00 AM - 07:05 AM	48.6	46.0	09:40 AM - 09:45 AM	41.7	37.6
04:25 AM - 04:30 AM	51.7	42.0	07:05 AM - 07:10 AM	49.5	46.8	09:45 AM - 09:50 AM	41.2	37.6
04:30 AM - 04:35 AM	48.4	41.1	07:10 AM - 07:15 AM	49.4	46.5	09:50 AM - 09:55 AM	52.1	40.3
04:35 AM - 04:40 AM	50.0	40.3	07:15 AM - 07:20 AM	52.5	47.2	09:55 AM - 10:00 AM	45.0	40.4

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022982-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-22
Parameter Noise Level (Leq 5 min)
Location N4 : ศึกษาภัณฑ์บ้านเขาพระ 5 ปากแหลมฉบัง
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	53.2	46.7	12:40 PM - 12:45 PM	52.7	47.3	03:20 PM - 03:25 PM	54.1	49.1
10:05 AM - 10:10 AM	51.0	45.9	12:45 PM - 12:50 PM	51.5	47.1	03:25 PM - 03:30 PM	52.3	48.1
10:10 AM - 10:15 AM	49.8	46.7	12:50 PM - 12:55 PM	51.6	47.9	03:30 PM - 03:35 PM	51.8	48.4
10:15 AM - 10:20 AM	51.9	45.2	12:55 PM - 01:00 PM	53.1	49.7	03:35 PM - 03:40 PM	52.2	48.9
10:20 AM - 10:25 AM	53.9	47.2	01:00 PM - 01:05 PM	51.8	48.2	03:40 PM - 03:45 PM	52.1	49.6
10:25 AM - 10:30 AM	57.8	46.5	01:05 PM - 01:10 PM	52.0	48.9	03:45 PM - 03:50 PM	52.9	49.3
10:30 AM - 10:35 AM	51.6	45.6	01:10 PM - 01:15 PM	53.2	48.9	03:50 PM - 03:55 PM	52.4	49.4
10:35 AM - 10:40 AM	52.2	46.8	01:15 PM - 01:20 PM	52.2	47.2	03:55 PM - 04:00 PM	51.3	48.7
10:40 AM - 10:45 AM	52.3	47.5	01:20 PM - 01:25 PM	52.7	48.7	04:00 PM - 04:05 PM	52.6	48.7
10:45 AM - 10:50 AM	51.4	44.9	01:25 PM - 01:30 PM	51.6	48.9	04:05 PM - 04:10 PM	53.9	49.8
10:50 AM - 10:55 AM	54.8	48.2	01:30 PM - 01:35 PM	51.9	48.1	04:10 PM - 04:15 PM	50.7	48.1
10:55 AM - 11:00 AM	54.4	47.4	01:35 PM - 01:40 PM	54.4	49.4	04:15 PM - 04:20 PM	52.2	48.8
11:00 AM - 11:05 AM	56.6	45.4	01:40 PM - 01:45 PM	52.1	49.2	04:20 PM - 04:25 PM	50.9	48.2
11:05 AM - 11:10 AM	52.4	46.2	01:45 PM - 01:50 PM	50.5	47.9	04:25 PM - 04:30 PM	53.0	48.9
11:10 AM - 11:15 AM	50.4	43.8	01:50 PM - 01:55 PM	52.0	47.8	04:30 PM - 04:35 PM	51.6	48.0
11:15 AM - 11:20 AM	52.6	44.1	01:55 PM - 02:00 PM	53.7	50.7	04:35 PM - 04:40 PM	51.2	47.7
11:20 AM - 11:25 AM	56.6	45.0	02:00 PM - 02:05 PM	51.0	47.1	04:40 PM - 04:45 PM	57.0	47.3
11:25 AM - 11:30 AM	50.1	46.1	02:05 PM - 02:10 PM	50.6	46.9	04:45 PM - 04:50 PM	53.3	48.0
11:30 AM - 11:35 AM	52.4	45.8	02:10 PM - 02:15 PM	51.7	47.6	04:50 PM - 04:55 PM	53.1	48.6
11:35 AM - 11:40 AM	50.9	45.4	02:15 PM - 02:20 PM	53.0	47.9	04:55 PM - 05:00 PM	54.5	49.4
11:40 AM - 11:45 AM	51.2	47.0	02:20 PM - 02:25 PM	52.4	49.5	05:00 PM - 05:05 PM	52.6	48.8
11:45 AM - 11:50 AM	52.5	47.8	02:25 PM - 02:30 PM	54.0	48.6	05:05 PM - 05:10 PM	51.4	48.4
11:50 AM - 11:55 AM	53.8	46.6	02:30 PM - 02:35 PM	51.6	47.1	05:10 PM - 05:15 PM	52.0	47.8
11:55 AM - 12:00 PM	52.4	46.2	02:35 PM - 02:40 PM	49.3	47.2	05:15 PM - 05:20 PM	52.6	48.0
12:00 PM - 12:05 PM	54.4	46.9	02:40 PM - 02:45 PM	51.7	47.0	05:20 PM - 05:25 PM	55.5	48.0
12:05 PM - 12:10 PM	52.6	47.9	02:45 PM - 02:50 PM	51.5	47.8	05:25 PM - 05:30 PM	52.9	47.5
12:10 PM - 12:15 PM	53.9	47.9	02:50 PM - 02:55 PM	50.7	48.2	05:30 PM - 05:35 PM	51.6	47.9
12:15 PM - 12:20 PM	50.0	47.4	02:55 PM - 03:00 PM	50.9	47.5	05:35 PM - 05:40 PM	53.5	48.1
12:20 PM - 12:25 PM	50.0	47.2	03:00 PM - 03:05 PM	58.4	47.9	05:40 PM - 05:45 PM	58.4	48.7
12:25 PM - 12:30 PM	51.0	46.6	03:05 PM - 03:10 PM	53.1	50.0	05:45 PM - 05:50 PM	53.6	49.1
12:30 PM - 12:35 PM	53.8	48.6	03:10 PM - 03:15 PM	52.0	48.7	05:50 PM - 05:55 PM	52.4	48.9
12:35 PM - 12:40 PM	52.3	48.1	03:15 PM - 03:20 PM	53.6	49.6	05:55 PM - 06:00 PM	52.8	48.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022982-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-22
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการนิคมนิวาหมู่ 5 บำนลุงสักส์
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29, 2024 Time	Leq dB(A)	L90 dB(A)	May 29 - May 30, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	57.9	49.0	08:40 PM - 08:45 PM	52.2	50.8	11:20 PM - 11:25 PM	52.0	48.6
06:05 PM - 06:10 PM	55.0	48.5	08:45 PM - 08:50 PM	51.7	50.3	11:25 PM - 11:30 PM	51.9	48.8
06:10 PM - 06:15 PM	56.6	49.2	08:50 PM - 08:55 PM	54.8	50.7	11:30 PM - 11:35 PM	51.4	48.9
06:15 PM - 06:20 PM	54.1	49.2	08:55 PM - 09:00 PM	51.9	50.3	11:35 PM - 11:40 PM	51.7	49.4
06:20 PM - 06:25 PM	59.7	49.0	09:00 PM - 09:05 PM	52.4	50.5	11:40 PM - 11:45 PM	52.6	49.6
06:25 PM - 06:30 PM	52.2	49.0	09:05 PM - 09:10 PM	54.4	50.4	11:45 PM - 11:50 PM	51.4	49.2
06:30 PM - 06:35 PM	51.8	49.1	09:10 PM - 09:15 PM	51.2	49.9	11:50 PM - 11:55 PM	51.4	48.6
06:35 PM - 06:40 PM	51.8	49.8	09:15 PM - 09:20 PM	52.2	50.1	11:55 PM - 12:00 AM	52.4	49.4
06:40 PM - 06:45 PM	51.5	49.6	09:20 PM - 09:25 PM	51.7	50.2	12:00 AM - 12:05 AM	51.8	49.0
06:45 PM - 06:50 PM	53.0	50.6	09:25 PM - 09:30 PM	51.9	50.3	12:05 AM - 12:10 AM	51.3	48.4
06:50 PM - 06:55 PM	55.6	52.3	09:30 PM - 09:35 PM	52.1	50.9	12:10 AM - 12:15 AM	50.6	48.1
06:55 PM - 07:00 PM	52.1	50.5	09:35 PM - 09:40 PM	52.9	50.4	12:15 AM - 12:20 AM	52.1	48.5
07:00 PM - 07:05 PM	52.1	49.9	09:40 PM - 09:45 PM	52.8	50.6	12:20 AM - 12:25 AM	52.1	48.4
07:05 PM - 07:10 PM	52.4	50.3	09:45 PM - 09:50 PM	54.0	50.8	12:25 AM - 12:30 AM	51.2	48.3
07:10 PM - 07:15 PM	53.4	51.4	09:50 PM - 09:55 PM	53.1	51.3	12:30 AM - 12:35 AM	50.0	48.3
07:15 PM - 07:20 PM	53.0	51.0	09:55 PM - 10:00 PM	52.4	50.7	12:35 AM - 12:40 AM	49.4	47.9
07:20 PM - 07:25 PM	53.1	51.2	10:00 PM - 10:05 PM	54.5	50.7	12:40 AM - 12:45 AM	59.7	47.9
07:25 PM - 07:30 PM	53.2	51.3	10:05 PM - 10:10 PM	53.7	50.7	12:45 AM - 12:50 AM	52.9	48.9
07:30 PM - 07:35 PM	53.5	51.5	10:10 PM - 10:15 PM	52.4	50.1	12:50 AM - 12:55 AM	50.4	48.3
07:35 PM - 07:40 PM	53.2	51.1	10:15 PM - 10:20 PM	53.3	49.9	12:55 AM - 01:00 AM	50.8	47.2
07:40 PM - 07:45 PM	54.6	52.7	10:20 PM - 10:25 PM	54.4	50.5	01:00 AM - 01:05 AM	50.2	47.7
07:45 PM - 07:50 PM	61.0	54.4	10:25 PM - 10:30 PM	51.7	49.5	01:05 AM - 01:10 AM	55.7	47.4
07:50 PM - 07:55 PM	55.0	54.7	10:30 PM - 10:35 PM	53.4	49.6	01:10 AM - 01:15 AM	49.1	47.6
07:55 PM - 08:00 PM	56.0	54.0	10:35 PM - 10:40 PM	54.1	50.1	01:15 AM - 01:20 AM	51.0	47.5
08:00 PM - 08:05 PM	56.0	54.3	10:40 PM - 10:45 PM	53.0	49.9	01:20 AM - 01:25 AM	48.8	47.4
08:05 PM - 08:10 PM	58.3	55.9	10:45 PM - 10:50 PM	52.2	49.7	01:25 AM - 01:30 AM	48.4	47.1
08:10 PM - 08:15 PM	56.8	54.8	10:50 PM - 10:55 PM	52.2	50.6	01:30 AM - 01:35 AM	49.7	47.3
08:15 PM - 08:20 PM	55.5	51.8	10:55 PM - 11:00 PM	54.2	50.6	01:35 AM - 01:40 AM	48.3	46.8
08:20 PM - 08:25 PM	52.7	50.7	11:00 PM - 11:05 PM	52.1	50.5	01:40 AM - 01:45 AM	48.8	46.5
08:25 PM - 08:30 PM	53.0	50.4	11:05 PM - 11:10 PM	54.9	50.3	01:45 AM - 01:50 AM	48.1	46.7
08:30 PM - 08:35 PM	55.6	51.2	11:10 PM - 11:15 PM	53.6	49.5	01:50 AM - 01:55 AM	50.2	47.1
08:35 PM - 08:40 PM	53.2	51.6	11:15 PM - 11:20 PM	54.1	49.1	01:55 AM - 02:00 AM	48.8	46.8

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Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022982-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-22
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการนิคมนิวาหมู่ 5 บำนลุงสักส์
Measurement Date May 29 - May 30, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	48.5	46.8	04:40 AM - 04:45 AM	51.2	46.9	07:20 AM - 07:25 AM	53.1	48.9
02:05 AM - 02:10 AM	47.7	46.3	04:45 AM - 04:50 AM	51.4	47.7	07:25 AM - 07:30 AM	53.1	49.1
02:10 AM - 02:15 AM	48.0	46.4	04:50 AM - 04:55 AM	50.4	47.7	07:30 AM - 07:35 AM	52.6	47.6
02:15 AM - 02:20 AM	47.8	46.2	04:55 AM - 05:00 AM	49.8	48.1	07:35 AM - 07:40 AM	50.9	47.1
02:20 AM - 02:25 AM	47.4	46.3	05:00 AM - 05:05 AM	48.9	47.4	07:40 AM - 07:45 AM	52.9	47.7
02:25 AM - 02:30 AM	47.6	46.3	05:05 AM - 05:10 AM	51.2	47.6	07:45 AM - 07:50 AM	50.6	47.7
02:30 AM - 02:35 AM	51.0	46.3	05:10 AM - 05:15 AM	52.7	48.6	07:50 AM - 07:55 AM	49.9	47.0
02:35 AM - 02:40 AM	48.7	46.0	05:15 AM - 05:20 AM	52.5	48.6	07:55 AM - 08:00 AM	53.5	47.1
02:40 AM - 02:45 AM	47.6	46.3	05:20 AM - 05:25 AM	53.3	49.7	08:00 AM - 08:05 AM	53.5	48.2
02:45 AM - 02:50 AM	51.2	46.7	05:25 AM - 05:30 AM	53.9	50.7	08:05 AM - 08:10 AM	50.4	46.4
02:50 AM - 02:55 AM	47.6	46.2	05:30 AM - 05:35 AM	54.7	49.9	08:10 AM - 08:15 AM	50.2	46.2
02:55 AM - 03:00 AM	47.9	46.3	05:35 AM - 05:40 AM	52.2	48.9	08:15 AM - 08:20 AM	49.8	46.3
03:00 AM - 03:05 AM	48.7	46.8	05:40 AM - 05:45 AM	52.3	48.8	08:20 AM - 08:25 AM	52.9	46.9
03:05 AM - 03:10 AM	49.7	47.0	05:45 AM - 05:50 AM	50.9	48.8	08:25 AM - 08:30 AM	49.7	46.3
03:10 AM - 03:15 AM	48.6	46.3	05:50 AM - 05:55 AM	52.7	49.1	08:30 AM - 08:35 AM	50.2	46.6
03:15 AM - 03:20 AM	50.5	46.8	05:55 AM - 06:00 AM	52.1	49.2	08:35 AM - 08:40 AM	49.5	46.7
03:20 AM - 03:25 AM	51.6	46.3	06:00 AM - 06:05 AM	53.5	49.2	08:40 AM - 08:45 AM	51.0	48.1
03:25 AM - 03:30 AM	48.3	46.2	06:05 AM - 06:10 AM	50.8	48.4	08:45 AM - 08:50 AM	50.6	47.1
03:30 AM - 03:35 AM	50.0	46.3	06:10 AM - 06:15 AM	53.7	48.6	08:50 AM - 08:55 AM	51.3	46.9
03:35 AM - 03:40 AM	48.4	46.8	06:15 AM - 06:20 AM	52.8	48.8	08:55 AM - 09:00 AM	49.8	46.6
03:40 AM - 03:45 AM	48.7	46.7	06:20 AM - 06:25 AM	51.2	48.6	09:00 AM - 09:05 AM	51.2	46.8
03:45 AM - 03:50 AM	47.8	46.4	06:25 AM - 06:30 AM	54.1	48.5	09:05 AM - 09:10 AM	51.2	46.2
03:50 AM - 03:55 AM	48.5	46.9	06:30 AM - 06:35 AM	53.9	49.2	09:10 AM - 09:15 AM	51.0	46.3
03:55 AM - 04:00 AM	47.6	46.5	06:35 AM - 06:40 AM	53.1	49.0	09:15 AM - 09:20 AM	50.3	46.7
04:00 AM - 04:05 AM	48.4	46.4	06:40 AM - 06:45 AM	54.1	49.3	09:20 AM - 09:25 AM	51.5	47.0
04:05 AM - 04:10 AM	48.1	46.3	06:45 AM - 06:50 AM	52.0	48.6	09:25 AM - 09:30 AM	50.2	46.3
04:10 AM - 04:15 AM	48.8	46.6	06:50 AM - 06:55 AM	51.0	49.0	09:30 AM - 09:35 AM	50.2	46.0
04:15 AM - 04:20 AM	50.2	46.6	06:55 AM - 07:00 AM	52.7	48.7	09:35 AM - 09:40 AM	49.5	45.4
04:20 AM - 04:25 AM	51.2	46.6	07:00 AM - 07:05 AM	52.7	49.3	09:40 AM - 09:45 AM	50.8	47.1
04:25 AM - 04:30 AM	49.0	46.4	07:05 AM - 07:10 AM	55.3	49.1	09:45 AM - 09:50 AM	51.0	47.1
04:30 AM - 04:35 AM	48.4	46.3	07:10 AM - 07:15 AM	52.3	49.0	09:50 AM - 09:55 AM	51.4	47.4
04:35 AM - 04:40 AM	48.3	46.6	07:15 AM - 07:20 AM	55.0	49.2	09:55 AM - 10:00 AM	51.3	45.7

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022983-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-23
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการนิคมนิวาหมู่ 5 บำนลุงสักส์
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	49.9	46.4	12:40 PM - 12:45 PM	53.1	45.1	03:20 PM - 03:25 PM	48.9	46.4
10:05 AM - 10:10 AM	50.4	46.9	12:45 PM - 12:50 PM	48.1	44.2	03:25 PM - 03:30 PM	48.8	46.8
10:10 AM - 10:15 AM	50.2	47.9	12:50 PM - 12:55 PM	49.2	45.1	03:30 PM - 03:35 PM	49.0	45.6
10:15 AM - 10:20 AM	52.9	47.7	12:55 PM - 01:00 PM	50.2	44.6	03:35 PM - 03:40 PM	54.0	46.3
10:20 AM - 10:25 AM	51.3	47.0	01:00 PM - 01:05 PM	52.1	48.1	03:40 PM - 03:45 PM	54.4	44.7
10:25 AM - 10:30 AM	61.5	52.1	01:05 PM - 01:10 PM	52.6	47.2	03:45 PM - 03:50 PM	48.9	46.3
10:30 AM - 10:35 AM	52.7	49.0	01:10 PM - 01:15 PM	51.8	48.3	03:50 PM - 03:55 PM	53.4	50.3
10:35 AM - 10:40 AM	53.3	49.5	01:15 PM - 01:20 PM	51.6	47.5	03:55 PM - 04:00 PM	51.4	47.4
10:40 AM - 10:45 AM	52.5	50.0	01:20 PM - 01:25 PM	49.3	45.2	04:00 PM - 04:05 PM	53.4	48.4
10:45 AM - 10:50 AM	53.5	48.3	01:25 PM - 01:30 PM	48.3	45.8	04:05 PM - 04:10 PM	52.6	48.3
10:50 AM - 10:55 AM	51.0	47.6	01:30 PM - 01:35 PM	49.6	46.3	04:10 PM - 04:15 PM	52.5	47.9
10:55 AM - 11:00 AM	54.3	49.6	01:35 PM - 01:40 PM	51.0	47.9	04:15 PM - 04:20 PM	53.3	48.2
11:00 AM - 11:05 AM	54.2	48.9	01:40 PM - 01:45 PM	49.6	47.5	04:20 PM - 04:25 PM	54.0	50.7
11:05 AM - 11:10 AM	53.5	48.8	01:45 PM - 01:50 PM	50.4	48.3	04:25 PM - 04:30 PM	53.4	51.6
11:10 AM - 11:15 AM	52.9	47.4	01:50 PM - 01:55 PM	50.1	45.6	04:30 PM - 04:35 PM	53.9	50.2
11:15 AM - 11:20 AM	53.8	47.4	01:55 PM - 02:00 PM	48.6	46.1	04:35 PM - 04:40 PM	57.1	49.4
11:20 AM - 11:25 AM	53.3	47.7	02:00 PM - 02:05 PM	48.2	45.3	04:40 PM - 04:45 PM	54.6	47.9
11:25 AM - 11:30 AM	57.0	47.9	02:05 PM - 02:10 PM	49.5	45.8	04:45 PM - 04:50 PM	50.2	48.4
11:30 AM - 11:35 AM	57.4	53.2	02:10 PM - 02:15 PM	48.8	44.6	04:50 PM - 04:55 PM	53.9	48.3
11:35 AM - 11:40 AM	59.0	51.9	02:15 PM - 02:20 PM	47.0	44.4	04:55 PM - 05:00 PM	51.2	47.1
11:40 AM - 11:45 AM	56.2	49.9	02:20 PM - 02:25 PM	49.5	45.4	05:00 PM - 05:05 PM	50.3	47.3
11:45 AM - 11:50 AM	56.6	50.7	02:25 PM - 02:30 PM	53.9	47.0	05:05 PM - 05:10 PM	54.6	49.0
11:50 AM - 11:55 AM	55.3	49.3	02:30 PM - 02:35 PM	54.1	48.9	05:10 PM - 05:15 PM	53.9	50.0
11:55 AM - 12:00 PM	54.0	46.5	02:35 PM - 02:40 PM	54.6	53.3	05:15 PM - 05:20 PM	52.8	50.3
12:00 PM - 12:05 PM	51.5	47.6	02:40 PM - 02:45 PM	54.1	52.1	05:20 PM - 05:25 PM	53.2	49.7
12:05 PM - 12:10 PM	53.5	46.7	02:45 PM - 02:50 PM	53.7	46.5	05:25 PM - 05:30 PM	52.3	48.4
12:10 PM - 12:15 PM	53.2	45.1	02:50 PM - 02:55 PM	50.3	47.0	05:30 PM - 05:35 PM	54.8	52.7
12:15 PM - 12:20 PM	52.0	45.8	02:55 PM - 03:00 PM	53.5	47.4	05:35 PM - 05:40 PM	54.1	51.1
12:20 PM - 12:25 PM	54.1	45.9	03:00 PM - 03:05 PM	52.2	47.2	05:40 PM - 05:45 PM	52.7	49.8
12:25 PM - 12:30 PM	50.8	44.8	03:05 PM - 03:10 PM	49.5	46.4	05:45 PM - 05:50 PM	54.1	51.0
12:30 PM - 12:35 PM	54.3	45.7	03:10 PM - 03:15 PM	48.9	46.9	05:50 PM - 05:55 PM	53.0	51.3
12:35 PM - 12:40 PM	54.6	46.0	03:15 PM - 03:20 PM	48.9	46.6	05:55 PM - 06:00 PM	52.4	50.3

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Approved by
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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022983-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-23
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการนิคมนิวาหมู่ 5 บำนลุงสักส์
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30, 2024 Time	Leq dB(A)	L90 dB(A)	May 30 - May 31, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	51.5	48.3	08:40 PM - 08:45 PM	52.9	50.1	11:20 PM - 11:25 PM	55.7	54.2
06:05 PM - 06:10 PM	52.6	49.0	08:45 PM - 08:50 PM	50.8	48.8	11:25 PM - 11:30 PM	55.8	53.7
06:10 PM - 06:15 PM	53.4	50.0	08:50 PM - 08:55 PM	51.3	48.9	11:30 PM - 11:35 PM	55.6	53.5
06:15 PM - 06:20 PM	54.7	49.5	08:55 PM - 09:00 PM	51.8	48.9	11:35 PM - 11:40 PM	54.4	52.5
06:20 PM - 06:25 PM	54.6	49.7	09:00 PM - 09:05 PM	52.7	48.9	11:40 PM - 11:45 PM	58.2	52.9
06:25 PM - 06:30 PM	53.6	50.5	09:05 PM - 09:10 PM	50.6	48.3	11:45 PM - 11:50 PM	55.3	53.6
06:30 PM - 06:35 PM	57.4	50.4	09:10 PM - 09:15 PM	53.0	49.6	11:50 PM - 11:55 PM	55.5	53.3
06:35 PM - 06:40 PM	53.0	49.4	09:15 PM - 09:20 PM	54.3	48.9	11:55 PM - 12:00 AM	56.9	54.7
06:40 PM - 06:45 PM	55.1	50.5	09:20 PM - 09:25 PM	51.9	49.3	12:00 AM - 12:05 AM	57.1	55.4
06:45 PM - 06:50 PM	54.3	51.0	09:25 PM - 09:30 PM	50.6	49.0	12:05 AM - 12:10 AM	56.7	54.6
06:50 PM - 06:55 PM	54.3	51.5	09:30 PM - 09:35 PM	52.9	49.3	12:10 AM - 12:15 AM	56.5	53.9
06:55 PM - 07:00 PM	55.6	52.5	09:35 PM - 09:40 PM	51.7	49.1	12:15 AM - 12:20 AM	56.1	53.4
07:00 PM - 07:05 PM	52.6	48.7	09:40 PM - 09:45 PM	52.0	48.7	12:20 AM - 12:25 AM	57.6	53.3
07:05 PM - 07:10 PM	53.3	49.9	09:45 PM - 09:50 PM	50.8	47.9	12:25 AM - 12:30 AM	56.4	54.0
07:10 PM - 07:15 PM	51.9	49.3	09:50 PM - 09:55 PM	54.0	49.3	12:30 AM - 12:35 AM	56.1	54.0
07:15 PM - 07:20 PM	53.3	50.1	09:55 PM - 10:00 PM	53.3	49.4	12:35 AM - 12:40 AM	56.3	53.5
07:20 PM - 07:25 PM	53.1	50.4	10:00 PM - 10:05 PM	53.6	48.8	12:40 AM - 12:45 AM	56.6	53.6
07:25 PM - 07:30 PM	53.8	50.3	10:05 PM - 10:10 PM	59.4	50.0	12:45 AM - 12:50 AM	57.6	54.8
07:30 PM - 07:35 PM	52.7	50.1	10:10 PM - 10:15 PM	53.8	51.1	12:50 AM - 12:55 AM	57.7	55.4
07:35 PM - 07:40 PM	52.6	49.7	10:15 PM - 10:20 PM	54.1	52.0	12:55 AM - 01:00 AM	56.9	54.2
07:40 PM - 07:45 PM	52.1	49.8	10:20 PM - 10:25 PM	54.5	51.1	01:00 AM - 01:05 AM	55.7	53.8
07:45 PM - 07:50 PM	52.5	49.7	10:25 PM - 10:30 PM	54.6	52.0	01:05 AM - 01:10 AM	56.5	53.6
07:50 PM - 07:55 PM	52.3	49.2	10:30 PM - 10:35 PM	55.2	52.4	01:10 AM - 01:15 AM	56.3	53.7
07:55 PM - 08:00 PM	50.9	48.3	10:35 PM - 10:40 PM	54.9	52.2	01:15 AM - 01:20 AM	55.6	53.2
08:00 PM - 08:05 PM	51.8	48.5	10:40 PM - 10:45 PM	54.5	51.2	01:20 AM - 01:25 AM	55.6	53.7
08:05 PM - 08:10 PM	52.6	50.0	10:45 PM - 10:50 PM	56.5	52.8	01:25 AM - 01:30 AM	56.7	54.9
08:10 PM - 08:15 PM	52.6	49.7	10:50 PM - 10:55 PM	54.5	52.5	01:30 AM - 01:35 AM	55.8	53.7
08:15 PM - 08:20 PM	52.4	50.1	10:55 PM - 11:00 PM	55.4	53.3	01:35 AM - 01:40 AM	54.5	49.4
08:20 PM - 08:25 PM	52.7	50.4	11:00 PM - 11:05 PM	53.6	53.1	01:40 AM - 01:45 AM	55.1	52.4
08:25 PM - 08:30 PM	51.1	49.5	11:05 PM - 11:10 PM	54.9	53.1	01:45 AM - 01:50 AM	54.1	51.6
08:30 PM - 08:35 PM	51.8	50.2	11:10 PM - 11:15 PM	54.7	52.4	01:50 AM - 01:55 AM	54.4	48.1
08:35 PM - 08:40 PM	53.7	50.7	11:15 PM - 11:20 PM	55.3	53.6	01:55 AM - 02:00 AM	55.5	53.2

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Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022983-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-23
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ตั้งอาคารนันทนาการหมู่ 5 ปานสุทัศน์
Measurement Date May 30 - May 31, 2024
Measurement by Santi Chaikhana
Sound Level meter Serial No. 00376364

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	55.1	51.6	04:40 AM - 04:45 AM	52.4	46.5	07:20 AM - 07:25 AM	55.2	51.3
02:05 AM - 02:10 AM	54.3	51.9	04:45 AM - 04:50 AM	52.2	46.6	07:25 AM - 07:30 AM	53.7	51.5
02:10 AM - 02:15 AM	54.2	51.5	04:50 AM - 04:55 AM	50.5	46.8	07:30 AM - 07:35 AM	54.3	51.5
02:15 AM - 02:20 AM	53.3	50.4	04:55 AM - 05:00 AM	51.5	46.9	07:35 AM - 07:40 AM	56.1	51.0
02:20 AM - 02:25 AM	52.3	47.8	05:00 AM - 05:05 AM	52.3	47.7	07:40 AM - 07:45 AM	54.6	51.1
02:25 AM - 02:30 AM	51.7	48.6	05:05 AM - 05:10 AM	50.0	47.2	07:45 AM - 07:50 AM	52.9	50.6
02:30 AM - 02:35 AM	52.8	49.3	05:10 AM - 05:15 AM	50.6	47.2	07:50 AM - 07:55 AM	53.1	50.3
02:35 AM - 02:40 AM	51.2	47.5	05:15 AM - 05:20 AM	52.2	47.5	07:55 AM - 08:00 AM	54.6	50.3
02:40 AM - 02:45 AM	52.1	46.8	05:20 AM - 05:25 AM	53.0	48.3	08:00 AM - 08:05 AM	55.8	50.7
02:45 AM - 02:50 AM	49.6	46.1	05:25 AM - 05:30 AM	54.5	49.7	08:05 AM - 08:10 AM	55.4	51.3
02:50 AM - 02:55 AM	49.6	46.5	05:30 AM - 05:35 AM	56.1	52.5	08:10 AM - 08:15 AM	53.4	50.6
02:55 AM - 03:00 AM	51.4	47.2	05:35 AM - 05:40 AM	55.7	52.2	08:15 AM - 08:20 AM	53.9	51.0
03:00 AM - 03:05 AM	49.6	46.4	05:40 AM - 05:45 AM	54.0	50.8	08:20 AM - 08:25 AM	53.2	50.4
03:05 AM - 03:10 AM	47.8	46.0	05:45 AM - 05:50 AM	54.0	50.6	08:25 AM - 08:30 AM	52.7	49.8
03:10 AM - 03:15 AM	47.9	45.9	05:50 AM - 05:55 AM	53.7	50.2	08:30 AM - 08:35 AM	56.1	49.9
03:15 AM - 03:20 AM	48.2	46.1	05:55 AM - 06:00 AM	54.5	48.9	08:35 AM - 08:40 AM	53.5	49.8
03:20 AM - 03:25 AM	49.0	46.2	06:00 AM - 06:05 AM	51.4	48.4	08:40 AM - 08:45 AM	53.5	50.2
03:25 AM - 03:30 AM	51.3	46.1	06:05 AM - 06:10 AM	53.6	49.6	08:45 AM - 08:50 AM	53.4	49.5
03:30 AM - 03:35 AM	49.9	46.1	06:10 AM - 06:15 AM	53.6	49.5	08:50 AM - 08:55 AM	54.0	51.1
03:35 AM - 03:40 AM	49.4	46.1	06:15 AM - 06:20 AM	52.0	48.4	08:55 AM - 09:00 AM	55.9	50.2
03:40 AM - 03:45 AM	51.3	46.4	06:20 AM - 06:25 AM	53.1	49.5	09:00 AM - 09:05 AM	54.6	50.0
03:45 AM - 03:50 AM	48.6	46.5	06:25 AM - 06:30 AM	54.7	50.5	09:05 AM - 09:10 AM	51.3	48.1
03:50 AM - 03:55 AM	48.9	45.9	06:30 AM - 06:35 AM	53.1	49.8	09:10 AM - 09:15 AM	50.4	47.4
03:55 AM - 04:00 AM	48.2	45.5	06:35 AM - 06:40 AM	52.5	50.3	09:15 AM - 09:20 AM	55.1	47.6
04:00 AM - 04:05 AM	48.4	45.5	06:40 AM - 06:45 AM	56.0	50.8	09:20 AM - 09:25 AM	54.4	50.4
04:05 AM - 04:10 AM	49.5	45.7	06:45 AM - 06:50 AM	54.6	50.2	09:25 AM - 09:30 AM	56.8	53.1
04:10 AM - 04:15 AM	48.2	45.5	06:50 AM - 06:55 AM	53.2	50.3	09:30 AM - 09:35 AM	54.6	49.9
04:15 AM - 04:20 AM	49.1	46.3	06:55 AM - 07:00 AM	53.6	50.5	09:35 AM - 09:40 AM	53.9	51.5
04:20 AM - 04:25 AM	52.2	46.1	07:00 AM - 07:05 AM	54.2	50.6	09:40 AM - 09:45 AM	56.3	51.5
04:25 AM - 04:30 AM	53.1	46.7	07:05 AM - 07:10 AM	53.8	50.7	09:45 AM - 09:50 AM	52.9	51.2
04:30 AM - 04:35 AM	52.4	46.4	07:10 AM - 07:15 AM	53.4	50.2	09:50 AM - 09:55 AM	55.2	50.9
04:35 AM - 04:40 AM	53.1	46.6	07:15 AM - 07:20 AM	54.8	51.3	09:55 AM - 10:00 AM	54.1	50.7

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022984-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-24
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ตั้งอาคารนันทนาการหมู่ 5 ปานสุทัศน์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaikhana
Sound Level meter Serial No. 00376364

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	53.4	50.2	12:40 PM - 12:45 PM	50.9	48.1	03:20 PM - 03:25 PM	53.2	46.4
10:05 AM - 10:10 AM	53.5	49.9	12:45 PM - 12:50 PM	52.6	47.0	03:25 PM - 03:30 PM	53.3	46.6
10:10 AM - 10:15 AM	53.3	48.4	12:50 PM - 12:55 PM	51.6	47.1	03:30 PM - 03:35 PM	51.2	47.6
10:15 AM - 10:20 AM	55.0	50.7	12:55 PM - 01:00 PM	56.9	48.4	03:35 PM - 03:40 PM	52.4	47.8
10:20 AM - 10:25 AM	54.2	49.6	01:00 PM - 01:05 PM	51.5	47.8	03:40 PM - 03:45 PM	52.0	48.0
10:25 AM - 10:30 AM	52.5	49.0	01:05 PM - 01:10 PM	53.5	45.4	03:45 PM - 03:50 PM	52.6	46.9
10:30 AM - 10:35 AM	53.5	48.7	01:10 PM - 01:15 PM	53.2	45.6	03:50 PM - 03:55 PM	53.3	47.3
10:35 AM - 10:40 AM	54.5	47.7	01:15 PM - 01:20 PM	50.6	46.6	03:55 PM - 04:00 PM	51.5	47.7
10:40 AM - 10:45 AM	57.1	48.7	01:20 PM - 01:25 PM	52.5	48.6	04:00 PM - 04:05 PM	53.4	47.2
10:45 AM - 10:50 AM	52.7	46.7	01:25 PM - 01:30 PM	54.9	49.7	04:05 PM - 04:10 PM	51.3	46.9
10:50 AM - 10:55 AM	52.9	48.5	01:30 PM - 01:35 PM	52.5	49.1	04:10 PM - 04:15 PM	49.7	46.2
10:55 AM - 11:00 AM	54.8	47.7	01:35 PM - 01:40 PM	52.9	49.3	04:15 PM - 04:20 PM	51.7	46.1
11:00 AM - 11:05 AM	53.7	47.6	01:40 PM - 01:45 PM	59.8	48.4	04:20 PM - 04:25 PM	53.1	46.3
11:05 AM - 11:10 AM	52.0	47.8	01:45 PM - 01:50 PM	51.9	46.8	04:25 PM - 04:30 PM	54.5	47.2
11:10 AM - 11:15 AM	54.9	48.0	01:50 PM - 01:55 PM	50.4	47.3	04:30 PM - 04:35 PM	53.0	46.7
11:15 AM - 11:20 AM	52.4	48.9	01:55 PM - 02:00 PM	53.1	48.3	04:35 PM - 04:40 PM	51.9	45.6
11:20 AM - 11:25 AM	53.1	48.5	02:00 PM - 02:05 PM	53.6	47.2	04:40 PM - 04:45 PM	52.4	46.2
11:25 AM - 11:30 AM	51.6	48.9	02:05 PM - 02:10 PM	56.9	47.1	04:45 PM - 04:50 PM	52.1	47.6
11:30 AM - 11:25 AM	52.8	50.2	02:10 PM - 02:15 PM	53.4	48.9	04:50 PM - 04:55 PM	51.2	47.7
11:35 AM - 11:40 AM	54.0	49.6	02:15 PM - 02:20 PM	51.1	47.4	04:55 PM - 05:00 PM	53.5	48.0
11:40 AM - 11:45 AM	53.0	50.3	02:20 PM - 02:25 PM	53.5	49.3	05:00 PM - 05:05 PM	50.9	48.2
11:45 AM - 11:50 AM	54.5	53.1	02:25 PM - 02:30 PM	54.3	48.5	05:05 PM - 05:10 PM	57.4	50.2
11:50 AM - 11:55 AM	53.4	50.5	02:30 PM - 02:35 PM	51.8	45.5	05:10 PM - 05:15 PM	55.5	49.7
11:55 AM - 12:00 PM	53.0	46.8	02:35 PM - 02:40 PM	50.9	45.0	05:15 PM - 05:20 PM	53.2	50.2
12:00 PM - 12:05 PM	54.4	48.5	02:40 PM - 02:45 PM	51.6	46.4	05:20 PM - 05:25 PM	52.6	49.6
12:05 PM - 12:10 PM	52.5	47.7	02:45 PM - 02:50 PM	51.8	43.2	05:25 PM - 05:30 PM	53.3	49.1
12:10 PM - 12:15 PM	52.0	46.6	02:50 PM - 02:55 PM	55.3	45.2	05:30 PM - 05:35 PM	52.9	49.3
12:15 PM - 12:20 PM	52.3	47.6	02:55 PM - 03:00 PM	53.5	46.7	05:35 PM - 05:40 PM	55.4	50.5
12:20 PM - 12:25 PM	53.0	46.8	03:00 PM - 03:05 PM	51.0	44.8	05:40 PM - 05:45 PM	51.6	48.9
12:25 PM - 12:30 PM	51.8	46.5	03:05 PM - 03:10 PM	50.9	46.9	05:45 PM - 05:50 PM	52.3	48.4
12:30 PM - 12:35 PM	51.3	47.3	03:10 PM - 03:15 PM	55.6	47.1	05:50 PM - 05:55 PM	52.9	48.6
12:35 PM - 12:40 PM	50.3	46.3	03:15 PM - 03:20 PM	55.5	48.7	05:55 PM - 06:00 PM	57.7	48.5

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022984-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-24
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ตั้งอาคารนันทนาการหมู่ 5 ปานสุทัศน์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaikhana
Sound Level meter Serial No. 00376364

May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31, 2024 Time	Leq dB(A)	L90 dB(A)	May 31 - Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	52.2	50.1	08:40 PM - 08:45 PM	54.9	51.2	11:20 PM - 11:25 PM	56.3	54.4
06:05 PM - 06:10 PM	53.3	48.3	08:45 PM - 08:50 PM	54.3	51.7	11:25 PM - 11:30 PM	57.0	55.3
06:10 PM - 06:15 PM	54.7	47.9	08:50 PM - 08:55 PM	54.0	52.1	11:30 PM - 11:35 PM	57.7	56.2
06:15 PM - 06:20 PM	52.2	47.9	08:55 PM - 09:00 PM	54.8	52.1	11:35 PM - 11:40 PM	51.8	47.9
06:20 PM - 06:25 PM	52.4	48.1	09:00 PM - 09:05 PM	55.3	53.3	11:40 PM - 11:45 PM	49.8	46.8
06:25 PM - 06:30 PM	52.8	47.6	09:05 PM - 09:10 PM	55.6	51.2	11:45 PM - 11:50 PM	51.8	46.7
06:30 PM - 06:35 PM	52.7	48.2	09:10 PM - 09:15 PM	56.0	53.9	11:50 PM - 11:55 PM	51.9	46.7
06:35 PM - 06:40 PM	53.3	48.9	09:15 PM - 09:20 PM	57.2	54.7	11:55 PM - 12:00 AM	50.6	47.4
06:40 PM - 06:45 PM	54.6	50.8	09:20 PM - 09:25 PM	57.1	54.9	12:00 AM - 12:05 AM	50.3	47.0
06:45 PM - 06:50 PM	54.3	52.1	09:25 PM - 09:30 PM	56.7	55.1	12:05 AM - 12:10 AM	54.0	49.3
06:50 PM - 06:55 PM	53.9	51.7	09:30 PM - 09:35 PM	57.5	55.1	12:10 AM - 12:15 AM	51.5	47.8
06:55 PM - 07:00 PM	54.1	51.6	09:35 PM - 09:40 PM	57.4	55.7	12:15 AM - 12:20 AM	54.5	49.1
07:00 PM - 07:05 PM	54.7	51.6	09:40 PM - 09:45 PM	57.3	54.8	12:20 AM - 12:25 AM	52.9	46.7
07:05 PM - 07:10 PM	53.1	50.1	09:45 PM - 09:50 PM	57.5	55.5	12:25 AM - 12:30 AM	50.9	46.5
07:10 PM - 07:15 PM	56.6	51.1	09:50 PM - 09:55 PM	56.8	54.6	12:30 AM - 12:35 AM	48.8	45.6
07:15 PM - 07:20 PM	52.3	49.8	09:55 PM - 10:00 PM	57.6	55.3	12:35 AM - 12:40 AM	49.1	46.4
07:20 PM - 07:25 PM	52.3	49.6	10:00 PM - 10:05 PM	57.0	55.2	12:40 AM - 12:45 AM	49.6	45.6
07:25 PM - 07:30 PM	51.0	49.2	10:05 PM - 10:10 PM	57.2	54.8	12:45 AM - 12:50 AM	51.5	45.8
07:30 PM - 07:35 PM	51.7	48.8	10:10 PM - 10:15 PM	57.0	55.3	12:50 AM - 12:55 AM	57.3	47.5
07:35 PM - 07:40 PM	51.9	48.7	10:15 PM - 10:20 PM	57.3	55.9	12:55 AM - 01:00 AM	58.7	56.9
07:40 PM - 07:45 PM	50.7	48.4	10:20 PM - 10:25 PM	57.2	55.0	01:00 AM - 01:05 AM	58.8	57.4
07:45 PM - 07:50 PM	51.2	48.6	10:25 PM - 10:30 PM	57.0	55.5	01:05 AM - 01:10 AM	59.4	57.4
07:50 PM - 07:55 PM	54.1	49.2	10:30 PM - 10:35 PM	56.9	54.9	01:10 AM - 01:15 AM	59.0	57.2
07:55 PM - 08:00 PM	57.3	54.1	10:35 PM - 10:40 PM	57.1	53.5	01:15 AM - 01:20 AM	59.1	57.4
08:00 PM - 08:05 PM	55.7	54.4	10:40 PM - 10:45 PM	56.2	53.0	01:20 AM - 01:25 AM	59.4	58.2
08:05 PM - 08:10 PM	54.4	53.2	10:45 PM - 10:50 PM	55.5	52.4	01:25 AM - 01:30 AM	59.1	57.9
08:10 PM - 08:15 PM	54.3	52.6	10:50 PM - 10:55 PM	56.7	53.0	01:30 AM - 01:35 AM	59.5	58.3
08:15 PM - 08:20 PM	56.1	55.0	10:55 PM - 11:00 PM	56.8	54.4	01:35 AM - 01:40 AM	59.7	58.5
08:20 PM - 08:25 PM	55.9	53.7	11:00 PM - 11:05 PM	57.1	54.8	01:40 AM - 01:45 AM	59.8	57.7
08:25 PM - 08:30 PM	52.6	49.7	11:05 PM - 11:10 PM	56.6	54.4	01:45 AM - 01:50 AM	59.0	57.6
08:30 PM - 08:35 PM	52.7	49.3	11:10 PM - 11:15 PM	56.6	53.9	01:50 AM - 01:55 AM	59.0	57.7
08:35 PM - 08:40 PM	53.0	49.9	11:15 PM - 11:20 PM	59.3	54.6	01:55 AM - 02:00 AM	58.9	57.8

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022984-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-24
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ตั้งอาคารนันทนาการหมู่ 5 ปานสุทัศน์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaikhana
Sound Level meter Serial No. 00376364

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	59.1	58.1	04:40 AM - 04:45 AM	50.8	48.7	07:20 AM - 07:25 AM	54.6	52.6
02:05 AM - 02:10 AM	59.0	58.0	04:45 AM - 04:50 AM	52.1	48.9	07:25 AM - 07:30 AM	56.1	53.3
02:10 AM - 02:15 AM	58.3	57.3	04:50 AM - 04:55 AM	51.0	49.1	07:30 AM - 07:35 AM	54.7	52.0
02:15 AM - 02:20 AM	57.8	57.0	04:55 AM - 05:00 AM	51.3	48.9	07:35 AM - 07:40 AM	57.2	53.1
02:20 AM - 02:25 AM	57.9	56.7	05:00 AM - 05:05 AM	49.6	48.4	07:40 AM - 07:45 AM	57.5	53.4
02:25 AM - 02:30 AM	57.7	56.9	05:05 AM - 05:10 AM	50.8	48.9	07:45 AM - 07:50 AM	57.2	52.7
02:30 AM - 02:35 AM	57.5	56.8	05:10 AM - 05:15 AM	52.4	48.8	07:50 AM - 07:55 AM	55.4	52.5
02:35 AM - 02:40 AM	57.7	57.0	05:15 AM - 05:20 AM	53.2	49.5	07:55 AM - 08:00 AM	56.3	51.6
02:40 AM - 02:45 AM	57.9	57.1	05:20 AM - 05:25 AM	54.1	50.0	08:00 AM - 08:05 AM	57.5	50.8
02:45 AM - 02:50 AM	58.0	56.6	05:25 AM - 05:30 AM	52.5	49.8	08:05 AM - 08:10 AM	55.4	51.6
02:50 AM - 02:55 AM	57.0	56.2	05:30 AM - 05:35 AM	54.9	52.0	08:10 AM - 08:15 AM	54.0	51.4
02:55 AM - 03:00 AM	56.1	55.5	05:35 AM - 05:40 AM	56.0	53.0	08:15 AM - 08:20 AM	57.8	51.2
03:00 AM - 03:05 AM	55.9	54.4	05:40 AM - 05:45 AM	55.4	51.1	08:20 AM - 08:25 AM	54.6	50.9
03:05 AM - 03:10 AM	54.5	53.4	05:45 AM - 05:50 AM	52.7	50.6	08:25 AM - 08:30 AM	54.8	51.3
03:10 AM - 03:15 AM	53.7	52.9	05:50 AM - 05:55 AM	55.5	50.7	08:30 AM - 08:35 AM	55.0	51.7
03:15 AM - 03:20 AM	55.5	52.8	05:55 AM - 06:00 AM	53.3	50.4	08:35 AM - 08:40 AM	57.4	51.9
03:20 AM - 03:25 AM	53.1	52.0	06:00 AM - 06:05 AM	53.0	51.3	08:40 AM - 08:45 AM	59.6	51.7
03:25 AM - 03:30 AM	52.7	51.6	06:05 AM - 06:10 AM	54.1	51.7	08:45 AM - 08:50 AM	58.3	53.3
03:30 AM - 03:35 AM	53.6	51.3	06:10 AM - 06:15 AM	53.4	51.2	08:50 AM - 08:55 AM	57.5	51.3
03:35 AM - 03:40 AM	52.4	51.0	06:15 AM - 06:20 AM	54.5	51.9	08:55 AM - 09:00 AM	54.2	50.4
03:40 AM - 03:45 AM	51.4	50.2	06:20 AM - 06:25 AM	54.5	51.8	09:00 AM - 09:05 AM	53.4	50.3
03:45 AM - 03:50 AM	51.2	49.4	06:25 AM - 06:30 AM	53.3	52.5	09:05 AM - 09:10 AM	55.0	51.6
03:50 AM - 03:55 AM	50.8	49.2	06:30 AM - 06:35 AM	54.6	52.2	09:10 AM - 09:15 AM	53.4	49.5
03:55 AM - 04:00 AM	50.0	48.9	06:35 AM - 06:40 AM	57.5	52.1	09:15 AM - 09:20 AM	55.2	49.5
04:00 AM - 04:05 AM	50.0	48.3	06:40 AM - 06:45 AM	52.8	51.7	09:20 AM - 09:25 AM	52.8	49.6
04:05 AM - 04:10 AM	49.8	48.2	06:45 AM - 06:50 AM	53.8	52.7	09:25 AM - 09:30 AM	53.4	50.9
04:10 AM - 04:15 AM	52.3	48.4	06:50 AM - 06:55 AM	54.2	51.8	09:30 AM - 09:35 AM	55.7	51.2
04:15 AM - 04:20 AM	49.7	48.2	06:55 AM - 07:00 AM	54.0	51.2	09:35 AM - 09:40 AM	55.6	52.4
04:20 AM - 04:25 AM	52.5	48.3	07:00 AM - 07:05 AM	56.1	52.2	09:40 AM - 09:45 AM	55.1	51.1
04:25 AM - 04:30 AM	53.2	48.5	07:05 AM - 07:10 AM	55.0	52.1	09:45 AM - 09:50 AM	54.8	51.4
04:30 AM - 04:35 AM	52.3	49.2	07:10 AM - 07:15 AM	55.9	52.7	09:50 AM - 09:55 AM	53.4	49.7
04:35 AM - 04:40 AM	52.5	49.2	07:15 AM - 07:20 AM	56.9	53.0	09:55 AM - 10:00 AM	54.3	49.8

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Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022985-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-25
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการอ่านน้ำเขาหมู่ 5 ตำบลสุรศักดิ์
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	52.3	49.8	12:40 PM - 12:45 PM	52.7	49.0	03:20 PM - 03:25 PM	52.3	48.6
10:05 AM - 10:10 AM	56.2	51.1	12:45 PM - 12:50 PM	52.0	48.7	03:25 PM - 03:30 PM	52.0	46.8
10:10 AM - 10:15 AM	54.0	51.1	12:50 PM - 12:55 PM	53.2	49.9	03:30 PM - 03:35 PM	51.0	44.7
10:15 AM - 10:20 AM	53.0	50.7	12:55 PM - 01:00 PM	53.5	49.6	03:35 PM - 03:40 PM	52.1	46.7
10:20 AM - 10:25 AM	55.8	51.5	01:00 PM - 01:05 PM	54.4	51.0	03:40 PM - 03:45 PM	51.8	46.7
10:25 AM - 10:30 AM	53.2	50.0	01:05 PM - 01:10 PM	54.1	49.7	03:45 PM - 03:50 PM	50.5	47.1
10:30 AM - 10:35 AM	53.2	50.0	01:10 PM - 01:15 PM	54.8	48.6	03:50 PM - 03:55 PM	50.7	46.9
10:35 AM - 10:40 AM	54.5	48.7	01:15 PM - 01:20 PM	53.1	49.7	03:55 PM - 04:00 PM	51.0	46.0
10:40 AM - 10:45 AM	53.4	49.1	01:20 PM - 01:25 PM	54.6	51.4	04:00 PM - 04:05 PM	50.9	44.9
10:45 AM - 10:50 AM	52.5	48.9	01:25 PM - 01:30 PM	52.3	49.0	04:05 PM - 04:10 PM	51.7	46.3
10:50 AM - 10:55 AM	52.6	48.9	01:30 PM - 01:35 PM	56.4	50.0	04:10 PM - 04:15 PM	50.1	46.5
10:55 AM - 11:00 AM	53.0	48.7	01:35 PM - 01:40 PM	55.9	52.6	04:15 PM - 04:20 PM	50.3	46.0
11:00 AM - 11:05 AM	52.2	47.9	01:40 PM - 01:45 PM	53.8	51.4	04:20 PM - 04:25 PM	50.4	47.1
11:05 AM - 11:10 AM	52.9	49.5	01:45 PM - 01:50 PM	53.7	50.3	04:25 PM - 04:30 PM	49.7	46.2
11:10 AM - 11:15 AM	55.2	49.6	01:50 PM - 01:55 PM	54.0	50.5	04:30 PM - 04:35 PM	49.9	45.5
11:15 AM - 11:20 AM	54.0	50.8	01:55 PM - 02:00 PM	56.3	52.5	04:35 PM - 04:40 PM	51.5	47.0
11:20 AM - 11:25 AM	54.0	49.7	02:00 PM - 02:05 PM	56.2	51.2	04:40 PM - 04:45 PM	53.7	48.0
11:25 AM - 11:30 AM	51.9	47.4	02:05 PM - 02:10 PM	53.6	49.7	04:45 PM - 04:50 PM	51.5	47.8
11:30 AM - 11:35 AM	53.6	48.8	02:10 PM - 02:15 PM	57.8	49.9	04:50 PM - 04:55 PM	52.4	47.4
11:35 AM - 11:40 AM	53.6	49.3	02:15 PM - 02:20 PM	55.5	50.7	04:55 PM - 05:00 PM	52.2	47.3
11:40 AM - 11:45 AM	54.2	50.3	02:20 PM - 02:25 PM	52.4	47.8	05:00 PM - 05:05 PM	50.8	46.9
11:45 AM - 11:50 AM	56.0	49.8	02:25 PM - 02:30 PM	52.8	49.0	05:05 PM - 05:10 PM	53.4	47.9
11:50 AM - 11:55 AM	52.8	48.3	02:30 PM - 02:35 PM	52.5	48.6	05:10 PM - 05:15 PM	52.7	47.9
11:55 AM - 12:00 PM	53.7	48.0	02:35 PM - 02:40 PM	54.5	48.8	05:15 PM - 05:20 PM	53.8	47.4
12:00 PM - 12:05 PM	52.8	48.9	02:40 PM - 02:45 PM	58.4	49.5	05:20 PM - 05:25 PM	54.3	49.9
12:05 PM - 12:10 PM	57.2	50.3	02:45 PM - 02:50 PM	52.4	49.0	05:25 PM - 05:30 PM	53.4	51.0
12:10 PM - 12:15 PM	55.7	50.8	02:50 PM - 02:55 PM	54.0	49.4	05:30 PM - 05:35 PM	54.6	50.4
12:15 PM - 12:20 PM	51.7	47.4	02:55 PM - 03:00 PM	52.3	48.9	05:35 PM - 05:40 PM	54.0	51.3
12:20 PM - 12:25 PM	55.5	48.3	03:00 PM - 03:05 PM	52.3	48.4	05:40 PM - 05:45 PM	54.9	51.2
12:25 PM - 12:30 PM	55.2	50.8	03:05 PM - 03:10 PM	52.8	47.6	05:45 PM - 05:50 PM	54.9	50.8
12:30 PM - 12:35 PM	54.8	51.0	03:10 PM - 03:15 PM	52.8	48.8	05:50 PM - 05:55 PM	54.8	51.4
12:35 PM - 12:40 PM	52.7	48.6	03:15 PM - 03:20 PM	53.0	46.6	05:55 PM - 06:00 PM	54.4	51.8

Approved by
Sarayuth Jitvanont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022985-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-25
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการอ่านน้ำเขาหมู่ 5 ตำบลสุรศักดิ์
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 01 - Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	52.5	50.0	08:40 PM - 08:45 PM	57.1	52.8	11:20 PM - 11:25 PM	51.4	48.7
06:05 PM - 06:10 PM	52.8	50.1	08:45 PM - 08:50 PM	56.2	52.6	11:25 PM - 11:30 PM	51.7	49.1
06:10 PM - 06:15 PM	54.2	51.6	08:50 PM - 08:55 PM	55.8	51.8	11:30 PM - 11:35 PM	51.3	49.2
06:15 PM - 06:20 PM	55.7	51.8	08:55 PM - 09:00 PM	56.4	52.6	11:35 PM - 11:40 PM	51.2	48.7
06:20 PM - 06:25 PM	54.2	51.6	09:00 PM - 09:05 PM	56.2	53.1	11:40 PM - 11:45 PM	53.2	49.2
06:25 PM - 06:30 PM	56.2	49.2	09:05 PM - 09:10 PM	54.4	52.4	11:45 PM - 11:50 PM	52.5	48.8
06:30 PM - 06:35 PM	54.3	50.8	09:10 PM - 09:15 PM	56.0	53.9	11:50 PM - 11:55 PM	53.4	49.6
06:35 PM - 06:40 PM	53.1	50.2	09:15 PM - 09:20 PM	57.1	54.3	11:55 PM - 12:00 AM	51.6	48.5
06:40 PM - 06:45 PM	53.3	51.3	09:20 PM - 09:25 PM	56.8	54.1	12:00 AM - 12:05 AM	57.8	56.1
06:45 PM - 06:50 PM	54.3	52.9	09:25 PM - 09:30 PM	58.5	55.7	12:05 AM - 12:10 AM	57.8	55.8
06:50 PM - 06:55 PM	54.1	52.6	09:30 PM - 09:35 PM	56.7	54.3	12:10 AM - 12:15 AM	57.7	56.0
06:55 PM - 07:00 PM	52.3	50.3	09:35 PM - 09:40 PM	57.4	55.2	12:15 AM - 12:20 AM	57.8	55.9
07:00 PM - 07:05 PM	54.0	51.6	09:40 PM - 09:45 PM	52.6	48.6	12:20 AM - 12:25 AM	56.5	54.2
07:05 PM - 07:10 PM	55.6	52.9	09:45 PM - 09:50 PM	56.9	49.4	12:25 AM - 12:30 AM	56.8	55.0
07:10 PM - 07:15 PM	53.0	51.3	09:50 PM - 09:55 PM	55.0	47.8	12:30 AM - 12:35 AM	56.5	54.2
07:15 PM - 07:20 PM	54.2	51.9	09:55 PM - 10:00 PM	52.1	48.6	12:35 AM - 12:40 AM	57.5	55.8
07:20 PM - 07:25 PM	54.5	51.9	10:00 PM - 10:05 PM	51.8	49.1	12:40 AM - 12:45 AM	57.7	55.7
07:25 PM - 07:30 PM	55.0	52.2	10:05 PM - 10:10 PM	52.1	48.6	12:45 AM - 12:50 AM	56.7	54.4
07:30 PM - 07:35 PM	57.7	52.7	10:10 PM - 10:15 PM	53.2	49.0	12:50 AM - 12:55 AM	55.8	53.1
07:35 PM - 07:40 PM	54.7	52.4	10:15 PM - 10:20 PM	52.1	48.4	12:55 AM - 01:00 AM	55.4	52.6
07:40 PM - 07:45 PM	54.3	51.8	10:20 PM - 10:25 PM	51.2	48.0	01:00 AM - 01:05 AM	55.9	52.8
07:45 PM - 07:50 PM	53.7	51.8	10:25 PM - 10:30 PM	52.7	48.0	01:05 AM - 01:10 AM	56.2	54.0
07:50 PM - 07:55 PM	53.2	51.7	10:30 PM - 10:35 PM	51.6	49.2	01:10 AM - 01:15 AM	56.5	53.7
07:55 PM - 08:00 PM	52.9	51.2	10:35 PM - 10:40 PM	50.5	48.1	01:15 AM - 01:20 AM	55.9	52.3
08:00 PM - 08:05 PM	53.7	51.8	10:40 PM - 10:45 PM	52.5	49.2	01:20 AM - 01:25 AM	54.7	53.7
08:05 PM - 08:10 PM	55.3	52.3	10:45 PM - 10:50 PM	53.8	48.5	01:25 AM - 01:30 AM	54.9	51.6
08:10 PM - 08:15 PM	55.7	53.0	10:50 PM - 10:55 PM	52.7	48.6	01:30 AM - 01:35 AM	55.6	52.3
08:15 PM - 08:20 PM	55.3	53.3	10:55 PM - 11:00 PM	53.5	49.6	01:35 AM - 01:40 AM	54.9	51.1
08:20 PM - 08:25 PM	55.9	52.7	11:00 PM - 11:05 PM	50.8	48.7	01:40 AM - 01:45 AM	54.7	51.5
08:25 PM - 08:30 PM	55.7	52.3	11:05 PM - 11:10 PM	51.7	48.9	01:45 AM - 01:50 AM	56.6	52.1
08:30 PM - 08:35 PM	56.2	53.8	11:10 PM - 11:15 PM	51.7	49.4	01:50 AM - 01:55 AM	55.5	50.4
08:35 PM - 08:40 PM	58.3	55.8	11:15 PM - 11:20 PM	50.6	48.7	01:55 AM - 02:00 AM	55.4	50.4

Approved by
Sarayuth Jitvanont
Assistant General Manager

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Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022985-1

P/O RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample Number 2450167-25
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการอ่านน้ำเขาหมู่ 5 ตำบลสุรศักดิ์
Measurement Date Jun 01 - Jun 02, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	53.7	48.8	04:40 AM - 04:45 AM	54.4	48.5	07:20 AM - 07:25 AM	58.0	50.4
02:05 AM - 02:10 AM	53.6	49.1	04:45 AM - 04:50 AM	49.8	48.2	07:25 AM - 07:30 AM	55.0	48.8
02:10 AM - 02:15 AM	52.4	48.7	04:50 AM - 04:55 AM	49.8	48.4	07:30 AM - 07:35 AM	51.9	47.9
02:15 AM - 02:20 AM	53.6	50.3	04:55 AM - 05:00 AM	49.7	48.5	07:35 AM - 07:40 AM	50.6	46.7
02:20 AM - 02:25 AM	53.0	48.3	05:00 AM - 05:05 AM	50.2	48.8	07:40 AM - 07:45 AM	54.1	47.3
02:25 AM - 02:30 AM	52.1	48.1	05:05 AM - 05:10 AM	50.9	49.0	07:45 AM - 07:50 AM	52.0	47.0
02:30 AM - 02:35 AM	51.5	48.6	05:10 AM - 05:15 AM	50.4	48.9	07:50 AM - 07:55 AM	50.5	45.6
02:35 AM - 02:40 AM	51.7	47.7	05:15 AM - 05:20 AM	52.4	49.5	07:55 AM - 08:00 AM	52.1	46.9
02:40 AM - 02:45 AM	52.9	48.8	05:20 AM - 05:25 AM	54.7	49.4	08:00 AM - 08:05 AM	50.5	46.6
02:45 AM - 02:50 AM	52.5	48.6	05:25 AM - 05:30 AM	57.2	55.1	08:05 AM - 08:10 AM	51.6	47.0
02:50 AM - 02:55 AM	52.4	48.4	05:30 AM - 05:35 AM	53.8	49.9	08:10 AM - 08:15 AM	53.0	48.1
02:55 AM - 03:00 AM	53.1	48.7	05:35 AM - 05:40 AM	53.6	49.5	08:15 AM - 08:20 AM	52.0	46.8
03:00 AM - 03:05 AM	53.2	48.5	05:40 AM - 05:45 AM	54.1	49.7	08:20 AM - 08:25 AM	52.7	48.6
03:05 AM - 03:10 AM	52.4	48.2	05:45 AM - 05:50 AM	53.6	49.2	08:25 AM - 08:30 AM	52.7	47.9
03:10 AM - 03:15 AM	50.8	48.1	05:50 AM - 05:55 AM	54.7	49.7	08:30 AM - 08:35 AM	51.4	47.4
03:15 AM - 03:20 AM	51.8	48.5	05:55 AM - 06:00 AM	53.0	49.5	08:35 AM - 08:40 AM	51.8	47.3
03:20 AM - 03:25 AM	51.5	48.3	06:00 AM - 06:05 AM	50.6	48.8	08:40 AM - 08:45 AM	51.6	47.5
03:25 AM - 03:30 AM	51.0	48.0	06:05 AM - 06:10 AM	51.6	49.6	08:45 AM - 08:50 AM	50.5	48.0
03:30 AM - 03:35 AM	50.8	47.9	06:10 AM - 06:15 AM	52.3	49.7	08:50 AM - 08:55 AM	52.8	48.5
03:35 AM - 03:40 AM	51.5	48.1	06:15 AM - 06:20 AM	51.7	48.7	08:55 AM - 09:00 AM	53.2	47.1
03:40 AM - 03:45 AM	51.8	48.2	06:20 AM - 06:25 AM	52.9	49.2	09:00 AM - 09:05 AM	52.7	47.3
03:45 AM - 03:50 AM	51.8	48.3	06:25 AM - 06:30 AM	52.5	49.6	09:05 AM - 09:10 AM	51.9	47.2
03:50 AM - 03:55 AM	51.0	47.9	06:30 AM - 06:35 AM	52.9	49.7	09:10 AM - 09:15 AM	51.5	48.2
03:55 AM - 04:00 AM	51.9	47.9	06:35 AM - 06:40 AM	53.0	50.3	09:15 AM - 09:20 AM	53.2	47.0
04:00 AM - 04:05 AM	52.7	48.1	06:40 AM - 06:45 AM	53.0	50.1	09:20 AM - 09:25 AM	53.2	48.2
04:05 AM - 04:10 AM	53.0	48.7	06:45 AM - 06:50 AM	53.7	48.7	09:25 AM - 09:30 AM	51.7	47.2
04:10 AM - 04:15 AM	51.0	48.0	06:50 AM - 06:55 AM	51.3	48.4	09:30 AM - 09:35 AM	50.2	46.5
04:15 AM - 04:20 AM	49.6	47.8	06:55 AM - 07:00 AM	54.5	49.3	09:35 AM - 09:40 AM	51.4	47.8
04:20 AM - 04:25 AM	49.0	47.6	07:00 AM - 07:05 AM	54.8	50.2	09:40 AM - 09:45 AM	52.2	47.7
04:25 AM - 04:30 AM	50.1	47.4	07:05 AM - 07:10 AM	51.7	48.9	09:45 AM - 09:50 AM	49.6	46.1
04:30 AM - 04:35 AM	50.1	47.8	07:10 AM - 07:15 AM	53.0	49.2	09:50 AM - 09:55 AM	51.5	48.0
04:35 AM - 04:40 AM	53.5	48.5	07:15 AM - 07:20 AM	52.5	48.7	09:55 AM - 10:00 AM	51.9	48.2

Approved by
Sarayuth Jitvanont
Assistant General Manager

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Analysis / Test Report

Client Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022985-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample Number 2450167-26
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการอ่านน้ำเขาหมู่ 5 ตำบลสุรศักดิ์
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	50.6	46.6	12:40 PM - 12:45 PM	52.1	46.7	03:20 PM - 03:25 PM	53.5	48.5
10:05 AM - 10:10 AM	51.1	47.9	12:45 PM - 12:50 PM	50.9	46.5	03:25 PM - 03:30 PM	51.7	47.5
10:10 AM - 10:15 AM	50.5	48.1	12:50 PM - 12:55 PM	51.0	47.3	03:30 PM - 03:35 PM	51.2	47.8
10:15 AM - 10:20 AM	52.3	48.3	12:55 PM - 01:00 PM	52.5	49.1	03:35 PM - 03:40 PM	51.6	48.3
10:20 AM - 10:25 AM	50.8	47.8	01:00 PM - 01:05 PM	51.2	47.6	03:40 PM - 03:45 PM	51.5	49.0
10:25 AM - 10:30 AM	50.5	47.0	01:05 PM - 01:10 PM	51.4	48.3	03:45 PM - 03:50 PM	51.4	48.7
10:30 AM - 10:35 AM	51.4	48.3	01:10 PM - 01:15 PM	52.7	48.3	03:50 PM - 03:55 PM	51.8	48.8
10:35 AM - 10:40 AM	49.2	46.4	01:15 PM - 01:20 PM	51.6	46.6	03:55 PM - 04:00 PM	50.7	48.1
10:40 AM - 10:45 AM	51.8	47.9	01:20 PM - 01:25 PM	52.1	49.1	04:00 PM - 04:05 PM	52.0	48.1
10:45 AM - 10:50 AM	51.2	48.2	01:25 PM - 01:30 PM	51.0	48.3	04:05 PM - 04:10 PM	53.3	49.2
10:50 AM - 10:55 AM	50.4	47.5	01:30 PM - 01:35 PM	51.3	47.5	04:10 PM - 04:15 PM	50.1	47.5
10:55 AM - 11:00 AM	51.7	48.6	01:35 PM - 01:40 PM	53.8	48.8	04:15 PM - 04:20 PM	51.6	48.2
11:00 AM - 11:05 AM	55.2	47.8	01:40 PM - 01:45 PM	51.3	48.6	04:20 PM - 04:25 PM	50.3	47.6
11:05 AM - 11:10 AM	51.2	47.1	01:45 PM - 01:50 PM	49.9	47.3	04:25 PM - 04:30 PM	52.4	48.3
11:10 AM - 11:15 AM	53.7	48.3	01:50 PM - 01:55 PM	51.4	47.2	04:30 PM - 04:35 PM	51.0	47.4
11:15 AM - 11:20 AM	56.2	47.6	01:55 PM - 02:00 PM	52.1	50.1	04:35 PM - 04:40 PM	50.6	47.1
11:20 AM - 11:25 AM	49.8	46.9	02:00 PM - 02:05 PM	50.4	46.5	04:40 PM - 04:45 PM	56.4	46.7
11:25 AM - 11:30 AM	50.8	45.5	02:05 PM - 02:10 PM	49.4	46.3	04:45 PM - 04:50 PM	52.7	47.4
11:30 AM - 11:35 AM	51.0	47.4	02:10 PM - 02:15 PM	51.1	47.0	04:50 PM - 04:55 PM	52.5	48.0
11:35 AM - 11:40 AM	49.4	47.4	02:15 PM - 02:20 PM	52.4	47.3	04:55 PM - 05:00 PM	53.9	48.0
11:40 AM - 11:45 AM	51.8	47.6	02:20 PM - 02:25 PM	51.8	48.9	05:00 PM - 05:05 PM	52.0	48.2
11:45 AM - 11:50 AM	53.1	47.5	02:25 PM - 02:30 PM	53.4	48.6	05:05 PM - 05:10 PM	50.8	47.8
11:50 AM - 11:55 AM	54.5	47.6	02:30 PM - 02:35 PM	51.0	46.5	05:10 PM - 05:15 PM	51.4	47.2
11:55 AM - 12:00 PM	51.3	48.1	02:35 PM - 02:40 PM	48.7	46.6	05:15 PM - 05:20 PM	52.0	47.4
12:00 PM - 12:05 PM	50.6	47.7	02:40 PM - 02:45 PM	51.1	46.4	05:20 PM - 05:25 PM	54.9	47.4
12:05 PM - 12:10 PM	52.0	47.1	02:45 PM - 02:50 PM	50.9	47.2	05:25 PM - 05:30 PM	52.3	46.9
12:10 PM - 12:15 PM	53.2	47.2	02:50 PM - 02:55 PM	50.1	47.6	05:30 PM - 05:35 PM	51.0	47.3
12:15 PM - 12:20 PM	49.4	46.8	02:55 PM - 03:00 PM	50.3	46.9	05:35 PM - 05:40 PM	52.9	47.5
12:20 PM - 12:25 PM	49.4	46.6	03:00 PM - 03:05 PM	57.8	47.3	05:40 PM - 05:45 PM	57.8	48.1
12:25 PM - 12:30 PM	50.4	46.9	03:05 PM - 03:10 PM	52.5	49.4	05:45 PM - 05:50 PM	53.0	48.5
12:30 PM - 12:35 PM	53.2	49.8	03:10 PM - 03:15 PM	51.6	48.1	05:50 PM - 05:55 PM	51.8	48.3
12:35 PM - 12:40 PM	51.7	47.5	03:15 PM - 03:20 PM	53.8	49.6	05:55 PM - 06:00 PM	52.2	48.2

Approved by
Sarayuth Jitvanont
Assistant General Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022986-1

Sample Number 2450167-26
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการสันปะทายหมู่ 5 ปากแสนศักดิ์
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 02, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 02 - Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	57.3	48.4	08:40 PM - 08:45 PM	51.6	50.2	11:20 PM - 11:25 PM	51.4	48.0
06:05 PM - 06:10 PM	54.4	47.9	08:45 PM - 08:50 PM	51.1	49.7	11:25 PM - 11:30 PM	51.3	48.2
06:10 PM - 06:15 PM	56.0	48.6	08:50 PM - 08:55 PM	54.2	50.1	11:30 PM - 11:35 PM	50.8	48.3
06:15 PM - 06:20 PM	53.5	48.6	08:55 PM - 09:00 PM	51.3	49.7	11:35 PM - 11:40 PM	51.1	48.8
06:20 PM - 06:25 PM	59.1	48.4	09:00 PM - 09:05 PM	51.8	49.9	11:40 PM - 11:45 PM	52.0	49.0
06:25 PM - 06:30 PM	51.6	48.4	09:05 PM - 09:10 PM	53.8	49.8	11:45 PM - 11:50 PM	50.8	48.6
06:30 PM - 06:35 PM	51.2	48.5	09:10 PM - 09:15 PM	50.6	49.3	11:50 PM - 11:55 PM	50.8	48.0
06:35 PM - 06:40 PM	51.2	49.2	09:15 PM - 09:20 PM	51.6	49.5	11:55 PM - 12:00 AM	51.8	49.8
06:40 PM - 06:45 PM	50.9	49.0	09:20 PM - 09:25 PM	51.1	49.6	12:00 AM - 12:05 AM	51.2	48.4
06:45 PM - 06:50 PM	52.4	50.0	09:25 PM - 09:30 PM	51.3	49.7	12:05 AM - 12:10 AM	50.7	47.8
06:50 PM - 06:55 PM	55.0	51.7	09:30 PM - 09:35 PM	51.5	49.4	12:10 AM - 12:15 AM	50.0	47.5
06:55 PM - 07:00 PM	51.5	49.9	09:35 PM - 09:40 PM	52.3	49.8	12:15 AM - 12:20 AM	51.5	47.9
07:00 PM - 07:05 PM	51.5	49.3	09:40 PM - 09:45 PM	52.2	50.0	12:20 AM - 12:25 AM	51.5	47.8
07:05 PM - 07:10 PM	51.8	49.7	09:45 PM - 09:50 PM	52.4	50.2	12:25 AM - 12:30 AM	50.6	47.7
07:10 PM - 07:15 PM	54.8	50.8	09:50 PM - 09:55 PM	52.5	50.7	12:30 AM - 12:35 AM	49.4	47.7
07:15 PM - 07:20 PM	52.4	50.4	09:55 PM - 10:00 PM	51.8	50.1	12:35 AM - 12:40 AM	48.8	47.3
07:20 PM - 07:25 PM	52.5	50.6	10:00 PM - 10:05 PM	53.9	50.1	12:40 AM - 12:45 AM	49.1	47.3
07:25 PM - 07:30 PM	52.6	50.7	10:05 PM - 10:10 PM	53.1	50.1	12:45 AM - 12:50 AM	52.3	48.3
07:30 PM - 07:35 PM	52.9	50.9	10:10 PM - 10:15 PM	51.8	49.5	12:50 AM - 12:55 AM	49.8	47.7
07:35 PM - 07:40 PM	52.6	50.5	10:15 PM - 10:20 PM	52.7	49.3	12:55 AM - 01:00 AM	50.2	46.6
07:40 PM - 07:45 PM	54.0	52.1	10:20 PM - 10:25 PM	53.8	49.9	01:00 AM - 01:05 AM	49.6	47.1
07:45 PM - 07:50 PM	60.4	53.8	10:25 PM - 10:30 PM	51.1	48.9	01:05 AM - 01:10 AM	55.1	46.8
07:50 PM - 07:55 PM	56.2	54.1	10:30 PM - 10:35 PM	52.8	49.0	01:10 AM - 01:15 AM	48.5	47.0
07:55 PM - 08:00 PM	55.4	53.4	10:35 PM - 10:40 PM	53.5	49.5	01:15 AM - 01:20 AM	50.4	46.9
08:00 PM - 08:05 PM	55.4	53.7	10:40 PM - 10:45 PM	52.4	49.3	01:20 AM - 01:25 AM	48.2	46.8
08:05 PM - 08:10 PM	57.7	55.3	10:45 PM - 10:50 PM	51.6	49.1	01:25 AM - 01:30 AM	47.8	46.5
08:10 PM - 08:15 PM	56.2	54.2	10:50 PM - 10:55 PM	52.6	50.0	01:30 AM - 01:35 AM	49.1	46.7
08:15 PM - 08:20 PM	54.9	51.2	10:55 PM - 11:00 PM	53.6	50.0	01:35 AM - 01:40 AM	47.7	46.2
08:20 PM - 08:25 PM	52.1	50.1	11:00 PM - 11:05 PM	52.5	49.9	01:40 AM - 01:45 AM	48.2	45.9
08:25 PM - 08:30 PM	52.4	49.8	11:05 PM - 11:10 PM	54.3	49.7	01:45 AM - 01:50 AM	47.5	46.1
08:30 PM - 08:35 PM	55.0	50.6	11:10 PM - 11:15 PM	52.4	48.9	01:50 AM - 01:55 AM	49.6	46.5
08:35 PM - 08:40 PM	52.6	51.0	11:15 PM - 11:20 PM	53.5	48.5	01:55 AM - 02:00 AM	48.2	46.2

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022986-1

Sample Number 2450167-26
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการสันปะทายหมู่ 5 ปากแสนศักดิ์
Measurement Date Jun 02 - Jun 03, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	47.9	46.2	04:40 AM - 04:45 AM	50.6	46.3	07:20 AM - 07:25 AM	52.5	48.3
02:05 AM - 02:10 AM	47.1	45.7	04:45 AM - 04:50 AM	50.8	47.1	07:25 AM - 07:30 AM	52.7	48.5
02:10 AM - 02:15 AM	47.4	45.8	04:50 AM - 04:55 AM	49.8	47.1	07:30 AM - 07:35 AM	52.0	47.0
02:15 AM - 02:20 AM	47.2	45.6	04:55 AM - 05:00 AM	49.2	47.5	07:35 AM - 07:40 AM	50.3	46.7
02:20 AM - 02:25 AM	46.8	45.7	05:00 AM - 05:05 AM	48.3	46.8	07:40 AM - 07:45 AM	53.3	47.1
02:25 AM - 02:30 AM	47.0	45.7	05:05 AM - 05:10 AM	50.6	47.0	07:45 AM - 07:50 AM	50.0	47.1
02:30 AM - 02:35 AM	50.4	45.7	05:10 AM - 05:15 AM	53.1	48.0	07:50 AM - 07:55 AM	49.3	46.4
02:35 AM - 02:40 AM	48.1	45.4	05:15 AM - 05:20 AM	51.9	48.0	07:55 AM - 08:00 AM	52.9	46.5
02:40 AM - 02:45 AM	47.0	45.7	05:20 AM - 05:25 AM	52.7	49.1	08:00 AM - 08:05 AM	52.9	47.6
02:45 AM - 02:50 AM	50.6	46.1	05:25 AM - 05:30 AM	53.3	50.1	08:05 AM - 08:10 AM	49.8	45.8
02:50 AM - 02:55 AM	47.0	45.6	05:30 AM - 05:35 AM	54.1	49.3	08:10 AM - 08:15 AM	49.6	45.6
02:55 AM - 03:00 AM	47.3	45.7	05:35 AM - 05:40 AM	51.6	48.3	08:15 AM - 08:20 AM	49.2	45.7
03:00 AM - 03:05 AM	48.1	46.2	05:40 AM - 05:45 AM	51.7	48.2	08:20 AM - 08:25 AM	52.3	46.3
03:05 AM - 03:10 AM	49.1	46.4	05:45 AM - 05:50 AM	50.3	48.2	08:25 AM - 08:30 AM	49.1	45.7
03:10 AM - 03:15 AM	48.0	45.6	05:50 AM - 05:55 AM	52.1	48.5	08:30 AM - 08:35 AM	49.6	46.0
03:15 AM - 03:20 AM	49.9	45.4	05:55 AM - 06:00 AM	51.5	48.6	08:35 AM - 08:40 AM	48.9	46.1
03:20 AM - 03:25 AM	51.0	45.7	06:00 AM - 06:05 AM	52.9	48.6	08:40 AM - 08:45 AM	50.4	47.5
03:25 AM - 03:30 AM	47.7	45.6	06:05 AM - 06:10 AM	50.2	47.8	08:45 AM - 08:50 AM	50.0	46.5
03:30 AM - 03:35 AM	49.4	45.7	06:10 AM - 06:15 AM	53.1	48.0	08:50 AM - 08:55 AM	50.7	46.3
03:35 AM - 03:40 AM	47.8	46.2	06:15 AM - 06:20 AM	52.2	48.2	08:55 AM - 09:00 AM	49.2	46.0
03:40 AM - 03:45 AM	48.1	46.1	06:20 AM - 06:25 AM	50.6	48.0	09:00 AM - 09:05 AM	50.6	46.2
03:45 AM - 03:50 AM	47.2	45.8	06:25 AM - 06:30 AM	53.5	47.9	09:05 AM - 09:10 AM	50.6	45.6
03:50 AM - 03:55 AM	47.9	46.3	06:30 AM - 06:35 AM	53.3	48.6	09:10 AM - 09:15 AM	50.4	45.7
03:55 AM - 04:00 AM	47.0	45.9	06:35 AM - 06:40 AM	52.5	48.4	09:15 AM - 09:20 AM	49.7	46.1
04:00 AM - 04:05 AM	47.8	45.8	06:40 AM - 06:45 AM	53.5	48.7	09:20 AM - 09:25 AM	50.9	46.4
04:05 AM - 04:10 AM	47.5	45.7	06:45 AM - 06:50 AM	51.4	48.0	09:25 AM - 09:30 AM	49.6	45.7
04:10 AM - 04:15 AM	48.2	46.0	06:50 AM - 06:55 AM	50.4	48.4	09:30 AM - 09:35 AM	49.6	45.4
04:15 AM - 04:20 AM	49.6	46.0	06:55 AM - 07:00 AM	52.3	48.1	09:35 AM - 09:40 AM	48.9	44.8
04:20 AM - 04:25 AM	50.6	46.0	07:00 AM - 07:05 AM	52.3	48.7	09:40 AM - 09:45 AM	50.2	46.5
04:25 AM - 04:30 AM	48.4	45.8	07:05 AM - 07:10 AM	54.7	48.5	09:45 AM - 09:50 AM	50.4	46.5
04:30 AM - 04:35 AM	47.8	45.7	07:10 AM - 07:15 AM	51.7	48.4	09:50 AM - 09:55 AM	50.8	46.8
04:35 AM - 04:40 AM	47.7	46.0	07:15 AM - 07:20 AM	54.4	48.6	09:55 AM - 10:00 AM	50.7	45.1

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022987-1

Sample Number 2450167-27
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการสันปะทายหมู่ 5 ปากแสนศักดิ์
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	49.3	45.8	12:40 PM - 12:45 PM	50.4	45.3	03:20 PM - 03:25 PM	49.9	46.1
10:05 AM - 10:10 AM	49.8	46.3	12:45 PM - 12:50 PM	51.6	45.5	03:25 PM - 03:30 PM	50.4	45.6
10:10 AM - 10:15 AM	49.6	47.3	12:50 PM - 12:55 PM	47.8	44.3	03:30 PM - 03:35 PM	50.2	46.6
10:15 AM - 10:20 AM	52.3	47.1	12:55 PM - 01:00 PM	48.9	44.8	03:35 PM - 03:40 PM	49.8	46.1
10:20 AM - 10:25 AM	50.7	46.4	01:00 PM - 01:05 PM	50.7	45.5	03:40 PM - 03:45 PM	52.2	48.2
10:25 AM - 10:30 AM	50.8	46.9	01:05 PM - 01:10 PM	51.1	46.0	03:45 PM - 03:50 PM	56.5	49.0
10:30 AM - 10:35 AM	48.8	45.8	01:10 PM - 01:15 PM	49.3	45.6	03:50 PM - 03:55 PM	54.6	47.4
10:35 AM - 10:40 AM	50.8	45.7	01:15 PM - 01:20 PM	50.7	44.7	03:55 PM - 04:00 PM	51.7	48.3
10:40 AM - 10:45 AM	50.9	45.7	01:20 PM - 01:25 PM	49.1	44.8	04:00 PM - 04:05 PM	51.4	48.7
10:45 AM - 10:50 AM	49.6	46.4	01:25 PM - 01:30 PM	48.9	45.8	04:05 PM - 04:10 PM	51.7	48.2
10:50 AM - 10:55 AM	49.3	46.0	01:30 PM - 01:35 PM	50.0	45.8	04:10 PM - 04:15 PM	52.8	48.6
10:55 AM - 11:00 AM	53.0	48.3	01:35 PM - 01:40 PM	52.3	45.6	04:15 PM - 04:20 PM	51.7	48.0
11:00 AM - 11:05 AM	50.5	46.8	01:40 PM - 01:45 PM	50.8	45.1	04:20 PM - 04:25 PM	50.8	47.6
11:05 AM - 11:10 AM	53.5	48.1	01:45 PM - 01:50 PM	53.8	47.0	04:25 PM - 04:30 PM	52.3	47.6
11:10 AM - 11:15 AM	51.9	45.7	01:50 PM - 01:55 PM	50.4	44.6	04:30 PM - 04:35 PM	51.2	48.8
11:15 AM - 11:20 AM	49.9	45.5	01:55 PM - 02:00 PM	48.4	44.7	04:35 PM - 04:40 PM	50.1	47.7
11:20 AM - 11:25 AM	47.8	44.6	02:00 PM - 02:05 PM	51.2	46.1	04:40 PM - 04:45 PM	52.1	48.8
11:25 AM - 11:30 AM	48.1	45.4	02:05 PM - 02:10 PM	50.6	45.9	04:45 PM - 04:50 PM	53.4	48.1
11:30 AM - 11:35 AM	48.6	44.6	02:10 PM - 02:15 PM	49.0	45.7	04:50 PM - 04:55 PM	52.3	48.2
11:35 AM - 11:40 AM	50.5	44.8	02:15 PM - 02:20 PM	52.0	45.0	04:55 PM - 05:00 PM	52.1	48.6
11:40 AM - 11:45 AM	56.3	46.5	02:20 PM - 02:25 PM	50.4	45.0	05:00 PM - 05:05 PM	50.4	48.3
11:45 AM - 11:50 AM	49.7	46.4	02:25 PM - 02:30 PM	48.6	45.0	05:05 PM - 05:10 PM	51.3	48.5
11:50 AM - 11:55 AM	54.3	45.7	02:30 PM - 02:35 PM	49.6	45.7	05:10 PM - 05:15 PM	50.9	49.0
11:55 AM - 12:00 PM	52.5	45.4	02:35 PM - 02:40 PM	50.8	46.0	05:15 PM - 05:20 PM	50.2	48.3
12:00 PM - 12:05 PM	50.9	45.7	02:40 PM - 02:45 PM	49.8	46.8	05:20 PM - 05:25 PM	51.0	48.3
12:05 PM - 12:10 PM	49.4	45.4	02:45 PM - 02:50 PM	50.3	46.7	05:25 PM - 05:30 PM	51.3	48.9
12:10 PM - 12:15 PM	47.8	45.5	02:50 PM - 02:55 PM	49.7	46.2	05:30 PM - 05:35 PM	50.9	48.8
12:15 PM - 12:20 PM	52.4	44.8	02:55 PM - 03:00 PM	50.3	46.8	05:35 PM - 05:40 PM	50.8	48.3
12:20 PM - 12:25 PM	50.6	46.2	03:00 PM - 03:05 PM	49.4	46.7	05:40 PM - 05:45 PM	52.8	48.8
12:25 PM - 12:30 PM	49.9	45.6	03:05 PM - 03:10 PM	53.0	46.6	05:45 PM - 05:50 PM	52.1	48.4
12:30 PM - 12:35 PM	50.6	45.3	03:10 PM - 03:15 PM	49.2	45.7	05:50 PM - 05:55 PM	53.0	49.2
12:35 PM - 12:40 PM	47.4	44.4	03:15 PM - 03:20 PM	54.1	46.6	05:55 PM - 06:00 PM	51.2	48.1

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022987-1

Sample Number 2450167-27
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ทำการสันปะทายหมู่ 5 ปากแสนศักดิ์
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 03 - Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	54.4	48.9	08:40 PM - 08:45 PM	51.3	50.0	11:20 PM - 11:25 PM	50.2	47.8
06:05 PM - 06:10 PM	52.0	49.1	08:45 PM - 08:50 PM	53.9	49.5	11:25 PM - 11:30 PM	51.6	47.8
06:10 PM - 06:15 PM	51.2	48.4	08:50 PM - 08:55 PM	54.0	50.0	11:30 PM - 11:35 PM	49.0	47.1
06:15 PM - 06:20 PM	51.9	48.9	08:55 PM - 09:00 PM	50.5	48.9	11:35 PM - 11:40 PM	48.7	47.3
06:20 PM - 06:25 PM	51.2	48.3	09:00 PM - 09:05 PM	50.8	48.6	11:40 PM - 11:45 PM	49.0	47.3
06:25 PM - 06:30 PM	51.4	48.6	09:05 PM - 09:10 PM	50.6	48.7	11:45 PM - 11:50 PM	49.1	47.2
06:30 PM - 06:35 PM	52.3	48.6	09:10 PM - 09:15 PM	50.1	48.9	11:50 PM - 11:55 PM	49.3	47.3
06:35 PM - 06:40 PM	56.6	48.7	09:15 PM - 09:20 PM	51.4	48.7	11:55 PM - 12:00 AM	50.1	47.1
06:40 PM - 06:45 PM	51.0	48.3	09:20 PM - 09:25 PM	51.5	48.7	12:00 AM - 12:05 AM	48.5	47.1
06:45 PM - 06:50 PM	52.8	50.3	09:25 PM - 09:30 PM	53.5	48.9	12:05 AM - 12:10 AM	47.9	46.4
06:50 PM - 06:55 PM	53.8	50.2	09:30 PM - 09:35 PM	50.4	48.7	12:10 AM - 12:15 AM	50.8	46.9
06:55 PM - 07:00 PM	52.3	49.9	09:35 PM - 09:40 PM	52.3	49.0	12:15 AM - 12:20 AM	51.3	46.9
07:00 PM - 07:05 PM	53.0	50.1	09:40 PM - 09:45 PM	49.8	48.5	12:20 AM - 12:25 AM	50.4	47.0
07:05 PM - 07:10 PM	53.2	49.7	09:45 PM - 09:50 PM	51.1	48.9	12:25 AM - 12:30 AM	47.9	46.5
07:10 PM - 07:15 PM	54.1	50.9	09:50 PM - 09:55 PM	50.6	49.0	12:30 AM - 12:35 AM	49.5	47.2
07:15 PM - 07:20 PM	52.7	51.3	09:55 PM - 10:00 PM	49.6	48.1	12:35 AM - 12:40 AM	49.3	47.0
07:20 PM - 07:25 PM	54.3	51.7	10:00 PM - 10:05 PM	49.5	47.9	12:40 AM - 12:45 AM	47.8	46.4
07:25 PM - 07:30 PM	53.1	51.6	10:05 PM - 10:10 PM	51.1	48.3	12:45 AM - 12:50 AM	48.3	46.7
07:30 PM - 07:35 PM	54.2	51.6	10:10 PM - 10:15 PM	50.5	48.7	12:50 AM - 12:55 AM	47.9	46.5
07:35 PM - 07:40 PM	54.0	51.7	10:15 PM - 10:20 PM	49.8	48.2	12:55 AM - 01:00 AM	48.8	46.8
07:40 PM - 07:45 PM	55.3	50.8	10:20 PM - 10:25 PM	49.8	47.9	01:00 AM - 01:05 AM	48.8	46.9
07:45 PM - 07:50 PM	53.6	51.6	10:25 PM - 10:30 PM	49.2	47.6	01:05 AM - 01:10 AM	48.5	46.9
07:50 PM - 07:55 PM	52.9	51.5	10:30 PM - 10:35 PM	50.3	47.7	01:10 AM - 01:15 AM	48.8	47.0
07:55 PM - 08:00 PM	52.5	50.9	10:35 PM - 10:40 PM	51.1	47.5	01:15 AM - 01:20 AM	48.3	46.5
08:00 PM - 08:05 PM	54.7	51.3	10:40 PM - 10:45 PM	49.5	47.6	01:20 AM - 01:25 AM	47.8	45.8
08:05 PM - 08:10 PM	55.1	51.7	10:45 PM - 10:50 PM	49.1	47.3	01:25 AM - 01:30 AM	47.5	45.6
08:10 PM - 08:15 PM	53.5	51.7	10:50 PM - 10:55 PM	50.0	47.7	01:30 AM - 01:35 AM	46.9	45.6
08:15 PM - 08:20 PM	54.0	51.6	10:55 PM - 11:00 PM	50.3	48.0	01:35 AM - 01:40 AM	47.8	46.0
08:20 PM - 08:25 PM	53.8	51.6	11:00 PM - 11:05 PM	50.5	48.2	01:40 AM - 01:45 AM	47.3	45.5
08:25 PM - 08:30 PM	52.8	51.1	11:05 PM - 11:10 PM	51.4	48.2	01:45 AM - 01:50 AM	47.3	46.0
08:30 PM - 08:35 PM	51.9	50.1	11:10 PM - 11:15 PM	49.4	47.6	01:50 AM - 01:55 AM	47.5	46.3
08:35 PM - 08:40 PM	52.5	50.0	11:15 PM - 11:20 PM	48.8	47.4	01:55 AM - 02:00 AM	48.5	46.2

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Approved by
Sarayuth Jitranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022987-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-27
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ห้องทำงานโรงงาน 5 นำนครศักดิ์
Measurement Date Jun 03 - Jun 04, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No 00376364

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	48.9	48.1	04:40 AM - 04:45 AM	50.4	45.9	07:20 AM - 07:25 AM	57.9	51.5
02:05 AM - 02:10 AM	54.5	46.3	04:45 AM - 04:50 AM	49.6	46.2	07:25 AM - 07:30 AM	52.3	49.6
02:10 AM - 02:15 AM	47.3	46.0	04:50 AM - 04:55 AM	51.6	45.7	07:30 AM - 07:35 AM	53.3	50.7
02:15 AM - 02:20 AM	47.0	45.9	04:55 AM - 05:00 AM	48.1	44.6	07:35 AM - 07:40 AM	54.4	51.0
02:20 AM - 02:25 AM	48.8	46.2	05:00 AM - 05:05 AM	48.2	44.4	07:40 AM - 07:45 AM	56.6	54.5
02:25 AM - 02:30 AM	47.6	45.8	05:05 AM - 05:10 AM	49.2	45.2	07:45 AM - 07:50 AM	57.1	54.0
02:30 AM - 02:35 AM	49.7	45.7	05:10 AM - 05:15 AM	53.7	46.0	07:50 AM - 07:55 AM	54.6	52.7
02:35 AM - 02:40 AM	49.6	46.0	05:15 AM - 05:20 AM	50.7	46.2	07:55 AM - 08:00 AM	55.2	53.5
02:40 AM - 02:45 AM	47.2	45.8	05:20 AM - 05:25 AM	53.4	45.6	08:00 AM - 08:05 AM	56.2	50.4
02:45 AM - 02:50 AM	51.6	46.3	05:25 AM - 05:30 AM	53.2	49.2	08:05 AM - 08:10 AM	52.8	49.1
02:50 AM - 02:55 AM	47.8	46.0	05:30 AM - 05:35 AM	52.0	46.8	08:10 AM - 08:15 AM	56.7	49.7
02:55 AM - 03:00 AM	47.2	45.9	05:35 AM - 05:40 AM	52.4	47.3	08:15 AM - 08:20 AM	53.1	48.7
03:00 AM - 03:05 AM	47.5	45.9	05:40 AM - 05:45 AM	53.5	46.4	08:20 AM - 08:25 AM	62.5	49.5
03:05 AM - 03:10 AM	47.8	45.8	05:45 AM - 05:50 AM	52.4	46.8	08:25 AM - 08:30 AM	53.0	47.8
03:10 AM - 03:15 AM	48.0	45.4	05:50 AM - 05:55 AM	53.7	46.8	08:30 AM - 08:35 AM	51.4	47.2
03:15 AM - 03:20 AM	50.4	45.9	05:55 AM - 06:00 AM	51.5	47.1	08:35 AM - 08:40 AM	50.5	47.7
03:20 AM - 03:25 AM	48.2	45.7	06:00 AM - 06:05 AM	52.3	47.4	08:40 AM - 08:45 AM	50.6	47.3
03:25 AM - 03:30 AM	47.7	45.5	06:05 AM - 06:10 AM	50.8	47.7	08:45 AM - 08:50 AM	51.9	47.6
03:30 AM - 03:35 AM	48.9	45.2	06:10 AM - 06:15 AM	52.8	49.2	08:50 AM - 08:55 AM	52.6	45.6
03:35 AM - 03:40 AM	48.8	45.2	06:15 AM - 06:20 AM	54.2	48.6	08:55 AM - 09:00 AM	55.3	46.0
03:40 AM - 03:45 AM	48.1	45.3	06:20 AM - 06:25 AM	55.8	49.4	09:00 AM - 09:05 AM	52.6	47.0
03:45 AM - 03:50 AM	47.8	45.0	06:25 AM - 06:30 AM	52.1	49.0	09:05 AM - 09:10 AM	52.8	47.7
03:50 AM - 03:55 AM	48.2	45.3	06:30 AM - 06:35 AM	55.0	50.0	09:10 AM - 09:15 AM	51.3	47.3
03:55 AM - 04:00 AM	47.5	45.0	06:35 AM - 06:40 AM	56.7	49.6	09:15 AM - 09:20 AM	52.1	45.9
04:00 AM - 04:05 AM	49.0	45.2	06:40 AM - 06:45 AM	54.8	49.8	09:20 AM - 09:25 AM	54.6	46.3
04:05 AM - 04:10 AM	48.6	45.5	06:45 AM - 06:50 AM	52.6	49.0	09:25 AM - 09:30 AM	53.4	47.3
04:10 AM - 04:15 AM	48.3	44.9	06:50 AM - 06:55 AM	55.0	49.4	09:30 AM - 09:35 AM	56.1	47.3
04:15 AM - 04:20 AM	48.8	45.6	06:55 AM - 07:00 AM	54.0	50.1	09:35 AM - 09:40 AM	51.7	46.1
04:20 AM - 04:25 AM	52.8	46.2	07:00 AM - 07:05 AM	54.5	52.1	09:40 AM - 09:45 AM	52.1	46.7
04:25 AM - 04:30 AM	51.0	45.9	07:05 AM - 07:10 AM	54.5	50.8	09:45 AM - 09:50 AM	53.4	47.0
04:30 AM - 04:35 AM	50.2	45.9	07:10 AM - 07:15 AM	53.1	50.5	09:50 AM - 09:55 AM	53.0	46.3
04:35 AM - 04:40 AM	50.9	46.1	07:15 AM - 07:20 AM	53.1	51.1	09:55 AM - 10:00 AM	50.9	46.8

The above results are relevant for the 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 : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022988-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-28
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ห้องทำงานโรงงาน 5 นำนครศักดิ์
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)
10:00 AM - 10:05 AM	53.6	46.0	12:40 PM - 12:45 PM	49.7	42.7	03:20 PM - 03:25 PM	52.4	49.5
10:05 AM - 10:10 AM	51.9	45.8	12:45 PM - 12:50 PM	50.2	44.3	03:25 PM - 03:30 PM	53.9	50.4
10:10 AM - 10:15 AM	53.4	46.6	12:50 PM - 12:55 PM	50.5	44.6	03:30 PM - 03:35 PM	53.4	50.9
10:15 AM - 10:20 AM	52.0	45.7	12:55 PM - 01:00 PM	53.4	44.5	03:35 PM - 03:40 PM	58.5	50.1
10:20 AM - 10:25 AM	51.3	47.4	01:00 PM - 01:05 PM	52.0	44.6	03:40 PM - 03:45 PM	51.0	45.9
10:25 AM - 10:30 AM	52.2	46.6	01:05 PM - 01:10 PM	50.3	45.2	03:45 PM - 03:50 PM	52.7	48.7
10:30 AM - 10:35 AM	51.6	45.5	01:10 PM - 01:15 PM	49.2	43.8	03:50 PM - 03:55 PM	53.1	48.9
10:35 AM - 10:40 AM	51.0	44.9	01:15 PM - 01:20 PM	54.4	46.5	03:55 PM - 04:00 PM	51.4	47.1
10:40 AM - 10:45 AM	54.7	46.2	01:20 PM - 01:25 PM	52.8	46.9	04:00 PM - 04:05 PM	51.9	46.4
10:45 AM - 10:50 AM	53.7	47.2	01:25 PM - 01:30 PM	54.4	45.5	04:05 PM - 04:10 PM	51.4	47.3
10:50 AM - 10:55 AM	54.3	46.3	01:30 PM - 01:35 PM	53.7	46.0	04:10 PM - 04:15 PM	51.4	46.3
10:55 AM - 11:00 AM	54.4	46.7	01:35 PM - 01:40 PM	55.9	45.0	04:15 PM - 04:20 PM	52.2	46.0
11:00 AM - 11:05 AM	50.5	46.2	01:40 PM - 01:45 PM	54.5	45.9	04:20 PM - 04:25 PM	54.0	47.7
11:05 AM - 11:10 AM	50.8	45.3	01:45 PM - 01:50 PM	51.7	45.1	04:25 PM - 04:30 PM	50.3	45.1
11:10 AM - 11:15 AM	56.3	46.6	01:50 PM - 01:55 PM	52.6	46.9	04:30 PM - 04:35 PM	54.5	48.0
11:15 AM - 11:20 AM	53.0	46.1	01:55 PM - 02:00 PM	53.2	46.9	04:35 PM - 04:40 PM	59.5	46.8
11:20 AM - 11:25 AM	58.8	47.7	02:00 PM - 02:05 PM	53.0	46.1	04:40 PM - 04:45 PM	53.6	46.4
11:25 AM - 11:30 AM	56.6	46.4	02:05 PM - 02:10 PM	53.2	45.1	04:45 PM - 04:50 PM	51.4	45.9
11:30 AM - 11:35 AM	56.8	46.7	02:10 PM - 02:15 PM	58.3	45.2	04:50 PM - 04:55 PM	55.2	48.0
11:35 AM - 11:40 AM	58.3	48.0	02:15 PM - 02:20 PM	52.8	46.3	04:55 PM - 05:00 PM	55.3	48.4
11:40 AM - 11:45 AM	55.6	45.6	02:20 PM - 02:25 PM	52.6	45.6	05:00 PM - 05:05 PM	53.4	47.7
11:45 AM - 11:50 AM	53.1	44.7	02:25 PM - 02:30 PM	55.1	47.4	05:05 PM - 05:10 PM	51.4	48.5
11:50 AM - 11:55 AM	58.4	44.7	02:30 PM - 02:35 PM	57.8	47.7	05:10 PM - 05:15 PM	54.8	49.2
11:55 AM - 12:00 PM	52.0	44.8	02:35 PM - 02:40 PM	52.4	47.5	05:15 PM - 05:20 PM	51.6	45.9
12:00 PM - 12:05 PM	52.9	43.6	02:40 PM - 02:45 PM	53.7	46.7	05:20 PM - 05:25 PM	52.7	46.8
12:05 PM - 12:10 PM	50.1	43.0	02:45 PM - 02:50 PM	53.8	48.7	05:25 PM - 05:30 PM	50.9	47.0
12:10 PM - 12:15 PM	58.5	44.4	02:50 PM - 02:55 PM	55.0	49.9	05:30 PM - 05:35 PM	50.7	46.9
12:15 PM - 12:20 PM	50.1	43.0	02:55 PM - 03:00 PM	52.7	48.7	05:35 PM - 05:40 PM	54.8	46.4
12:20 PM - 12:25 PM	52.1	43.1	03:00 PM - 03:05 PM	53.3	46.9	05:40 PM - 05:45 PM	52.4	46.3
12:25 PM - 12:30 PM	52.5	44.8	03:05 PM - 03:10 PM	52.2	46.8	05:45 PM - 05:50 PM	53.7	47.0
12:30 PM - 12:35 PM	54.0	43.9	03:10 PM - 03:15 PM	54.0	48.6	05:50 PM - 05:55 PM	51.7	46.4
12:35 PM - 12:40 PM	51.3	43.9	03:15 PM - 03:20 PM	52.7	48.9	05:55 PM - 06:00 PM	54.1	47.6

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022988-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-28
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ห้องทำงานโรงงาน 5 นำนครศักดิ์
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 04 - Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
06:00 PM - 06:05 PM	52.3	47.2	08:40 PM - 08:45 PM	52.7	49.2	11:20 PM - 11:25 PM	51.5	47.9
06:05 PM - 06:10 PM	52.5	48.2	08:45 PM - 08:50 PM	51.9	48.9	11:25 PM - 11:30 PM	51.1	47.2
06:10 PM - 06:15 PM	50.7	47.5	08:50 PM - 08:55 PM	52.5	49.3	11:30 PM - 11:35 PM	52.0	48.2
06:15 PM - 06:20 PM	52.0	47.1	08:55 PM - 09:00 PM	50.6	48.0	11:35 PM - 11:40 PM	53.8	47.7
06:20 PM - 06:25 PM	51.5	46.9	09:00 PM - 09:05 PM	51.1	47.8	11:40 PM - 11:45 PM	49.8	47.2
06:25 PM - 06:30 PM	52.0	48.1	09:05 PM - 09:10 PM	52.7	48.7	11:45 PM - 11:50 PM	49.4	47.1
06:30 PM - 06:35 PM	56.2	47.8	09:10 PM - 09:15 PM	51.0	49.3	11:50 PM - 11:55 PM	50.0	47.0
06:35 PM - 06:40 PM	51.5	47.3	09:15 PM - 09:20 PM	52.4	48.1	11:55 PM - 12:00 AM	51.9	47.5
06:40 PM - 06:45 PM	54.1	48.4	09:20 PM - 09:25 PM	51.4	48.1	12:00 AM - 12:05 AM	49.7	47.6
06:45 PM - 06:50 PM	52.6	48.3	09:25 PM - 09:30 PM	50.4	47.7	12:05 AM - 12:10 AM	50.6	47.5
06:50 PM - 06:55 PM	53.7	49.9	09:30 PM - 09:35 PM	51.6	48.5	12:10 AM - 12:15 AM	50.1	47.5
06:55 PM - 07:00 PM	53.7	49.6	09:35 PM - 09:40 PM	53.4	48.3	12:15 AM - 12:20 AM	51.7	47.6
07:00 PM - 07:05 PM	53.1	47.8	09:40 PM - 09:45 PM	50.1	47.1	12:20 AM - 12:25 AM	49.6	47.4
07:05 PM - 07:10 PM	55.5	48.4	09:45 PM - 09:50 PM	51.2	47.5	12:25 AM - 12:30 AM	53.4	47.7
07:10 PM - 07:15 PM	53.2	49.6	09:50 PM - 09:55 PM	50.3	47.7	12:30 AM - 12:35 AM	49.4	47.6
07:15 PM - 07:20 PM	52.9	49.5	09:55 PM - 10:00 PM	51.2	47.2	12:35 AM - 12:40 AM	50.6	48.0
07:20 PM - 07:25 PM	58.0	49.5	10:00 PM - 10:05 PM	50.0	47.1	12:40 AM - 12:45 AM	49.7	47.7
07:25 PM - 07:30 PM	56.8	50.8	10:05 PM - 10:10 PM	49.5	46.9	12:45 AM - 12:50 AM	50.1	47.7
07:30 PM - 07:35 PM	54.1	50.4	10:10 PM - 10:15 PM	51.3	48.3	12:50 AM - 12:55 AM	50.2	47.7
07:35 PM - 07:40 PM	54.6	50.8	10:15 PM - 10:20 PM	50.8	47.9	12:55 AM - 01:00 AM	49.5	47.6
07:40 PM - 07:45 PM	53.5	50.5	10:20 PM - 10:25 PM	50.0	47.8	01:00 AM - 01:05 AM	50.1	48.1
07:45 PM - 07:50 PM	53.6	50.0	10:25 PM - 10:30 PM	51.3	48.3	01:05 AM - 01:10 AM	50.8	48.0
07:50 PM - 07:55 PM	52.4	49.8	10:30 PM - 10:35 PM	50.5	48.0	01:10 AM - 01:15 AM	49.4	47.6
07:55 PM - 08:00 PM	53.4	49.7	10:35 PM - 10:40 PM	50.4	48.4	01:15 AM - 01:20 AM	49.7	48.0
08:00 PM - 08:05 PM	52.2	49.0	10:40 PM - 10:45 PM	51.1	47.6	01:20 AM - 01:25 AM	49.6	48.0
08:05 PM - 08:10 PM	52.5	49.4	10:45 PM - 10:50 PM	53.3	47.8	01:25 AM - 01:30 AM	50.4	48.0
08:10 PM - 08:15 PM	53.7	50.5	10:50 PM - 10:55 PM	52.0	47.7	01:30 AM - 01:35 AM	50.3	47.8
08:15 PM - 08:20 PM	55.0	50.3	10:55 PM - 11:00 PM	51.1	47.7	01:35 AM - 01:40 AM	50.8	47.3
08:20 PM - 08:25 PM	51.5	49.3	11:00 PM - 11:05 PM	51.9	47.5	01:40 AM - 01:45 AM	49.8	47.7
08:25 PM - 08:30 PM	51.2	47.3	11:05 PM - 11:10 PM	54.3	47.9	01:45 AM - 01:50 AM	50.4	48.0
08:30 PM - 08:35 PM	52.3	48.5	11:10 PM - 11:15 PM	53.5	48.2	01:50 AM - 01:55 AM	50.4	47.8
08:35 PM - 08:40 PM	54.4	49.1	11:15 PM - 11:20 PM	52.4	48.1	01:55 AM - 02:00 AM	51.8	47.6

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Approved by
Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450167
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3022988-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample Number 2450167-28
Parameter Noise Level (Leq 5 min)
Location N4 : ที่ห้องทำงานโรงงาน 5 นำนครศักดิ์
Measurement Date Jun 04 - Jun 05, 2024
Measurement by Santi Chaichana
Sound Level meter Serial No. 00376364

Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)	Jun 05, 2024 Time	Leq dB(A)	L90 dB(A)
02:00 AM - 02:05 AM	54.0	47.9	04:40 AM - 04:45 AM	51.3	47.9	07:20 AM - 07:25 AM	55.4	51.9
02:05 AM - 02:10 AM	50.2	47.5	04:45 AM - 04:50 AM	52.1	48.2	07:25 AM - 07:30 AM	54.9	51.5
02:10 AM - 02:15 AM	49.2	47.7	04:50 AM - 04:55 AM	50.4	47.5	07:30 AM - 07:35 AM	54.3	51.4
02:15 AM - 02:20 AM	51.0	48.1	04:55 AM - 05:00 AM	50.0	48.4	07:35 AM - 07:40 AM	53.8	50.9
02:20 AM - 02:25 AM	49.9	47.7	05:00 AM - 05:05 AM	53.5	47.8	07:40 AM - 07:45 AM	54.2	51.0
02:25 AM - 02:30 AM	50.6	48.2	05:05 AM - 05:10 AM	52.9	47.8	07:45 AM - 07:50 AM	54.1	50.4
02:30 AM - 02:35 AM	51.7	48.0	05:10 AM - 05:15 AM	50.9	48.5	07:50 AM - 07:55 AM	54.0	50.4
02:35 AM - 02:40 AM	49.9	47.8	05:15 AM - 05:20 AM	52.2	48.9	07:55 AM - 08:00 AM	52.6	49.5
02:40 AM - 02:45 AM	52.7	48.3	05:20 AM - 05:25 AM	52.5	48.9	08:00 AM - 08:05 AM	53.2	49.8
02:45 AM - 02:50 AM	51.2	48.4	05:25 AM - 05:30 AM	57.6	50.0	08:05 AM - 08:10 AM	54.0	49.6
02:50 AM - 02:55 AM	49.5	47.7	05:30 AM - 05:35 AM	53.6	50.7	08:10 AM - 08:15 AM	54.3	50.2
02:55 AM - 03:00 AM	51.8	48.5	05:35 AM - 05:40 AM	54.0	50.3	08:15 AM - 08:20 AM	54.3	49.8
03:00 AM - 03:05 AM	54.0	48.3	05:40 AM - 05:45 AM	54.5	49.6	08:20 AM - 08:25 AM	53.4	49.4
03:05 AM - 03:10 AM	52.2	47.9	05:45 AM - 05:50 AM	52.8	48.8	08:25 AM - 08:30 AM	57.3	49.4
03:10 AM - 03:15 AM	49.8	47.6	05:50 AM - 05:55 AM	53.4	48.9	08:30 AM - 08:35 AM	52.8	49.0
03:15 AM - 03:20 AM	50.7	48.6	05:55 AM - 06:00 AM	51.2	48.6	08:35 AM - 08:40 AM	53.1	49.9
03:20 AM - 03:25 AM	51.2	48.8	06:00 AM - 06:05 AM	52.2	49.5	08:40 AM - 08:45 AM	56.7	47.9
03:25 AM - 03:30 AM	53.4	48.6	06:05 AM - 06:10 AM	54.6	50.2	08:45 AM - 08:50 AM	53.4	47.9
03:30 AM - 03:35 AM	51.4	48.4	06:10 AM - 06:15 AM	53.8	50.4	08:50 AM - 08:55 AM	52.9	46.9
03:35 AM - 03:40 AM	50.7	48.0	06:15 AM - 06:20 AM	55.1	50.6	08:55 AM - 09:00 AM	52.8	48.0
03:40 AM - 03:45 AM	50.3	47.9	06:20 AM - 06:25 AM	54.2	50.7	09:00 AM - 09:05 AM	52.6	47.8
03:45 AM - 03:50 AM	49.5	48.0	06:25 AM - 06:30 AM	53.1	50.5	09:05 AM - 09:10 AM	53.6	48.8
03:50 AM - 03:55 AM	51.1	48.1	06:30 AM - 06:35 AM	55.7	52.0	09:10 AM - 09:15 AM	52.6	46.4
03:55 AM - 04:00 AM	50.1	48.2	06:35 AM - 06:40 AM	55.1	51.6	09:15 AM - 09:20 AM	52.0	45.5
04:00 AM - 04:05 AM	49.5	47.9	06:40 AM - 06:45 AM	56.6	51.9	09:20 AM - 09:25 AM	51.8	46.9
04:05 AM - 04:10 AM	51.8	48.6	06:45 AM - 06:50 AM	54.8	51.0	09:25 AM - 09:30 AM	52.6	46.5
04:10 AM - 04:15 AM	50.1	48.1	06:50 AM - 06:55 AM	54.1	51.5	09:30 AM - 09:35 AM	52.3	45.7
04:15 AM - 04:20 AM	57.8	47.7	06:55 AM - 07:00 AM	56.0	52.6	09:35 AM - 09:40 AM	53.0	47.2
04:20 AM - 04:25 AM	51.7	48.0	07:00 AM - 07:05 AM	56.9	52.0	09:40 AM - 09:45 AM	54.3	46.8
04:25 AM - 04:30 AM	52.5	48.2	07:05 AM - 07:10 AM	54.3	51.8	09:45 AM - 09:50 AM	53.9	45.2
04:30 AM - 04:35 AM	52.5	48.6	07:10 AM - 07:15 AM	54.4	51.7	09:50 AM - 09:55 AM	53.6	46.6
04:35 AM - 04:40 AM	51.6	48.0	07:15 AM - 07:20 AM	55.3	51.8	09:55 AM - 10:00 AM	53.6	46.1

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Sarayuth Jittranont
Assistant General Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023527-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-1
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรฯ
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	53.5	52.6	46.2	-	48.6	-2.4
12:00 PM - 01:00 PM	52.9	52.0	45.6	-	47.8	-2.2
01:00 PM - 02:00 PM	50.6	49.7	43.3	-	47.4	-4.1
02:00 PM - 03:00 PM	50.7	49.8	43.4	-	47.0	-3.6
03:00 PM - 04:00 PM	51.9	51.0	44.6	-	47.9	-2.9
04:00 PM - 05:00 PM	52.8	51.9	45.5	-	49.7	-4.2
05:00 PM - 06:00 PM	53.0	52.1	45.7	-	49.1	-3.4
06:00 PM - 07:00 PM	51.2	50.3	43.9	-	48.5	-4.6
07:00 PM - 08:00 PM	51.0	50.1	43.7	-	49.0	-5.3
08:00 PM - 09:00 PM	49.8	48.9	42.5	-	48.1	-5.6
09:00 PM - 10:00 PM	49.2	48.3	41.9	-	47.3	-5.4
10:00 PM - 10:05 PM	49.4	48.5	-	45.1	47.3	-2.2
10:05 PM - 10:10 PM	49.1	48.2	-	44.8	47.3	-2.5
10:10 PM - 10:15 PM	48.5	47.6	-	44.2	46.9	-2.7
10:15 PM - 10:20 PM	48.9	48.0	-	44.6	47.0	-2.4
10:20 PM - 10:25 PM	48.8	47.9	-	44.5	46.7	-2.2
10:25 PM - 10:30 PM	49.7	48.8	-	45.4	47.1	-1.7
10:30 PM - 10:35 PM	48.5	47.6	-	44.2	47.0	-2.8
10:35 PM - 10:40 PM	48.5	47.6	-	44.2	46.9	-2.7
10:40 PM - 10:45 PM	48.7	47.8	-	44.4	46.9	-2.5
10:45 PM - 10:50 PM	49.1	48.2	-	44.8	47.1	-2.3
10:50 PM - 10:55 PM	49.1	48.2	-	44.8	47.3	-2.5
10:55 PM - 11:00 PM	48.9	48.0	-	44.6	47.1	-2.5
11:00 PM - 11:05 PM	48.8	47.9	-	44.5	47.1	-2.6
11:05 PM - 11:10 PM	48.7	47.8	-	44.4	46.9	-2.5
11:10 PM - 11:15 PM	48.9	48.0	-	44.6	47.0	-2.4
11:15 PM - 11:20 PM	48.8	47.9	-	44.5	47.1	-2.6
11:20 PM - 11:25 PM	48.7	47.8	-	44.4	47.0	-2.6
11:25 PM - 11:30 PM	48.6	47.7	-	44.3	47.2	-2.9
11:30 PM - 11:35 PM	48.6	47.7	-	44.3	47.1	-2.8
11:35 PM - 11:40 PM	48.6	47.7	-	44.3	47.2	-2.9
11:40 PM - 11:45 PM	48.6	47.7	-	44.3	47.2	-2.9
11:45 PM - 11:50 PM	48.7	47.8	-	44.4	47.2	-2.8
11:50 PM - 11:55 PM	48.8	47.9	-	44.5	47.4	-2.9
11:55 PM - 12:00 AM	49.2	48.3	-	44.9	47.6	-2.7
12:00 AM - 12:05 AM	48.8	47.9	-	44.5	47.5	-3.0
12:05 AM - 12:10 AM	48.7	47.8	-	44.4	47.3	-2.9
12:10 AM - 12:15 AM	48.7	47.8	-	44.4	47.3	-2.9
12:15 AM - 12:20 AM	48.6	47.7	-	44.3	47.2	-2.9
12:20 AM - 12:25 AM	48.8	47.9	-	44.5	47.3	-2.6

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023527-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-1
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรฯ
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	48.4	47.5	-	44.1	47.1	-3.0
12:30 AM - 12:35 AM	48.6	47.7	-	44.3	47.0	-2.7
12:35 AM - 12:40 AM	48.5	47.6	-	44.2	47.1	-2.9
12:40 AM - 12:45 AM	48.5	47.6	-	44.2	46.9	-2.7
12:45 AM - 12:50 AM	48.4	47.5	-	44.1	46.8	-2.7
12:50 AM - 12:55 AM	48.3	47.4	-	44.0	46.7	-2.7
12:55 AM - 01:00 AM	49.0	48.1	-	44.7	46.4	-1.7
01:00 AM - 01:05 AM	48.2	47.3	-	43.9	46.2	-2.1
01:05 AM - 01:10 AM	47.3	46.4	-	43.0	45.9	-2.9
01:10 AM - 01:15 AM	47.5	46.6	-	43.2	45.8	-2.6
01:15 AM - 01:20 AM	47.3	46.4	-	43.0	45.8	-2.8
01:20 AM - 01:25 AM	47.2	46.3	-	42.9	45.8	-2.9
01:25 AM - 01:30 AM	47.3	46.4	-	43.0	45.8	-2.8
01:30 AM - 01:35 AM	47.8	46.9	-	43.5	45.9	-2.4
01:35 AM - 01:40 AM	47.9	47.0	-	43.6	45.9	-2.3
01:40 AM - 01:45 AM	47.5	46.6	-	43.2	46.0	-2.8
01:45 AM - 01:50 AM	47.7	46.8	-	43.4	46.0	-2.6
01:50 AM - 01:55 AM	47.6	46.7	-	43.3	46.0	-2.7
01:55 AM - 02:00 AM	48.2	47.3	-	43.9	46.1	-2.2
02:00 AM - 02:05 AM	47.2	46.3	-	42.9	45.8	-2.9
02:05 AM - 02:10 AM	47.3	46.4	-	43.0	45.8	-2.8
02:10 AM - 02:15 AM	47.3	46.4	-	43.0	45.7	-2.7
02:15 AM - 02:20 AM	47.6	46.7	-	43.3	46.0	-2.7
02:20 AM - 02:25 AM	47.8	46.9	-	43.5	46.0	-2.5
02:25 AM - 02:30 AM	47.4	46.5	-	43.1	45.9	-2.8
02:30 AM - 02:35 AM	47.3	46.4	-	43.0	45.8	-2.8
02:35 AM - 02:40 AM	47.8	46.9	-	43.5	46.1	-2.6
02:40 AM - 02:45 AM	47.8	46.9	-	43.5	46.1	-2.6
02:45 AM - 02:50 AM	48.5	47.6	-	44.2	46.2	-2.0
02:50 AM - 02:55 AM	48.1	47.2	-	43.8	46.2	-2.4
02:55 AM - 03:00 AM	47.7	46.8	-	43.4	46.0	-2.6
03:00 AM - 03:05 AM	48.0	47.1	-	43.7	46.0	-2.3
03:05 AM - 03:10 AM	50.5	49.6	-	46.2	46.1	0.1
03:10 AM - 03:15 AM	49.3	48.4	-	45.0	46.2	-1.2
03:15 AM - 03:20 AM	48.2	47.3	-	43.9	46.5	-2.7
03:20 AM - 03:25 AM	48.6	47.7	-	44.3	46.6	-2.3
03:25 AM - 03:30 AM	49.5	48.6	-	45.2	46.9	-1.7
03:30 AM - 03:35 AM	50.3	49.4	-	46.0	47.6	-1.6
03:35 AM - 03:40 AM	51.4	50.5	-	47.1	47.8	-0.7
03:40 AM - 03:45 AM	50.1	49.2	-	45.8	47.6	-1.8

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023527-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-1
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรฯ
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:45 AM - 03:50 AM	49.3	48.4	-	45.0	47.3	-2.3
03:50 AM - 03:55 AM	50.1	49.2	-	45.8	46.9	-1.1
03:55 AM - 04:00 AM	49.8	48.9	-	45.5	47.2	-1.7
04:00 AM - 04:05 AM	50.7	49.8	-	46.4	47.3	-0.9
04:05 AM - 04:10 AM	50.0	49.1	-	45.7	47.3	-1.6
04:10 AM - 04:15 AM	50.3	49.4	-	46.0	47.4	-1.4
04:15 AM - 04:20 AM	49.9	49.0	-	45.6	47.2	-1.6
04:20 AM - 04:25 AM	48.7	47.8	-	44.4	47.0	-2.6
04:25 AM - 04:30 AM	50.8	49.9	-	46.5	47.1	-0.6
04:30 AM - 04:35 AM	49.8	48.9	-	45.5	47.1	-1.6
04:35 AM - 04:40 AM	49.5	48.6	-	45.2	47.1	-1.9
04:40 AM - 04:45 AM	50.8	49.9	-	46.5	47.1	-0.6
04:45 AM - 04:50 AM	51.3	50.4	-	47.0	47.5	-0.5
04:50 AM - 04:55 AM	52.9	52.0	-	48.6	47.6	1.0
04:55 AM - 05:00 AM	53.9	53.0	-	49.6	47.6	2.0
05:00 AM - 05:05 AM	55.7	54.8	-	51.4	47.8	3.6
05:05 AM - 05:10 AM	58.2	57.4	-	54.0	47.4	6.6
05:10 AM - 05:15 AM	56.9	56.0	-	52.6	47.6	5.0
05:15 AM - 05:20 AM	54.2	53.3	-	49.9	47.4	2.5
05:20 AM - 05:25 AM	53.8	54.9	-	51.5	47.9	4.5
05:25 AM - 05:30 AM	57.5	56.6	-	53.2	47.9	5.3
05:30 AM - 05:35 AM	50.6	49.7	-	46.3	47.4	-1.1
05:35 AM - 05:40 AM	51.0	50.1	-	46.7	47.7	-1.0
05:40 AM - 05:45 AM	53.6	52.7	-	49.3	48.1	1.2
05:45 AM - 05:50 AM	53.5	52.6	-	49.2	48.5	0.7
05:50 AM - 05:55 AM	51.9	51.0	-	47.6	48.8	-1.2
05:55 AM - 06:00 AM	53.2	52.3	-	48.9	48.9	0.0
06:00 AM - 07:00 AM	54.2	53.3	46.9	-	49.3	-2.4
07:00 AM - 08:00 AM	54.2	53.3	46.9	-	49.7	-2.8
08:00 AM - 09:00 AM	56.0	55.1	48.7	-	51.8	-3.1
09:00 AM - 10:00 AM	54.7	53.8	47.4	-	49.2	-1.8
10:00 AM - 11:00 AM	51.4	50.5	44.1	-	48.0	-3.9
ค่าเฉลี่ยรวม						-1.10

Reference Method :
1. ISO 1996-1
2. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงของแหล่งกำเนิดประเภทประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่อง กำหนดค่ามาตรฐานระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่อง กำหนดค่ามาตรฐานของค่าเสียงรบกวนที่เป็นอันตรายต่อชุมชน พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ปกติการทำงาน วันที่ 29-30 พฤษภาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-1 วันที่การทำ 29-30 พฤษภาคม 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดมีมากกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023528-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-2
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรฯ
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	49.8	48.9	42.5	-	46.7	-4.2
12:00 PM - 01:00 PM	52.6	51.7	45.3	-	47.3	-2.0
01:00 PM - 02:00 PM	51.3	50.4	44.0	-	47.2	-3.2
02:00 PM - 03:00 PM	54.9	54.0	47.6	-	49.3	-1.7
03:00 PM - 04:00 PM	50.3	49.6	41.2	-	47.6	-4.4
04:00 PM - 05:00 PM	52.5	51.6	45.2	-	48.7	-3.5
05:00 PM - 06:00 PM	52.9	52.0	45.6	-	48.6	-3.0
06:00 PM - 07:00 PM	49.7	48.8	42.4	-	47.8	-5.4
07:00 PM - 08:00 PM	50.9	50.0	43.6	-	48.5	-4.9
08:00 PM - 09:00 PM	50.8	49.9	43.5	-	47.8	-4.3
09:00 PM - 10:00 PM	50.6	49.7	43.3	-	47.5	-4.2
10:00 PM - 10:05 PM	48.7	47.8	-	44.4	46.8	-2.4
10:05 PM - 10:10 PM	48.4	47.5	-	44.1	46.7	-2.6
10:10 PM - 10:15 PM	48.7	47.8	-	44.4	47.0	-2.6
10:15 PM - 10:20 PM	49.5	48.6	-	45.2	47.4	-2.2
10:20 PM - 10:25 PM	49.7	48.8	-	45.4	47.6	-2.2
10:25 PM - 10:30 PM	49.0	48.1	-	44.7	47.5	-2.8
10:30 PM - 10:35 PM	48.7	47.8	-	44.4	47.4	-3.0
10:35 PM - 10:40 PM	48.7	47.8	-	44.4	47.3	-2.5
10:40 PM - 10:45 PM	48.9	48.0	-	44.6	47.4	-2.8
10:45 PM - 10:50 PM	48.9	48.0	-	44.6	47.4	-2.8
10:50 PM - 10:55 PM	49.0	48.1	-	44.7	47.3	-2.6
10:55 PM - 11:00 PM	49.0	48.1	-	44.7	47.4	-2.7
11:00 PM - 11:05 PM	49.0	48.1	-	44.7	47.3	-2.6
11:05 PM - 11:10 PM	48.8	47.9	-	44.5	47.3	-2.8
11:10 PM - 11:15 PM	49.3	48.4	-	45.0	47.4	-2.4
11:15 PM - 11:20 PM	49.3	48.4	-	45.0	47.4	-2.4
11:20 PM - 11:25 PM	49.0	48.1	-	44.7	47.2	-2.5
11:25 PM - 11:30 PM	49.1	48.2	-	44.8	47.0	-2.2
11:30 PM - 11:35 PM	49.2	48.3	-	44.9	47.3	-2.3
11:35 PM - 11:40 PM	50.7	49.8	-	46.4	46.9	-0.5
11:40 PM - 11:45 PM	48.5	47.6	-	44.2	46.7	-2.5
11:45 PM - 11:50 PM	48.5	47.6	-	44.2	46.7	-2.5
11:50 PM - 11:55 PM	48.6	47.7	-	44.3	46.8	-2.5
11:55 PM - 12:00 AM	48.6	47.7	-	44.3	46.6	-2.5
12:00 AM - 12:05 AM	48.5	47.6	-	44.2	46.7	-2.5
12:05 AM - 12:10 AM	49.7	48.8	-	45.4	47.0	-1.6
12:10 AM - 12:15 AM	48.7	47.8	-	44.4	46.9	-2.5
12:15 AM - 12:20 AM	48.3	47.4	-	44.0	46.7	-2.7
12:20 AM - 12:25 AM	49.0	48.1	-	44.7	46.7	-2.0

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023528-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-2
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	50.0	49.1	-	45.7	46.7	-1.0
12:30 AM - 12:35 AM	48.1	47.2	-	43.8	46.5	-2.7
12:35 AM - 12:40 AM	47.6	47.0	-	43.6	46.5	-2.9
12:40 AM - 12:45 AM	48.5	47.6	-	44.2	46.6	-2.4
12:45 AM - 12:50 AM	49.2	47.3	-	43.9	46.5	2.6
12:50 AM - 12:55 AM	48.2	47.3	-	43.9	46.8	-2.9
12:55 AM - 01:00 AM	48.0	47.1	-	43.7	46.5	2.8
01:00 AM - 01:05 AM	48.2	47.3	-	43.9	46.6	2.7
01:05 AM - 01:10 AM	48.1	47.2	-	43.8	46.8	3.0
01:10 AM - 01:15 AM	48.4	47.5	-	44.1	46.9	2.8
01:15 AM - 01:20 AM	48.8	47.9	-	44.5	47.1	2.6
01:20 AM - 01:25 AM	48.6	47.7	-	44.3	47.1	2.8
01:25 AM - 01:30 AM	48.1	47.2	-	43.8	46.6	2.8
01:30 AM - 01:35 AM	48.4	47.5	-	44.1	46.7	2.6
01:35 AM - 01:40 AM	47.8	46.9	-	43.5	46.4	2.9
01:40 AM - 01:45 AM	48.1	47.2	-	43.8	46.4	2.6
01:45 AM - 01:50 AM	48.5	47.6	-	44.2	46.6	-2.4
01:50 AM - 01:55 AM	48.6	47.7	-	44.3	47.1	2.8
01:55 AM - 02:00 AM	48.6	47.7	-	44.3	47.0	2.7
02:00 AM - 02:05 AM	48.6	47.7	-	44.2	47.2	2.9
02:05 AM - 02:10 AM	48.5	47.6	-	44.2	47.1	2.9
02:10 AM - 02:15 AM	48.6	47.7	-	44.3	47.1	2.8
02:15 AM - 02:20 AM	48.8	47.9	-	44.5	47.3	2.8
02:20 AM - 02:25 AM	48.5	47.6	-	44.2	46.9	2.7
02:25 AM - 02:30 AM	48.2	47.3	-	43.9	46.8	2.9
02:30 AM - 02:35 AM	48.3	47.4	-	44.0	46.8	2.8
02:35 AM - 02:40 AM	49.6	48.7	-	45.3	46.7	-1.4
02:40 AM - 02:45 AM	48.6	47.7	-	44.3	46.9	2.6
02:45 AM - 02:50 AM	48.3	47.4	-	44.0	46.9	2.9
02:50 AM - 02:55 AM	48.4	47.5	-	44.1	47.0	2.9
02:55 AM - 03:00 AM	48.7	47.8	-	44.4	47.0	2.6
03:00 AM - 03:05 AM	48.7	47.8	-	44.4	47.0	2.6
03:05 AM - 03:10 AM	48.9	48.0	-	44.6	47.5	2.9
03:10 AM - 03:15 AM	49.0	48.1	-	44.7	47.0	2.3
03:15 AM - 03:20 AM	49.4	48.5	-	45.1	48.0	2.9
03:20 AM - 03:25 AM	49.1	48.2	-	44.8	47.7	2.9
03:25 AM - 03:30 AM	48.9	48.0	-	44.6	47.4	2.8
03:30 AM - 03:35 AM	49.2	48.3	-	44.9	47.7	2.8
03:35 AM - 03:40 AM	48.8	47.9	-	44.5	47.0	2.5
03:40 AM - 03:45 AM	48.6	47.7	-	44.3	46.8	2.5

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023528-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-2
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:45 AM - 03:50 AM	51.1	50.2	-	46.8	47.1	-0.3
03:50 AM - 03:55 AM	50.3	49.4	-	46.0	46.7	-0.7
03:55 AM - 04:00 AM	49.1	48.2	-	44.8	46.8	-2.0
04:00 AM - 04:05 AM	48.7	47.8	-	44.4	47.1	-2.7
04:05 AM - 04:10 AM	49.7	48.8	-	45.4	47.1	-1.7
04:10 AM - 04:15 AM	50.8	49.9	-	46.5	47.3	-0.8
04:15 AM - 04:20 AM	49.5	48.6	-	45.2	47.7	-2.5
04:20 AM - 04:25 AM	50.9	50.0	-	46.6	47.8	-1.2
04:25 AM - 04:30 AM	49.6	48.7	-	45.3	47.6	-2.3
04:30 AM - 04:35 AM	51.3	50.4	-	47.0	47.6	-0.6
04:35 AM - 04:40 AM	50.2	49.3	-	45.9	47.7	-1.8
04:40 AM - 04:45 AM	50.3	49.4	-	46.0	47.7	-1.7
04:45 AM - 04:50 AM	49.9	49.0	-	45.6	48.1	-2.5
04:50 AM - 04:55 AM	58.0	57.1	-	53.7	48.6	5.1
04:55 AM - 05:00 AM	56.2	55.3	-	51.8	49.1	2.8
05:00 AM - 05:05 AM	56.6	55.7	-	52.3	49.1	3.2
05:05 AM - 05:10 AM	54.8	53.9	-	50.5	48.8	1.7
05:10 AM - 05:15 AM	58.1	57.2	-	53.8	48.7	5.1
05:15 AM - 05:20 AM	54.4	53.5	-	50.1	48.5	1.6
05:20 AM - 05:25 AM	54.0	53.1	-	49.7	48.4	1.3
05:25 AM - 05:30 AM	53.8	52.9	-	49.5	48.3	1.2
05:30 AM - 05:35 AM	53.6	52.7	-	49.3	47.9	1.4
05:35 AM - 05:40 AM	56.4	55.5	-	52.1	48.4	3.7
05:40 AM - 05:45 AM	53.6	52.7	-	49.3	48.3	1.0
05:45 AM - 05:50 AM	54.7	53.8	-	50.4	48.8	1.6
05:50 AM - 05:55 AM	53.1	52.2	-	48.8	48.5	0.3
05:55 AM - 06:00 AM	55.3	54.4	-	51.0	49.1	1.9
06:00 AM - 07:00 AM	53.7	52.8	46.4	-	48.7	2.3
07:00 AM - 08:00 AM	53.6	52.1	45.7	-	47.7	2.0
08:00 AM - 09:00 AM	53.6	52.1	45.7	-	47.7	2.0
09:00 AM - 10:00 AM	53.0	52.1	45.7	-	47.5	1.8
10:00 AM - 11:00 AM	51.4	50.5	44.1	-	47.5	3.4
ตามมาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากรถยนต์ ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567 ตามกฎหมาย
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเฉลี่ยค่าระดับเสียงจากรถยนต์ขณะเคลื่อนที่ผ่านจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงมหาดไทย เรื่อง ค่าเฉลี่ยค่ามาตรฐานและวิธีการตรวจวัดระดับเสียงชั่วคราวที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ช่วงเวลาตรวจวัด วันที่ 30-31 พฤษภาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-2 วันที่ตรวจวัด 30-31 พฤษภาคม 2567)
3. หมายเหตุ ไม่สามารถหาค่าระดับเสียงขณะมีการรบกวนที่เกิดจากแหล่งเสียงจากแหล่งก่อเหตุร้ายเพียงอย่างเดียวขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023529-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-3
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	55.1	54.2	47.8		48.1	-0.3
12:00 PM - 01:00 PM	52.2	51.8	45.4		48.1	-2.7
01:00 PM - 02:00 PM	52.3	51.4	45.0		48.8	-3.8
02:00 PM - 03:00 PM	52.3	51.4	45.0		48.7	-3.7
03:00 PM - 04:00 PM	50.2	49.3	42.9		47.4	-4.5
04:00 PM - 05:00 PM	52.7	51.3	44.9		48.6	-3.1
05:00 PM - 06:00 PM	51.8	50.9	44.5		47.7	-3.2
06:00 PM - 07:00 PM	52.7	51.8	45.4		49.3	-3.9
07:00 PM - 08:00 PM	56.6	53.7	49.3		53.8	-4.5
08:00 PM - 09:00 PM	52.0	51.1	44.7		49.1	-4.4
09:00 PM - 10:00 PM	49.8	48.9	42.5		47.9	-5.4
10:00 PM - 10:05 PM	49.6	48.7		45.2	47.6	2.3
10:05 PM - 10:10 PM	49.2	48.3		44.9	47.4	2.5
10:10 PM - 10:15 PM	49.4	48.5		45.1	47.5	2.4
10:15 PM - 10:20 PM	49.2	48.3		44.9	47.4	2.5
10:20 PM - 10:25 PM	49.4	48.5		45.1	47.4	2.3
10:25 PM - 10:30 PM	49.8	48.9		45.5	47.3	1.8
10:30 PM - 10:35 PM	49.6	48.8		45.4	47.5	2.9
10:35 PM - 10:40 PM	49.0	48.1		44.7	47.6	2.9
10:40 PM - 10:45 PM	49.6	48.7		45.3	48.1	2.8
10:45 PM - 10:50 PM	50.6	49.7		46.3	49.0	2.7
10:50 PM - 10:55 PM	52.3	51.4		48.0	50.2	2.2
10:55 PM - 11:00 PM	54.0	53.1		49.7	51.8	2.1
11:00 PM - 11:05 PM	54.1	53.2		49.8	51.4	1.6
11:05 PM - 11:10 PM	55.7	54.8		51.4	53.2	1.8
11:10 PM - 11:15 PM	51.6	50.7		47.3	49.1	1.8
11:15 PM - 11:20 PM	52.2	51.3		47.9	49.5	1.6
11:20 PM - 11:25 PM	52.8	51.9		48.5	50.2	1.7
11:25 PM - 11:30 PM	52.7	51.8		48.4	50.2	1.8
11:30 PM - 11:35 PM	52.6	51.7		48.3	50.0	1.7
11:35 PM - 11:40 PM	52.7	51.8		48.4	50.2	1.8
11:40 PM - 11:45 PM	53.6	52.7		49.3	51.2	1.9
11:45 PM - 11:50 PM	53.9	53.0		49.6	51.4	1.8
11:50 PM - 11:55 PM	53.7	52.8		49.4	51.2	1.8
11:55 PM - 12:00 AM	52.6	52.7		49.1	51.2	1.9
12:00 AM - 12:05 AM	53.3	52.4		49.0	50.8	1.8
12:05 AM - 12:10 AM	53.2	52.3		48.9	50.6	1.7
12:10 AM - 12:15 AM	53.0	52.1		48.7	50.6	1.9
12:15 AM - 12:20 AM	52.3	51.4		48.0	50.2	1.8
12:20 AM - 12:25 AM	51.2	50.3		46.9	48.4	1.5

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023529-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-3
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	51.0	50.1		46.7	48.1	1.4
12:30 AM - 12:35 AM	51.0	50.1		46.7	48.2	1.5
12:35 AM - 12:40 AM	51.4	50.5		47.1	48.4	1.3
12:40 AM - 12:45 AM	51.8	50.9		47.5	49.1	1.6
12:45 AM - 12:50 AM	52.9	52.0		48.6	50.2	1.6
12:50 AM - 12:55 AM	52.7	51.8		48.4	50.1	1.7
12:55 AM - 01:00 AM	52.9	52.0		48.6	50.3	1.7
01:00 AM - 01:05 AM	53.2	52.3		48.9	50.6	1.7
01:05 AM - 01:10 AM	53.6	52.7		49.3	50.9	1.6
01:10 AM - 01:15 AM	53.5	52.6		49.2	51.1	1.9
01:15 AM - 01:20 AM	53.8	52.9		49.5	51.3	1.8
01:20 AM - 01:25 AM	53.5	52.6		49.2	51.0	1.8
01:25 AM - 01:30 AM	53.6	52.7		49.3	51.2	1.9
01:30 AM - 01:35 AM	53.7	52.8		49.4	51.2	1.8
01:35 AM - 01:40 AM	53.2	52.3		48.9	50.7	1.8
01:40 AM - 01:45 AM	53.0	52.1		48.7	50.6	1.9
01:45 AM - 01:50 AM	53.5	52.6		49.2	51.0	1.8
01:50 AM - 01:55 AM	53.5	52.6		49.2	51.1	1.9
01:55 AM - 02:00 AM	53.6	52.7		49.3	51.2	1.9
02:00 AM - 02:05 AM	53.9	53.0		49.6	51.4	1.8
02:05 AM - 02:10 AM	53.2	52.3		48.9	50.7	1.8
02:10 AM - 02:15 AM	52.4	51.5		48.1	50.0	1.9
02:15 AM - 02:20 AM	53.2	52.3		48.9	49.5	1.6
02:20 AM - 02:25 AM	51.6	50.7		47.3	48.8	1.5
02:25 AM - 02:30 AM	50.7	49.8		46.4	47.8	1.4
02:30 AM - 02:35 AM	50.1	49.2		45.8	47.2	1.4
02:35 AM - 02:40 AM	49.8	48.9		45.5	46.9	1.4
02:40 AM - 02:45 AM	49.4	48.5		45.1	46.5	1.4
02:45 AM - 02:50 AM	50.5	49.6		46.2	47.2	1.6
02:50 AM - 02:55 AM	51.7	50.8		47.4	48.3	1.5
02:55 AM - 03:00 AM	52.6	51.7		48.3	49.8	1.5
03:00 AM - 03:05 AM	52.3	51.4		48.0	49.5	1.5
03:05 AM - 03:10 AM	52.4	51.5		48.1	49.5	1.4
03:10 AM - 03:15 AM	52.6	51.7		48.3	49.2	1.5
03:15 AM - 03:20 AM	51.8	50.9		47.5	49.0	1.5
03:20 AM - 03:25 AM	51.4	50.5		47.1	48.6	1.5
03:25 AM - 03:30 AM	51.3	50.2		46.8	49.5	1.7
03:30 AM - 03:35 AM	51.2	50.3		46.9	48.1	1.4
03:35 AM - 03:40 AM	50.9	50.0		46.6	48.3	1.7
03:40 AM - 03:45 AM	50.8	49.9		46.5	48.3	1.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023529-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-3
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุษรา
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

เวลา	ระดับเสียง (dB(A)) เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน กลางวัน	เสียงขณะมีการรบกวน กลางคืน	เสียงพื้นฐาน	ค่าระดับการรบกวน
03:45 AM - 03:50 AM	50.9	50.9	-	46.6	48.2	-1.6
03:50 AM - 03:55 AM	50.5	49.6	-	46.2	47.9	-1.7
03:55 AM - 04:00 AM	50.2	49.3	-	45.9	47.9	-2.0
04:00 AM - 04:05 AM	50.7	49.8	-	46.4	48.0	-1.6
04:05 AM - 04:10 AM	50.8	49.9	-	46.5	48.1	-1.6
04:10 AM - 04:15 AM	50.8	49.9	-	46.5	48.1	-1.6
04:15 AM - 04:20 AM	51.2	50.3	-	46.9	48.2	-1.3
04:20 AM - 04:25 AM	53.6	52.7	-	49.1	48.5	0.8
04:25 AM - 04:30 AM	52.8	51.9	-	48.5	48.4	0.1
04:30 AM - 04:35 AM	51.8	50.9	-	47.5	48.3	-0.8
04:35 AM - 04:40 AM	52.8	51.9	-	48.5	48.4	0.1
04:40 AM - 04:45 AM	51.8	50.9	-	47.5	48.5	-1.0
04:45 AM - 04:50 AM	51.5	50.6	-	47.2	48.7	-1.5
04:50 AM - 04:55 AM	53.6	51.7	-	48.3	48.7	-0.4
04:55 AM - 05:00 AM	54.2	53.3	-	49.9	49.2	0.7
05:00 AM - 05:05 AM	57.5	56.6	-	53.2	49.6	3.6
05:05 AM - 05:10 AM	53.0	52.1	-	48.7	47.8	-1.1
05:10 AM - 05:15 AM	52.9	52.0	-	48.6	49.3	-0.7
05:15 AM - 05:20 AM	52.7	51.8	-	48.4	48.9	-0.5
05:20 AM - 05:25 AM	54.8	53.9	-	50.5	48.6	1.9
05:25 AM - 05:30 AM	53.4	52.5	-	49.1	48.4	0.7
05:30 AM - 05:35 AM	53.2	52.3	-	48.9	47.8	1.1
05:35 AM - 05:40 AM	52.5	51.6	-	48.2	47.4	0.8
05:40 AM - 05:45 AM	51.0	50.1	-	46.7	47.3	-0.6
05:45 AM - 05:50 AM	50.2	49.4	-	46.0	47.1	-1.1
05:50 AM - 05:55 AM	51.3	50.4	-	47.0	47.1	-0.1
05:55 AM - 06:00 AM	51.5	50.6	-	47.2	47.0	0.2
06:00 AM - 07:00 AM	52.1	51.2	44.8	-	46.7	-1.9
07:00 AM - 08:00 AM	53.0	52.1	45.7	-	48.5	-2.8
08:00 AM - 09:00 AM	54.8	53.9	47.5	-	48.9	-1.4
09:00 AM - 10:00 AM	53.2	52.3	43.9	-	48.4	-2.5
10:00 AM - 11:00 AM	55.9	55.0	48.6	-	48.1	0.5
ค่าสหสูงสุด						5.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกระบวนการ ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับค่าระดับเสียงจากการรบกวนและค่าระดับที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง การแต่งตั้งพนักงานเจ้าหน้าที่และหลักเกณฑ์การปฏิบัติงานในการตรวจสอบ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทดสอบวันที่ วันที่ 31 พฤษภาคม-01 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-3 วันที่ตรวจวัด 31 พฤษภาคม-01 มิถุนายน 2567)
3. n/a: ไม่สามารถตรวจและวัดระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023530-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-4
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุษรา
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

เวลา	ระดับเสียง (dB(A)) เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน กลางวัน	เสียงขณะมีการรบกวน กลางคืน	เสียงพื้นฐาน	ค่าระดับการรบกวน
11:00 AM - 12:00 PM	53.1	52.2	45.8	-	48.3	-2.5
12:00 PM - 01:00 PM	58.8	57.9	51.5	-	49.4	2.1
01:00 PM - 02:00 PM	54.8	53.9	47.5	-	49.0	-1.5
02:00 PM - 03:00 PM	53.5	52.6	46.6	-	48.5	-1.9
03:00 PM - 04:00 PM	51.7	50.7	44.8	-	47.3	-2.5
04:00 PM - 05:00 PM	50.8	49.8	43.9	-	47.0	-3.1
05:00 PM - 06:00 PM	51.3	50.3	44.4	-	47.4	-3.0
06:00 PM - 07:00 PM	50.9	49.9	44.0	-	47.9	-3.9
07:00 PM - 08:00 PM	50.7	49.7	43.8	-	48.8	-5.0
08:00 PM - 09:00 PM	50.4	49.4	43.5	-	48.5	-5.0
09:00 PM - 10:00 PM	49.7	48.7	42.8	-	48.0	-5.7
10:00 PM - 10:05 PM	50.0	49.0	-	46.1	48.2	-2.1
10:05 PM - 10:10 PM	50.0	49.0	-	46.1	48.2	-2.1
10:10 PM - 10:15 PM	49.8	48.8	-	45.9	48.2	-2.3
10:15 PM - 10:20 PM	50.7	49.7	-	46.8	48.5	-1.7
10:20 PM - 10:25 PM	50.2	49.2	-	46.3	48.2	-1.9
10:25 PM - 10:30 PM	50.0	49.0	-	46.1	48.0	-1.9
10:30 PM - 10:35 PM	50.1	49.1	-	46.2	47.8	-1.6
10:35 PM - 10:40 PM	49.8	48.8	-	45.9	47.8	-1.9
10:40 PM - 10:45 PM	50.1	49.2	-	46.4	48.2	-1.8
10:45 PM - 10:50 PM	50.1	49.1	-	46.2	48.1	-1.9
10:50 PM - 10:55 PM	50.0	49.0	-	46.1	48.2	-2.1
10:55 PM - 11:00 PM	50.9	49.9	-	47.0	48.4	-1.4
11:00 PM - 11:05 PM	50.1	49.1	-	46.2	48.2	-2.0
11:05 PM - 11:10 PM	50.1	49.1	-	46.2	48.0	-1.8
11:10 PM - 11:15 PM	50.0	49.0	-	46.1	48.0	-1.9
11:15 PM - 11:20 PM	50.2	49.2	-	46.3	48.1	-1.8
11:20 PM - 11:25 PM	51.5	50.5	-	47.6	49.2	-1.6
11:25 PM - 11:30 PM	51.0	50.0	-	47.1	49.0	-1.9
11:30 PM - 11:35 PM	50.1	49.1	-	46.2	48.5	-2.3
11:35 PM - 11:40 PM	50.1	49.1	-	46.2	48.6	-2.4
11:40 PM - 11:45 PM	50.4	49.4	-	46.5	48.7	-2.2
11:45 PM - 11:50 PM	50.6	49.6	-	46.7	48.6	-1.9
11:50 PM - 11:55 PM	50.3	49.3	-	46.4	48.7	-2.3
11:55 PM - 12:00 AM	51.0	50.0	-	47.1	49.2	-2.1
12:00 AM - 12:05 AM	51.0	50.0	-	47.1	49.1	-2.0
12:05 AM - 12:10 AM	50.9	49.9	-	47.0	49.1	-2.1
12:10 AM - 12:15 AM	51.6	50.6	-	47.7	49.6	-1.9
12:15 AM - 12:20 AM	51.5	50.5	-	47.6	49.7	-2.1
12:20 AM - 12:25 AM	51.3	50.3	-	47.4	49.4	-2.0

Approved by
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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023530-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-4
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุษรา
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

เวลา	ระดับเสียง (dB(A)) เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน กลางวัน	เสียงขณะมีการรบกวน กลางคืน	เสียงพื้นฐาน	ค่าระดับการรบกวน
12:25 AM - 12:30 AM	51.3	50.3	-	47.0	49.4	-1.8
12:30 AM - 12:35 AM	51.5	50.5	-	47.2	49.5	-1.9
12:35 AM - 12:40 AM	51.0	50.0	-	47.1	48.7	-1.6
12:40 AM - 12:45 AM	50.2	49.2	-	46.2	48.0	-1.7
12:45 AM - 12:50 AM	49.7	48.7	-	45.8	47.6	-1.8
12:50 AM - 12:55 AM	49.1	48.1	-	45.2	47.3	-2.1
12:55 AM - 01:00 AM	49.1	48.1	-	45.2	47.4	-2.2
01:00 AM - 01:05 AM	49.1	48.1	-	45.2	47.3	-2.1
01:05 AM - 01:10 AM	49.2	48.2	-	45.3	47.2	-1.9
01:10 AM - 01:15 AM	49.0	48.0	-	45.1	47.0	-1.9
01:15 AM - 01:20 AM	48.6	47.6	-	44.7	47.0	-2.3
01:20 AM - 01:25 AM	48.7	47.7	-	44.8	47.1	-2.3
01:25 AM - 01:30 AM	48.5	47.5	-	44.6	47.1	-2.5
01:30 AM - 01:35 AM	48.5	47.5	-	44.6	47.1	-2.5
01:35 AM - 01:40 AM	48.6	47.6	-	44.7	47.1	-2.4
01:40 AM - 01:45 AM	48.7	47.7	-	44.8	47.3	-2.5
01:45 AM - 01:50 AM	48.8	47.8	-	44.9	47.3	-2.4
01:50 AM - 01:55 AM	49.0	48.0	-	45.1	47.6	-2.5
01:55 AM - 02:00 AM	49.0	48.0	-	45.1	47.4	-2.3
02:00 AM - 02:05 AM	48.7	47.7	-	44.8	47.1	-2.3
02:05 AM - 02:10 AM	48.4	47.4	-	44.5	46.9	-2.4
02:10 AM - 02:15 AM	48.6	47.6	-	44.7	47.0	-2.3
02:15 AM - 02:20 AM	48.3	47.3	-	44.4	46.8	-2.4
02:20 AM - 02:25 AM	48.8	47.8	-	44.9	47.1	-2.2
02:25 AM - 02:30 AM	48.8	47.8	-	44.9	47.3	-2.4
02:30 AM - 02:35 AM	53.0	52.0	-	49.1	47.3	1.8
02:35 AM - 02:40 AM	52.2	51.2	-	48.3	47.3	1.0
02:40 AM - 02:45 AM	51.8	50.8	-	47.9	47.3	0.7
02:45 AM - 02:50 AM	49.7	48.7	-	45.8	47.0	-1.2
02:50 AM - 02:55 AM	48.6	47.6	-	44.7	46.8	-2.1
02:55 AM - 03:00 AM	48.7	47.7	-	44.8	46.6	-2.3
03:00 AM - 03:05 AM	48.2	47.2	-	44.4	46.7	-2.3
03:05 AM - 03:10 AM	48.0	47.0	-	44.1	46.3	-2.2
03:10 AM - 03:15 AM	47.9	46.9	-	44.0	46.4	-2.4
03:15 AM - 03:20 AM	48.1	47.1	-	44.4	46.5	-2.1
03:20 AM - 03:25 AM	47.8	46.8	-	41.9	46.2	-2.3
03:25 AM - 03:30 AM	48.1	47.1	-	44.2	46.4	-2.2
03:30 AM - 03:35 AM	48.3	47.3	-	44.4	46.4	-2.0
03:35 AM - 03:40 AM	48.5	47.5	-	44.6	46.3	-1.7
03:40 AM - 03:45 AM	48.2	47.2	-	44.3	46.4	-2.1

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023530-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-4
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุษรา
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

เวลา	ระดับเสียง (dB(A)) เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน กลางวัน	เสียงขณะมีการรบกวน กลางคืน	เสียงพื้นฐาน	ค่าระดับการรบกวน
03:45 AM - 03:50 AM	48.7	47.7	-	44.3	46.3	-2.0
03:50 AM - 03:55 AM	48.6	47.6	-	44.2	46.5	-1.8
03:55 AM - 04:00 AM	48.2	47.2	-	44.3	46.4	-2.1
04:00 AM - 04:05 AM	47.9	46.9	-	44.0	46.1	-2.1
04:05 AM - 04:10 AM	48.4	47.4	-	44.5	46.2	-1.7
04:10 AM - 04:15 AM	48.0	47.0	-	44.1	46.2	-2.1
04:15 AM - 04:20 AM	48.8	47.8	-	44.9	46.2	-1.4
04:20 AM - 04:25 AM	49.0	48.0	-	45.1	46.6	-1.5
04:25 AM - 04:30 AM	48.7	47.7	-	44.8	46.6	-1.8
04:30 AM - 04:35 AM	48.7	47.7	-	44.8	46.7	-1.9
04:35 AM - 04:40 AM	48.8	47.8	-	44.9	46.8	-1.9
04:40 AM - 04:45 AM	48.9	47.9	-	45.0	46.9	-1.9
04:45 AM - 04:50 AM	48.9	47.9	-	45.0	46.9	-1.9
04:50 AM - 04:55 AM	49.6	48.6	-	45.7	47.0	-1.3
04:55 AM - 05:00 AM	51.2	50.2	-	47.3	47.2	0.1
05:00 AM - 05:05 AM	51.1	50.1	-	47.2	47.9	-0.7
05:05 AM - 05:10 AM	51.9	50.9	-	48.0	47.4	0.6
05:10 AM - 05:15 AM	50.0	49.0	-	46.1	47.8	-1.7
05:15 AM - 05:20 AM	49.9	48.9	-	46.0	48.1	-2.1
05:20 AM - 05:25 AM	52.0	51.0	-	48.1	48.5	-0.4
05:25 AM - 05:30 AM	58.6	57.4	-	54.5	48.9	5.6
05:30 AM - 05:35 AM	52.0	51.0	-	48.1	48.2	-0.1
05:35 AM - 05:40 AM	51.0	50.0	-	47.1	48.4	-1.3
05:40 AM - 05:45 AM	51.1	50.1	-	47.2	49.0	-1.8
05:45 AM - 05:50 AM	55.0	54.0	-	51.1	48.9	2.2
05:50 AM - 05:55 AM	52.4	51.4	-	48.5	49.0	-0.5
05:55 AM - 06:00 AM	51.4	50.4	-	47.5	48.5	-1.0
06:00 AM - 07:00 AM	52.4	51.4	45.5	-	48.3	-2.8
07:00 AM - 08:00 AM	51.9	50.9	45.0	-	47.5	-2.5
08:00 AM - 09:00 AM	53.7	52.7	46.8	-	47.8	-1.0
09:00 AM - 10:00 AM	54.4	53.4	47.5	-	48.2	-0.7
10:00 AM - 11:00 AM	53.5	52.5	46.6	-	47.9	-1.3
ค่าสหสูงสุด						5.10

Reference Method
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกระบวนการ ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับค่าระดับเสียงจากการรบกวนและค่าระดับที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง การแต่งตั้งพนักงานเจ้าหน้าที่และหลักเกณฑ์การปฏิบัติงานในการตรวจสอบ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทดสอบวันที่ วันที่ 01-02 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-4 วันที่ตรวจวัด 01-02 มิถุนายน 2567)
3. n/a: ไม่สามารถตรวจและวัดระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023531-1

P/O : RJN-EW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-5
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	53.6	52.6	46.7	-	48.4	1.7
12:00 PM - 01:00 PM	53.9	52.9	47.6	-	48.2	1.2
01:00 PM - 02:00 PM	53.9	52.9	47.0	-	48.6	1.6
02:00 PM - 03:00 PM	55.3	54.3	48.4	-	48.7	0.3
03:00 PM - 04:00 PM	55.5	54.5	40.6		50.0	1.4
04:00 PM - 05:00 PM	53.4	51.4	45.5		48.3	2.8
05:00 PM - 06:00 PM	51.5	50.5	44.6		47.1	2.7
06:00 PM - 07:00 PM	53.2	51.2	45.3	-	47.7	2.4
07:00 PM - 08:00 PM	51.3	50.3	44.4		48.6	4.2
08:00 PM - 09:00 PM	52.0	51.0	45.1		48.7	3.6
09:00 PM - 10:00 PM	49.8	48.8	42.9		47.2	4.3
10:00 PM - 10:05 PM	48.9	47.9		45.0	46.7	1.7
10:05 PM - 10:10 PM	48.4	47.4		44.5	46.5	2.0
10:10 PM - 10:15 PM	50.1	49.1		46.2	46.5	0.3
10:15 PM - 10:20 PM	50.8	49.8		46.9	46.4	0.5
10:20 PM - 10:25 PM	48.1	47.1		44.2	46.4	2.2
10:25 PM - 10:30 PM	47.9	46.9		44.0	46.3	2.3
10:30 PM - 10:35 PM	48.5	47.5		44.6	46.4	1.8
10:35 PM - 10:40 PM	48.6	47.6		44.7	46.5	1.8
10:40 PM - 10:45 PM	48.1	47.1		44.2	46.3	2.1
10:45 PM - 10:50 PM	47.9	46.9		44.0	46.4	2.4
10:50 PM - 10:55 PM	47.8	46.8		43.9	46.3	2.4
10:55 PM - 11:00 PM	48.5	47.5		44.6	46.0	1.4
11:00 PM - 11:05 PM	48.6	47.6		44.7	46.0	1.3
11:05 PM - 11:10 PM	47.5	46.5		43.6	45.9	2.3
11:10 PM - 11:15 PM	47.4	46.4		43.5	46.0	2.5
11:15 PM - 11:20 PM	47.4	46.4		43.5	46.0	2.5
11:20 PM - 11:25 PM	47.6	46.6		43.7	46.0	2.3
11:25 PM - 11:30 PM	48.2	47.2		44.3	46.4	2.1
11:30 PM - 11:35 PM	48.5	47.5		44.6	46.4	1.8
11:35 PM - 11:40 PM	48.5	47.5		44.6	46.1	1.5
11:40 PM - 11:45 PM	49.3	48.3		45.4	46.1	0.2
11:45 PM - 11:50 PM	48.1	47.1		44.4	46.3	1.9
11:50 PM - 11:55 PM	47.6	46.6		43.7	45.9	2.2
11:55 PM - 12:00 AM	47.5	46.5		43.6	45.8	2.2
12:00 AM - 12:05 AM	47.7	46.7		43.8	45.8	2.0
12:05 AM - 12:10 AM	47.2	46.2		43.3	45.7	2.4
12:10 AM - 12:15 AM	47.4	46.4		43.5	45.6	2.1
12:15 AM - 12:20 AM	48.4	47.4		44.5	46.0	1.5
12:20 AM - 12:25 AM	48.2	47.2		44.3	46.0	1.7

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023531-1

P/O : RJN-EW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-5
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	47.9	46.9	-	44.0	45.9	1.9
12:30 AM - 12:35 AM	48.3	47.1	-	44.2	45.8	1.6
12:35 AM - 12:40 AM	47.6	46.6	-	43.7	45.8	2.1
12:40 AM - 12:45 AM	47.4	46.4	-	43.5	45.6	2.1
12:45 AM - 12:50 AM	47.2	46.2	-	43.3	45.1	1.8
12:50 AM - 12:55 AM	47.2	46.2	-	43.3	45.3	2.0
12:55 AM - 01:00 AM	46.8	45.8	-	42.9	45.0	2.1
01:00 AM - 01:05 AM	47.0	46.0	-	43.1	45.2	2.1
01:05 AM - 01:10 AM	47.5	46.5	-	43.6	45.5	1.9
01:10 AM - 01:15 AM	47.4	46.4	-	43.5	45.5	2.0
01:15 AM - 01:20 AM	47.4	46.4	-	43.5	45.5	2.0
01:20 AM - 01:25 AM	47.1	46.1	-	43.2	45.1	1.9
01:25 AM - 01:30 AM	47.0	46.0	-	43.1	45.1	2.0
01:30 AM - 01:35 AM	47.0	46.0	-	43.1	43.3	0.2
01:35 AM - 01:40 AM	46.8	45.8	-	42.9	45.1	2.2
01:40 AM - 01:45 AM	46.9	45.9	-	43.0	45.1	2.1
01:45 AM - 01:50 AM	47.6	46.6	-	43.7	45.2	1.5
01:50 AM - 01:55 AM	47.7	46.7	-	43.8	45.2	0.6
01:55 AM - 02:00 AM	47.0	46.0	-	43.1	45.1	2.0
02:00 AM - 02:05 AM	47.5	46.5	-	43.6	44.9	1.3
02:05 AM - 02:10 AM	46.6	45.6	-	42.7	44.8	2.1
02:10 AM - 02:15 AM	46.4	45.4	-	42.5	44.5	2.0
02:15 AM - 02:20 AM	46.6	45.6	-	42.7	45.0	2.3
02:20 AM - 02:25 AM	46.5	45.5	-	42.6	45.0	2.4
02:25 AM - 02:30 AM	46.5	45.5	-	42.6	45.0	2.4
02:30 AM - 02:35 AM	47.1	46.1	-	43.2	45.4	2.2
02:35 AM - 02:40 AM	47.1	46.1	-	43.2	45.5	2.3
02:40 AM - 02:45 AM	48.7	47.7	-	44.8	45.8	1.0
02:45 AM - 02:50 AM	47.0	46.0	-	43.1	45.5	2.4
02:50 AM - 02:55 AM	47.6	46.6	-	43.7	45.9	2.2
02:55 AM - 03:00 AM	47.2	46.2	-	43.3	45.7	2.4
03:00 AM - 03:05 AM	48.6	47.6	-	44.7	45.7	1.0
03:05 AM - 03:10 AM	47.4	46.4	-	43.5	45.7	2.2
03:10 AM - 03:15 AM	48.2	47.2	-	44.3	45.7	1.4
03:15 AM - 03:20 AM	47.4	46.4	-	43.5	45.8	2.3
03:20 AM - 03:25 AM	47.6	46.6	-	43.7	45.9	2.2
03:25 AM - 03:30 AM	47.8	46.8	-	43.9	46.1	2.2
03:30 AM - 03:35 AM	47.4	46.4	-	43.5	45.7	2.2
03:35 AM - 03:40 AM	47.4	46.4	-	43.5	45.5	2.0
03:40 AM - 03:45 AM	47.5	46.5	-	43.6	45.6	2.0

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023531-1

P/O : RJN-EW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-5
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:45 AM - 03:50 AM	47.4	46.4		43.5	45.8	2.3
03:50 AM - 03:55 AM	47.3	46.3		43.4	45.4	2.0
03:55 AM - 04:00 AM	46.8	45.8		42.9	45.0	2.1
04:00 AM - 04:05 AM	47.3	46.3		43.4	45.4	2.0
04:05 AM - 04:10 AM	47.6	46.6		43.7	45.6	1.9
04:10 AM - 04:15 AM	47.6	46.6		43.7	45.6	1.9
04:15 AM - 04:20 AM	47.7	46.7		43.8	45.6	1.8
04:20 AM - 04:25 AM	47.7	46.7		43.8	45.7	1.9
04:25 AM - 04:30 AM	48.3	47.3		44.4	45.9	1.5
04:30 AM - 04:35 AM	48.0	47.0		44.1	45.8	1.7
04:35 AM - 04:40 AM	48.7	47.7		44.8	46.2	1.4
04:40 AM - 04:45 AM	48.4	48.4		45.5	45.9	0.4
04:45 AM - 04:50 AM	48.2	47.2		44.3	45.9	1.6
04:50 AM - 04:55 AM	47.0	48.0		45.1	46.7	1.6
04:55 AM - 05:00 AM	49.6	48.6		45.7	47.6	1.9
05:00 AM - 05:05 AM	49.7	48.7		45.8	47.5	1.7
05:05 AM - 05:10 AM	50.3	49.3		46.4	47.7	1.3
05:10 AM - 05:15 AM	51.3	50.3		47.4	48.5	1.1
05:15 AM - 05:20 AM	50.6	49.6		46.7	47.7	1.0
05:20 AM - 05:25 AM	57.6	55.4		54.4	48.0	6.4
05:25 AM - 05:30 AM	51.0	49.8		47.8	47.8	0.0
05:30 AM - 05:35 AM	52.6	51.4		49.4	48.3	1.1
05:35 AM - 05:40 AM	53.7	52.5		50.5	48.1	2.4
05:40 AM - 05:45 AM	51.4	50.2		48.2	48.0	0.2
05:45 AM - 05:50 AM	52.5	51.3		49.3	47.8	1.5
05:50 AM - 05:55 AM	53.6	52.4		50.4	47.8	2.6
05:55 AM - 06:00 AM	53.3	52.1		50.1	48.3	1.8
06:00 AM - 07:00 AM	52.2	51.0	46.0		47.6	1.6
07:00 AM - 08:00 AM	53.5	54.1	49.3		46.7	2.6
08:00 AM - 09:00 AM	52.6	51.4	46.4		47.2	0.8
09:00 AM - 10:00 AM	54.0	52.8	47.8		47.7	0.1
10:00 AM - 11:00 AM	53.8	52.6	47.6		47.5	0.1
ค่าน้อยที่สุด						0.0

Reference Method :
1 ISO 1996-1
2 ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากการตรวจประเมินสิ่งแวดล้อม ฉบับที่ 24 (พ.ศ. 2560) และประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2562
มาตรฐาน
1 ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
2 ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานและข้อกำหนดการตรวจวัดระดับเสียงจากการประกอบกิจการที่มีนัยสำคัญต่อสุขภาพ พ.ศ. 2561
Remark:
1. ระดับเสียงจากแหล่งกำเนิด ตามหนังสือ ที่ กอ 02 03 สิงหาคม 2547
2. ระดับเสียงที่ผู้ประกอบการวัดเสียงมา (Sample No.2450169-5 วันที่ตรวจวัด 02-03 สิงหาคม 2567)
3. กฎหมาย ไม่ได้กำหนดค่าเสียงรบกวนที่เกิดจากการเปิดเครื่องปรับอากาศ ในวันที่ตรวจวัด

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023532-1

P/O : RJN-EW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-6
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	52.9	51.6	46.6	-	47.1	-0.5
12:00 PM - 01:00 PM	52.7	49.5	44.5		45.8	2.3
01:00 PM - 02:00 PM	53.2	52.0	47.0		47.3	0.3
02:00 PM - 03:00 PM	52.8	51.6	46.6		47.7	1.1
03:00 PM - 04:00 PM	52.2	51.0	46.0		48.5	2.5
04:00 PM - 05:00 PM	52.8	51.6	46.6		49.0	2.4
05:00 PM - 06:00 PM	53.4	52.2	47.2		49.1	1.9
06:00 PM - 07:00 PM	51.9	50.7	45.7		48.2	2.5
07:00 PM - 08:00 PM	54.0	52.8	47.8		51.2	3.4
08:00 PM - 09:00 PM	53.0	50.8	45.8		49.1	2.3
09:00 PM - 10:00 PM	50.0	48.8	43.8		47.4	3.6
10:00 PM - 10:05 PM	48.7	47.5		45.1	46.1	1.0
10:05 PM - 10:10 PM	49.4	48.2		46.2	46.9	0.7
10:10 PM - 10:15 PM	48.8	47.6		45.4	46.8	1.4
10:15 PM - 10:20 PM	49.0	47.8		45.8	47.1	1.3
10:20 PM - 10:25 PM	49.3	48.1		46.1	47.0	0.9
10:25 PM - 10:30 PM	48.9	47.7		45.7	47.0	1.3
10:30 PM - 10:35 PM	48.8	47.6		45.6	46.7	1.1
10:35 PM - 10:40 PM	49.0	47.8		45.8	46.9	1.1
10:40 PM - 10:45 PM	48.6	47.4		45.4	46.7	1.3
10:45 PM - 10:50 PM	48.7	47.5		45.5	46.8	1.3
10:50 PM - 10:55 PM	49.7	48.0		46.0	46.9	0.9
10:55 PM - 11:00 PM	48.9	47.7		45.7	46.7	1.0
11:00 PM - 11:05 PM	48.9	47.7		45.7	46.9	1.2
11:05 PM - 11:10 PM	49.1	47.9		45.9	47.1	1.2
11:10 PM - 11:15 PM	48.9	47.7		45.7	46.8	1.1
11:15 PM - 11:20 PM	48.7	47.5		45.5	46.5	1.0
11:20 PM - 11:25 PM	49.0	47.8		45.8	46.7	0.9
11:25 PM - 11:30 PM	48.9	47.7		45.7	46.9	1.2
11:30 PM - 11:35 PM	48.6	47.4		45.4	46.7	1.3
11:35 PM - 11:40 PM	48.4	47.2		45.2	46.5	1.3
11:40 PM - 11:45 PM	48.9	47.7		45.7	46.9	1.2
11:45 PM - 11:50 PM	48.6	47.4		45.4	46.6	1.2
11:50 PM - 11:55 PM	49.0	47.8		45.8	46.6	0.8
11:55 PM - 12:00 AM	48.8	47.6		45.6	46.8	1.2
12:00 AM - 12:05 AM	48.8	47.6		45.6	46.8	1.2
12:05 AM - 12:10 AM	48.5	47.3		45.3	46.7	1.4
12:10 AM - 12:15 AM	49.1	47.9		45.9	47.2	1.3
12:15 AM - 12:20 AM	49.5	48.3		46.3	47.0	0.7
12:20 AM - 12:25 AM	49.0	47.8		45.8	47.2	1.4

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Approved by
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023532-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-6
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	49.3	48.1	-	46.1	47.6	-1.5
12:30 AM - 12:35 AM	48.9	47.7	-	45.7	47.1	-1.4
12:35 AM - 12:40 AM	49.6	48.4	-	46.4	46.7	-0.3
12:40 AM - 12:45 AM	49.8	47.6	-	45.6	47.1	-1.5
12:45 AM - 12:50 AM	48.7	47.5	-	45.5	46.8	-1.3
12:50 AM - 12:55 AM	48.8	47.6	-	45.6	46.8	-1.2
12:55 AM - 01:00 AM	48.9	47.7	-	45.7	46.9	-1.2
01:00 AM - 01:05 AM	49.0	47.8	-	45.8	46.9	-1.1
01:05 AM - 01:10 AM	49.4	48.2	-	46.2	47.1	-0.9
01:10 AM - 01:15 AM	49.1	47.9	-	45.9	46.8	-0.9
01:15 AM - 01:20 AM	49.0	47.8	-	45.8	47.1	-1.3
01:20 AM - 01:25 AM	49.3	48.1	-	46.1	47.4	-1.3
01:25 AM - 01:30 AM	49.1	47.9	-	45.9	47.2	-1.3
01:30 AM - 01:35 AM	48.8	47.6	-	45.6	46.9	-1.3
01:35 AM - 01:40 AM	48.9	47.7	-	45.7	46.9	-1.2
01:40 AM - 01:45 AM	49.0	47.8	-	45.8	46.9	-1.1
01:45 AM - 01:50 AM	47.8	46.6	-	44.6	45.9	-1.3
01:50 AM - 01:55 AM	48.6	47.4	-	45.4	46.4	-1.0
01:55 AM - 02:00 AM	48.3	47.1	-	45.1	46.5	-1.4
02:00 AM - 02:05 AM	48.2	47.0	-	45.0	46.4	-1.4
02:05 AM - 02:10 AM	48.9	47.7	-	45.7	47.1	-1.4
02:10 AM - 02:15 AM	48.7	47.5	-	45.5	47.0	-1.5
02:15 AM - 02:20 AM	49.0	47.8	-	45.8	47.2	-1.4
02:20 AM - 02:25 AM	48.7	47.5	-	45.5	47.0	-1.5
02:25 AM - 02:30 AM	49.0	47.8	-	45.8	47.2	-1.4
02:30 AM - 02:35 AM	48.6	47.4	-	45.4	46.9	-1.5
02:35 AM - 02:40 AM	48.1	46.9	-	44.9	46.3	-1.4
02:40 AM - 02:45 AM	48.2	47.0	-	45.0	46.4	-1.4
02:45 AM - 02:50 AM	48.1	46.9	-	44.9	46.2	-1.3
02:50 AM - 02:55 AM	48.2	47.0	-	45.0	46.4	-1.4
02:55 AM - 03:00 AM	48.4	47.2	-	45.2	46.6	-1.4
03:00 AM - 03:05 AM	48.6	47.4	-	45.4	46.5	-1.1
03:05 AM - 03:10 AM	48.5	47.3	-	45.3	46.3	-1.0
03:10 AM - 03:15 AM	48.1	46.9	-	44.9	46.2	-1.3
03:15 AM - 03:20 AM	48.6	47.4	-	45.4	46.7	-1.3
03:20 AM - 03:25 AM	48.4	47.2	-	45.2	46.5	-1.3
03:25 AM - 03:30 AM	48.2	47.0	-	45.0	46.5	-1.5
03:30 AM - 03:35 AM	48.3	47.1	-	45.1	46.5	-1.4
03:35 AM - 03:40 AM	48.9	47.7	-	45.7	47.1	-1.4
03:40 AM - 03:45 AM	49.0	47.8	-	45.8	47.3	-1.5

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Wilawan Borikak
Manager

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot IDs: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023532-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-6
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
02:45 AM - 02:50 AM	48.9	47.7	-	45.7	47.3	-1.6
02:50 AM - 02:55 AM	49.1	47.9	-	45.9	47.4	-1.5
02:55 AM - 03:00 AM	49.5	48.3	-	46.3	47.6	-1.3
03:00 AM - 03:05 AM	49.7	48.5	-	46.5	47.9	-1.4
03:05 AM - 03:10 AM	49.7	48.5	-	46.5	47.9	-1.4
03:10 AM - 03:15 AM	49.0	47.8	-	45.8	47.2	-1.4
03:15 AM - 03:20 AM	49.2	48.0	-	46.0	47.1	-1.1
03:20 AM - 03:25 AM	48.9	47.7	-	45.7	46.9	-1.2
03:25 AM - 03:30 AM	48.6	48.4	-	46.4	47.1	-0.7
03:30 AM - 03:35 AM	49.4	48.2	-	46.2	47.7	-1.5
03:35 AM - 03:40 AM	50.0	48.8	-	46.8	47.9	-1.1
03:40 AM - 03:45 AM	49.2	48.0	-	46.0	47.1	-1.1
03:45 AM - 03:50 AM	49.2	48.0	-	46.0	47.1	-1.1
03:50 AM - 03:55 AM	49.4	48.2	-	46.2	47.3	-1.1
03:55 AM - 04:00 AM	49.5	48.3	-	46.3	47.6	-1.3
04:00 AM - 04:05 AM	49.7	48.5	-	46.5	47.9	-1.4
04:05 AM - 04:10 AM	49.7	48.5	-	46.5	47.9	-1.4
04:10 AM - 04:15 AM	49.0	47.8	-	45.8	47.2	-1.4
04:15 AM - 04:20 AM	49.2	48.0	-	46.0	47.1	-1.1
04:20 AM - 04:25 AM	48.9	47.7	-	45.7	46.9	-1.2
04:25 AM - 04:30 AM	49.6	48.4	-	46.4	47.8	-1.4
04:30 AM - 04:35 AM	49.9	48.7	-	46.7	48.2	-1.5
04:35 AM - 04:40 AM	50.0	48.8	-	46.8	47.9	-1.1
04:40 AM - 04:45 AM	50.0	48.8	-	46.8	47.7	-0.9
04:45 AM - 04:50 AM	49.6	48.4	-	46.4	47.7	-1.3
04:50 AM - 04:55 AM	49.3	48.1	-	46.1	47.4	-1.3
04:55 AM - 05:00 AM	49.3	48.1	-	46.1	47.5	-1.4
05:00 AM - 05:05 AM	49.3	48.1	-	46.1	47.5	-1.4
05:05 AM - 05:10 AM	49.7	48.5	-	46.5	47.8	-1.3
05:10 AM - 05:15 AM	49.8	48.6	-	46.6	47.9	-1.3
05:15 AM - 05:20 AM	49.8	48.6	-	46.6	48.0	-1.4
05:20 AM - 05:25 AM	52.2	51.0	-	49.0	48.2	2.8
05:25 AM - 05:30 AM	50.1	48.9	-	46.9	47.7	0.8
05:30 AM - 05:35 AM	56.4	55.2	-	53.2	48.1	5.1
05:35 AM - 05:40 AM	55.9	54.7	-	52.7	47.9	4.8
05:40 AM - 05:45 AM	54.1	52.9	-	50.9	48.3	2.6
05:45 AM - 05:50 AM	57.0	55.8	-	53.8	48.6	5.2
05:50 AM - 05:55 AM	55.3	54.1	-	52.1	48.5	3.6
05:55 AM - 06:00 AM	51.4	50.2	-	48.2	48.0	0.2
06:00 AM - 07:00 AM	53.2	52.0	47.0	-	48.2	-1.2
07:00 AM - 08:00 AM	55.0	53.8	48.8	-	51.8	-3.0
08:00 AM - 09:00 AM	53.0	51.8	46.8	-	47.6	-0.8
09:00 AM - 10:00 AM	54.6	53.4	48.4	-	48.3	0.1
10:00 AM - 11:00 AM	54.4	53.2	48.2	-	48.1	0.1
ค่าเฉลี่ยรุ่งวัน						0.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง ชนิดของโรงงานที่ต้องได้รับใบอนุญาตและหลักเกณฑ์ วิธีการ และเงื่อนไขในการขอรับใบอนุญาต ประกาศ ณ วันที่ 24 มีนาคม พ.ศ. 2560
มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงที่เครื่องจักรหรือการประกอบกิจการโรงงานจะต้องไม่เกินมาตรฐานที่กำหนด พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงที่เครื่องจักรหรือการประกอบกิจการโรงงานจะต้องไม่เกินมาตรฐานที่กำหนด พ.ศ. 2561
Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 มิถุนายน 2567
2. ระดับเสียงพื้นหลังและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-6 วันที่ตรวจวัด 03-04 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดมีค่าน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borikak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023533-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-7
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	53.4	52.2	47.2	-	47.7	-0.5
12:00 PM - 01:00 PM	51.3	50.1	45.1	-	47.4	-2.3
01:00 PM - 02:00 PM	53.8	52.6	47.6	-	47.9	-0.3
02:00 PM - 03:00 PM	53.4	52.2	47.2	-	48.3	-1.1
03:00 PM - 04:00 PM	52.8	51.6	46.6	-	49.1	-2.5
04:00 PM - 05:00 PM	53.4	52.2	47.2	-	49.6	-2.4
05:00 PM - 06:00 PM	54.0	52.8	47.8	-	49.7	-1.9
06:00 PM - 07:00 PM	52.5	51.3	46.3	-	48.8	-2.5
07:00 PM - 08:00 PM	54.5	53.4	48.4	-	51.8	-3.4
08:00 PM - 09:00 PM	52.6	51.4	46.4	-	49.7	-3.3
09:00 PM - 10:00 PM	50.5	49.4	44.4	-	48.0	-3.6
10:00 PM - 10:05 PM	49.3	48.1	-	46.1	47.1	-1.0
10:05 PM - 10:10 PM	49.2	48.0	-	46.0	47.5	-0.7
10:10 PM - 10:15 PM	49.2	48.0	-	46.0	47.4	-1.4
10:15 PM - 10:20 PM	49.6	48.4	-	46.4	47.7	-1.3
10:20 PM - 10:25 PM	49.9	48.7	-	46.7	47.6	-0.9
10:25 PM - 10:30 PM	49.5	48.3	-	46.3	47.6	-1.3
10:30 PM - 10:35 PM	49.4	48.2	-	46.2	47.3	-1.1
10:35 PM - 10:40 PM	49.6	48.4	-	46.4	47.5	-1.1
10:40 PM - 10:45 PM	49.2	48.0	-	46.0	47.3	-1.3
10:45 PM - 10:50 PM	49.3	48.1	-	46.1	47.4	-1.3
10:50 PM - 10:55 PM	49.8	48.6	-	46.6	47.5	-0.9
10:55 PM - 11:00 PM	49.5	48.3	-	46.3	47.3	-1.0
11:00 PM - 11:05 PM	49.5	48.3	-	46.3	47.5	-1.2
11:05 PM - 11:10 PM	49.7	48.5	-	46.5	47.7	-1.2
11:10 PM - 11:15 PM	49.5	48.3	-	46.3	47.4	-1.1
11:15 PM - 11:20 PM	49.3	48.1	-	46.1	47.1	-1.0
11:20 PM - 11:25 PM	49.6	48.4	-	46.4	47.3	-0.9
11:25 PM - 11:30 PM	49.5	48.3	-	46.3	47.5	-1.2
11:30 PM - 11:35 PM	49.2	48.0	-	46.0	47.3	-1.3
11:35 PM - 11:40 PM	49.0	47.8	-	45.8	47.1	-1.3
11:40 PM - 11:45 PM	49.5	48.3	-	46.3	47.5	-1.2
11:45 PM - 11:50 PM	49.2	48.0	-	46.0	47.2	-1.2
11:50 PM - 11:55 PM	49.6	48.4	-	46.4	47.2	-0.8
11:55 PM - 12:00 AM	49.4	48.2	-	46.2	47.4	-1.2
12:00 AM - 12:05 AM	49.4	48.2	-	46.2	47.4	-1.2
12:05 AM - 12:10 AM	49.1	47.9	-	45.9	47.3	-1.4
12:10 AM - 12:15 AM	49.2	48.0	-	46.0	47.3	-1.3
12:15 AM - 12:20 AM	50.1	48.9	-	46.9	48.4	-1.5
12:20 AM - 12:25 AM	49.6	48.4	-	46.4	47.8	-1.4

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023533-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-7
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบูรพา
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	49.9	48.7	-	46.7	48.2	-1.5
12:30 AM - 12:35 AM	49.5	48.3	-	46.3	47.7	-1.4
12:35 AM - 12:40 AM	50.3	49.0	-	47.0	47.3	-0.3
12:40 AM - 12:45 AM	49.4	48.2	-	46.2	47.7	-1.5
12:45 AM - 12:50 AM	49.3	48.1	-	46.1	47.4	-1.3
12:50 AM - 12:55 AM	49.4	48.2	-	46.2	47.4	-1.2
12:55 AM - 01:00 AM	49.5	48.3	-	46.3	47.5	-1.2
01:00 AM - 01:05 AM	49.6	48.4	-	46.4	47.5	-1.1
01:05 AM - 01:10 AM	50.0	48.8	-	46.8	47.7	-0.9
01:10 AM - 01:15 AM	49.7	48.5	-	46.5	47.4	-0.9
01:15 AM - 01:20 AM	49.0	47.8	-	45.8	47.1	-1.3
01:20 AM - 01:25 AM	49.3	48.1	-	46.1	47.4	-1.3
01:25 AM - 01:30 AM	49.1	47.9	-	45.9	47.2	-1.3
01:30 AM - 01:35 AM	48.8	47.6	-	45.6	46.9	-1.3
01:35 AM - 01:40 AM	48.9	47.7	-	45.7	46.9	-1.2
01:40 AM - 01:45 AM	49.0	47.8	-	45.8	46.9	-1.1
01:45 AM - 01:50 AM	47.8	46.6	-	44.6	45.9	-1.3
01:50 AM - 01:55 AM	48.6	47.4	-	45.4	46.4	-1.0
01:55 AM - 02:00 AM	48.3	47.1	-	45.1	46.5	-1.4
02:00 AM - 02:05 AM	48.2	47.0	-	45.0	46.4	-1.4
02:05 AM - 02:10 AM	48.9	47.7	-	45.7	47.1	-1.4
02:10 AM - 02:15 AM	48.7	47.5	-	45.5	47.0	-1.5
02:15 AM - 02:20 AM	49.0	47.8	-	45.8	47.2	-1.4
02:20 AM - 02:25 AM	48.7	47.5	-	45.5	47.0	-1.5
02:25 AM - 02:30 AM	49.0	47.8	-	45.8	47.2	-1.4
02:30 AM - 02:35 AM	48.6	47.4	-	45.4	46.9	-1.5
02:35 AM - 02:40 AM	48.1	46.9	-	44.9	46.3	-1.4
02:40 AM - 02:45 AM	48.2	47.0	-	45.0	46.4	-1.4
02:45 AM - 02:50 AM	48.1	46.9	-	44.9	46.2	-1.3
02:50 AM - 02:55 AM	48.2	47.0	-	45.0	46.4	-1.4
02:55 AM - 03:00 AM	48.4	47.2	-	45.2	46.6	-1.4
03:00 AM - 03:05 AM	48.6	47.4	-	45.4	46.5	-1.1
03:05 AM - 03:10 AM	48.5	47.3	-	45.3	46.3	-1.0
03:10 AM - 03:15 AM	48.1	46.9	-	44.9	46.2	-1.3
03:15 AM - 03:20 AM	48.6	47.4	-	45.4	46.7	-1.3
03:20 AM - 03:25 AM	48.4	47.2	-	45.2	46.5	-1.3
03:25 AM - 03:30 AM	48.2	47.0	-	45.0	46.5	-1.5
03:30 AM - 03:35 AM	48.3	47.1	-	45.1	46.5	-1.4
03:35 AM - 03:40 AM	48.9	47.7	-	45.7	47.1	-1.4
03:40 AM - 03:45 AM	49.0	47.8	-	45.8	47.3	-1.5

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Analysis / Test Report

Client : Rejana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023533-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-7
Parameter เสียงรบกวน
Location N1 : หมู่บ้านบุรพา
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chakhana
Sound Level Meter 00472127

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
01:45 AM - 01:50 AM	48.9	48.3	-	43.0	47.9	-4.9
01:50 AM - 01:55 AM	49.1	48.5	-	43.2	48.0	-4.8
01:55 AM - 02:00 AM	49.5	48.9	-	43.6	48.2	-4.6
02:00 AM - 02:05 AM	49.7	49.1	-	43.8	48.5	-4.7
02:05 AM - 02:10 AM	49.7	49.1	-	43.8	48.5	-4.7
02:10 AM - 02:15 AM	49.6	48.4	-	43.1	47.8	-4.7
02:15 AM - 02:20 AM	49.2	48.6	-	43.3	47.7	-4.4
02:20 AM - 02:25 AM	48.9	48.3	-	43.0	47.5	-4.5
02:25 AM - 02:30 AM	49.6	49.0	-	43.7	48.4	-4.7
02:30 AM - 02:35 AM	49.9	49.3	-	44.0	48.8	-4.8
02:35 AM - 02:40 AM	50.0	49.4	-	44.1	48.5	-4.4
02:40 AM - 02:45 AM	50.0	49.4	-	44.1	48.3	-4.2
02:45 AM - 02:50 AM	49.6	49.0	-	43.7	48.3	-4.6
02:50 AM - 02:55 AM	49.3	48.7	-	43.4	48.0	-4.6
02:55 AM - 03:00 AM	49.3	48.7	-	43.4	48.1	-4.7
03:00 AM - 03:05 AM	49.3	48.7	-	43.4	48.1	-4.7
03:05 AM - 03:10 AM	49.7	49.1	-	43.8	48.4	-4.6
03:10 AM - 03:15 AM	49.8	49.2	-	43.9	48.5	-4.6
03:15 AM - 03:20 AM	49.8	49.2	-	43.9	48.6	-4.7
03:20 AM - 03:25 AM	52.2	51.6	-	46.3	48.8	-2.5
03:25 AM - 03:30 AM	50.1	49.5	-	44.2	48.3	-4.1
03:30 AM - 03:35 AM	56.4	55.8	-	50.5	48.7	1.8
03:35 AM - 03:40 AM	55.9	55.3	-	50.0	48.5	1.5
03:40 AM - 03:45 AM	54.1	53.5	-	48.2	48.9	0.7
03:45 AM - 03:50 AM	57.0	56.4	-	51.1	49.2	1.9
03:50 AM - 03:55 AM	55.3	54.7	-	49.4	49.1	0.3
03:55 AM - 04:00 AM	51.4	50.8	-	45.5	48.6	-3.1
04:00 AM - 04:05 AM	53.2	52.6	44.3	-	48.8	-4.5
04:05 AM - 04:10 AM	55.0	54.4	46.1	-	52.4	-6.3
04:10 AM - 04:15 AM	53.6	52.4	44.1	-	48.2	-4.1
04:15 AM - 04:20 AM	54.6	54.0	45.7	-	48.8	-3.1
04:20 AM - 04:25 AM	53.7	53.1	44.8	-	48.5	-3.7
ค่าเฉลี่ย						-3.10

Reference Method :
1 ISO 1996-1
2. ประกาศคณะกรรมการกำกับกิจการโทรคมนาคมแห่งชาติ เรื่อง หลักเกณฑ์และวิธีการตรวจวัดระดับเสียงรบกวนของระบบเสียงเกินกว่า 24 ชั่วโมง และระดับเสียงของเครื่องกำเนิดกระแสไฟฟ้าของสถานีวิทยุคมนาคมและสถานีโทรทัศน์ พ.ศ. 2567
เกณฑ์ฯ
1 ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ากำหนดระดับเสียงรบกวนและการสั่นสะเทือนของโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดมาตรฐานเสียงและเสียงรบกวนที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
Remark:
1 ระดับเสียงจากแหล่งกำเนิด ทดสอบวันที่ 04-05 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-7 ในวันที่ทดสอบ 04-05 มิถุนายน 2567)
3. n/a: ไม่สามารถตรวจวัดระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the and collected 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
Wilawan Borirak
Manager

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

Analysis / Test Report

Client : Rejana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023534-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-5
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลฮิดายา
Measurement Date May 29 - 30, 2024
Measurement by Santi Chakhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	57.1	56.3	49.4	-	46.0	3.4
01:00 PM - 02:00 PM	57.6	56.8	49.9	-	42.7	7.2
02:00 PM - 03:00 PM	55.9	55.1	48.2	-	42.8	5.4
03:00 PM - 04:00 PM	58.2	57.4	50.5	-	39.6	11.9
04:00 PM - 05:00 PM	55.3	54.5	47.6	-	43.2	4.4
05:00 PM - 06:00 PM	56.4	55.6	48.7	-	44.4	4.3
06:00 PM - 07:00 PM	60.9	60.1	53.2	-	46.4	6.8
07:00 PM - 08:00 PM	60.0	59.2	52.3	-	55.3	-3.0
08:00 PM - 09:00 PM	54.7	53.9	47.0	-	39.5	7.5
09:00 PM - 10:00 PM	53.7	52.9	46.0	-	37.7	8.3
10:00 PM - 10:05 PM	57.5	56.7	-	52.8	36.4	16.4
10:05 PM - 10:10 PM	52.9	52.1	-	48.2	37.5	10.7
10:10 PM - 10:15 PM	44.5	43.7	-	39.8	37.2	2.6
10:15 PM - 10:20 PM	46.5	45.7	-	41.8	36.7	5.1
10:20 PM - 10:25 PM	50.4	49.6	-	45.7	37.2	8.5
10:25 PM - 10:30 PM	44.1	43.3	-	39.4	36.5	2.9
10:30 PM - 10:35 PM	44.7	43.9	-	40.0	37.5	2.5
10:35 PM - 10:40 PM	45.9	45.1	-	41.2	38.5	2.7
10:40 PM - 10:45 PM	45.9	45.1	-	41.2	38.6	2.6
10:45 PM - 10:50 PM	50.4	49.6	-	45.7	38.7	7.0
10:50 PM - 10:55 PM	49.0	48.2	-	44.3	39.7	4.6
10:55 PM - 11:00 PM	48.6	47.8	-	43.9	39.3	4.6
11:00 PM - 11:05 PM	57.5	56.7	-	52.8	42.7	10.1
11:05 PM - 11:10 PM	49.4	48.6	-	44.7	44.7	0.0
11:10 PM - 11:15 PM	55.6	54.8	-	50.9	44.6	6.3
11:15 PM - 11:20 PM	46.3	45.5	-	41.6	42.9	-1.3
11:20 PM - 11:25 PM	49.2	48.4	-	44.5	44.6	-0.1
11:25 PM - 11:30 PM	49.1	48.3	-	44.4	45.5	-1.1
11:30 PM - 11:35 PM	49.7	48.9	-	45.0	46.1	-1.1
11:35 PM - 11:40 PM	53.2	52.4	-	48.5	48.7	-0.2
11:40 PM - 11:45 PM	52.2	51.4	-	47.5	47.6	-0.1
11:45 PM - 11:50 PM	48.6	47.8	-	43.9	43.9	0.0
11:50 PM - 11:55 PM	53.0	52.2	-	48.3	42.6	5.7
11:55 PM - 12:00 AM	45.5	44.7	-	40.8	41.5	-0.7
12:00 AM - 12:05 AM	49.7	48.9	-	45.0	44.0	1.0
12:05 AM - 12:10 AM	52.6	51.8	-	47.9	48.5	-0.6
12:10 AM - 12:15 AM	54.5	53.7	-	49.8	50.7	-0.9
12:15 AM - 12:20 AM	55.2	54.4	-	50.5	50.1	0.4
12:20 AM - 12:25 AM	55.3	54.5	-	50.6	52.2	-1.6
12:25 AM - 12:30 AM	53.6	52.8	-	48.9	49.0	-0.1

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

Analysis / Test Report

Client : Rejana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023534-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-8
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลฮิดายา
Measurement Date May 29 - 30, 2024
Measurement by Santi Chakhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	51.1	50.3	-	46.4	47.1	-0.7
12:35 AM - 12:40 AM	50.3	49.5	-	45.6	44.5	1.1
12:40 AM - 12:45 AM	51.5	50.7	-	46.8	43.3	3.5
12:45 AM - 12:50 AM	50.4	49.6	-	45.7	42.9	2.8
12:50 AM - 12:55 AM	47.6	46.8	-	42.9	42.8	0.1
12:55 AM - 01:00 AM	45.9	45.1	-	41.2	40.6	0.6
01:00 AM - 01:05 AM	46.6	45.8	-	41.5	40.1	1.6
01:05 AM - 01:10 AM	44.7	43.9	-	40.0	39.9	0.1
01:10 AM - 01:15 AM	44.1	43.3	-	39.4	39.0	0.4
01:15 AM - 01:20 AM	43.3	42.5	-	38.6	37.8	0.8
01:20 AM - 01:25 AM	41.9	41.1	-	37.2	34.8	2.4
01:25 AM - 01:30 AM	38.9	38.1	-	34.2	34.1	0.1
01:30 AM - 01:35 AM	40.4	39.6	-	35.7	34.4	1.3
01:35 AM - 01:40 AM	40.3	39.5	-	35.6	35.0	0.6
01:40 AM - 01:45 AM	40.0	39.2	-	35.3	35.4	-0.1
01:45 AM - 01:50 AM	39.9	39.1	-	35.2	34.6	0.6
01:50 AM - 01:55 AM	41.2	40.4	-	36.5	34.8	1.7
01:55 AM - 02:00 AM	41.1	40.3	-	36.4	37.1	-1.7
02:00 AM - 02:05 AM	42.8	42.0	-	38.1	36.8	1.3
02:05 AM - 02:10 AM	43.0	42.2	-	38.3	36.6	1.7
02:10 AM - 02:15 AM	41.2	40.4	-	36.5	35.6	0.9
02:15 AM - 02:20 AM	43.0	42.2	-	38.3	35.9	2.4
02:20 AM - 02:25 AM	39.4	38.6	-	34.7	35.2	-0.5
02:25 AM - 02:30 AM	38.2	37.4	-	33.5	34.8	-1.3
02:30 AM - 02:35 AM	60.0	59.2	-	55.3	37.8	17.5
02:35 AM - 02:40 AM	42.1	41.3	-	37.4	35.3	2.1
02:40 AM - 02:45 AM	41.8	41.0	-	37.1	34.9	2.2
02:45 AM - 02:50 AM	41.5	40.7	-	36.8	34.3	2.5
02:50 AM - 02:55 AM	38.2	37.4	-	33.5	34.6	-1.1
02:55 AM - 03:00 AM	42.0	41.2	-	37.3	35.1	2.2
03:00 AM - 03:05 AM	38.5	37.7	-	33.8	34.8	-1.0
03:05 AM - 03:10 AM	39.1	38.3	-	34.4	34.8	-0.4
03:10 AM - 03:15 AM	40.7	39.9	-	35.5	34.9	0.6
03:15 AM - 03:20 AM	48.6	47.8	-	43.9	35.3	8.6
03:20 AM - 03:25 AM	42.1	41.3	-	37.4	35.0	2.4
03:25 AM - 03:30 AM	41.6	40.8	-	36.9	34.8	2.1
03:30 AM - 03:35 AM	43.8	43.0	-	41.1	35.7	5.4
03:35 AM - 03:40 AM	38.0	37.2	-	33.3	34.4	1.1
03:40 AM - 03:45 AM	39.2	38.4	-	34.5	34.5	0.0
03:45 AM - 03:50 AM	38.1	37.3	-	33.4	34.5	-1.1

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

Analysis / Test Report

Client : Rejana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023534-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-8
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลฮิดายา
Measurement Date May 29 - 30, 2024
Measurement by Santi Chakhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:50 AM - 03:55 AM	40.6	39.8	-	35.9	34.3	1.6
03:55 AM - 04:00 AM	39.7	38.9	-	35.0	35.1	-0.1
04:00 AM - 04:05 AM	39.3	38.5	-	34.6	34.5	0.1
04:05 AM - 04:10 AM	38.8	38.0	-	34.1	33.7	0.4
04:10 AM - 04:15 AM	41.6	42.8	-	38.9	34.7	4.2
04:15 AM - 04:20 AM	49.0	48.2	-	44.3	34.1	10.2
04:20 AM - 04:25 AM	41.5	40.7	-	36.8	34.5	2.3
04:25 AM - 04:30 AM	47.1	46.3	-	42.4	34.5	7.9
04:30 AM - 04:35 AM	39.2	38.4	-	34.5	33.9	0.6
04:35 AM - 04:40 AM	49.1	48.5	-	44.6	33.6	11.0
04:40 AM - 04:45 AM	63.9	63.1	-	59.2	36.9	22.3
04:45 AM - 04:50 AM	44.5	43.7	-	39.8	36.8	3.0
04:50 AM - 04:55 AM	50.0	49.2	-	45.3	37.3	8.0
04:55 AM - 05:00 AM	49.6	48.8	-	44.9	37.2	7.7
05:00 AM - 05:05 AM	43.6	40.8	-	36.9	36.1	0.8
05:05 AM - 05:10 AM	42.6	41.8	-	37.9	36.4	1.5
05:10 AM - 05:15 AM	46.6	45.8	-	41.9	35.9	6.0
05:15 AM - 05:20 AM	65.9	65.0	-	61.1	35.3	25.8
05:20 AM - 05:25 AM	44.2	43.4	-	39.5	35.5	4.0
05:25 AM - 05:30 AM	53.1	52.3	-	48.4	37.0	11.4
05:30 AM - 05:35 AM	47.6	46.8	-	42.9	36.5	6.4
05:35 AM - 05:40 AM	53.4	52.6	-	48.7	28.2	20.5
05:40 AM - 05:45 AM	51.8	51.0	-	47.1	38.5	8.6
05:45 AM - 05:50 AM	49.4	48.6	-	44.7	38.1	6.6
05:50 AM - 05:55 AM	53.5	52.7	-	48.8	39.4	9.4
05:55 AM - 06:00 AM	54.2	53.4	-	49.5	39.6	9.9
06:00 AM - 07:00 AM	55.9	55.1	48.2	-	41.9	6.3
07:00 AM - 08:00 AM	55.5	54.7	47.8	-	41.0	6.8
08:00 AM - 09:00 AM	57.2	57.4	49.5	-	40.2	9.3
09:00 AM - 10:00 AM	58.0	57.2	50.3	-	44.0	6.3
10:00 AM - 11:00 AM	59.8	59.0	52.1	-	47.3	4.8
11:00 AM - 12:00 PM	62.7	61.9	55.0	-	45.4	9.6
ค่าเฉลี่ย						5.10

Reference Method :
1 ISO 1996-1
2 ประกาศคณะกรรมการกำกับกิจการโทรคมนาคมแห่งชาติ เรื่อง หลักเกณฑ์และวิธีการตรวจวัดระดับเสียงรบกวนของระบบเสียงเกินกว่า 24 ชั่วโมง และระดับเสียงของเครื่องกำเนิดกระแสไฟฟ้าของสถานีวิทยุคมนาคมและสถานีโทรทัศน์ พ.ศ. 2567
เกณฑ์ฯ
1 ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ากำหนดระดับเสียงรบกวนและการสั่นสะเทือนของโรงงาน พ.ศ. 2548
2 ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดมาตรฐานเสียงและเสียงรบกวนที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
Remark:
1 ระดับเสียงจากแหล่งกำเนิด ทดสอบวันที่ 29-30 พฤษภาคม 2567
2 ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-8 ในวันที่ทดสอบ 29-30 พฤษภาคม 2567)
3 n/a: ไม่สามารถตรวจวัดระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023535-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-9
Parameter เสียงรบกวน
Location N2 : มัสยิดบุโลมัสลาม
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 823390

เวลา	ระดับเสียง (dB(A))					
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	56.5	55.7	48.8	-	44.4	4.4
01:00 PM - 02:00 PM	52.1	51.3	44.4	-	38.1	6.3
02:00 PM - 03:00 PM	52.8	52.0	45.1	-	38.1	7.0
03:00 PM - 04:00 PM	56.6	55.8	48.9	-	39.4	9.5
04:00 PM - 05:00 PM	55.6	54.8	47.9	-	39.6	8.3
05:00 PM - 06:00 PM	54.9	54.1	47.2	-	41.9	5.3
06:00 PM - 07:00 PM	57.8	57.0	50.1	-	45.0	5.1
07:00 PM - 08:00 PM	55.5	54.7	47.8	-	43.6	4.2
08:00 PM - 09:00 PM	54.6	53.8	46.9	-	40.2	6.7
09:00 PM - 10:00 PM	49.4	48.6	41.7	-	38.6	3.1
10:00 PM - 10:05 PM	44.4	43.6	-	39.7	37.5	2.2
10:05 PM - 10:10 PM	50.8	50.0	-	46.1	37.5	8.6
10:10 PM - 10:15 PM	52.3	51.5	-	47.6	38.0	9.6
10:15 PM - 10:20 PM	47.5	46.7	-	42.8	37.0	5.8
10:20 PM - 10:25 PM	43.9	43.1	-	39.2	37.2	2.0
10:25 PM - 10:30 PM	45.1	44.3	-	40.4	37.1	3.3
10:30 PM - 10:35 PM	46.2	45.4	-	41.5	38.6	2.9
10:35 PM - 10:40 PM	46.9	46.1	-	42.2	37.4	4.8
10:40 PM - 10:45 PM	49.2	48.4	-	44.5	37.6	6.9
10:45 PM - 10:50 PM	55.4	54.6	-	50.7	37.4	13.3
10:50 PM - 10:55 PM	46.9	46.1	-	42.2	37.5	4.7
10:55 PM - 11:00 PM	49.9	49.1	-	45.2	36.8	8.4
11:00 PM - 11:05 PM	56.2	55.4	-	51.5	36.1	15.4
11:05 PM - 11:10 PM	42.1	41.3	-	37.4	37.0	0.4
11:10 PM - 11:15 PM	42.2	41.4	-	37.5	36.5	1.0
11:15 PM - 11:20 PM	44.4	43.6	-	39.7	37.8	1.9
11:20 PM - 11:25 PM	43.7	42.9	-	39.0	38.1	0.9
11:25 PM - 11:30 PM	44.1	43.3	-	39.4	38.4	1.0
11:30 PM - 11:35 PM	42.4	41.6	-	37.7	37.2	0.5
11:35 PM - 11:40 PM	42.3	41.5	-	37.6	37.3	0.3
11:40 PM - 11:45 PM	52.1	51.3	-	47.4	37.6	9.8
11:45 PM - 11:50 PM	44.6	43.8	-	39.9	37.7	2.2
11:50 PM - 11:55 PM	47.5	46.7	-	42.8	37.8	4.9
11:55 PM - 12:00 AM	46.4	45.6	-	41.7	37.7	4.0
12:00 AM - 12:05 AM	47.8	47.0	-	43.1	36.0	7.1
12:05 AM - 12:10 AM	42.4	41.6	-	37.7	35.3	2.4
12:10 AM - 12:15 AM	41.0	40.2	-	36.3	35.5	0.8
12:15 AM - 12:20 AM	43.9	43.1	-	39.2	35.9	3.3
12:20 AM - 12:25 AM	43.7	42.9	-	39.0	36.8	2.2
12:25 AM - 12:30 AM	41.0	40.2	-	36.3	35.8	0.5

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023535-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-9
Parameter เสียงรบกวน
Location N2 : มัสยิดบุโลมัสลาม
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 823390

เวลา	ระดับเสียง (dB(A))					
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	43.8	43.0	-	39.1	36.0	3.1
12:35 AM - 12:40 AM	48.9	48.1	-	44.2	36.7	7.5
12:40 AM - 12:45 AM	44.2	43.4	-	39.5	35.7	3.8
12:45 AM - 12:50 AM	42.7	41.9	-	38.0	34.6	3.4
12:50 AM - 12:55 AM	46.9	46.1	-	42.2	34.8	7.4
12:55 AM - 01:00 AM	41.4	40.6	-	36.7	34.9	1.8
01:00 AM - 01:05 AM	46.6	45.8	-	41.9	35.4	6.5
01:05 AM - 01:10 AM	40.1	39.3	-	35.4	35.1	0.3
01:10 AM - 01:15 AM	38.9	38.1	-	34.2	35.3	-1.1
01:15 AM - 01:20 AM	56.2	55.4	-	51.5	34.9	16.6
01:20 AM - 01:25 AM	47.0	41.2	-	37.3	34.2	3.1
01:25 AM - 01:30 AM	43.1	42.3	-	38.4	35.3	3.1
01:30 AM - 01:35 AM	45.2	44.5	-	40.6	34.5	6.1
01:35 AM - 01:40 AM	46.9	46.1	-	42.2	34.0	8.2
01:40 AM - 01:45 AM	40.9	40.1	-	36.2	34.6	1.6
01:45 AM - 01:50 AM	37.6	36.8	-	32.9	33.9	-1.0
01:50 AM - 01:55 AM	42.7	41.9	-	38.0	34.3	3.7
01:55 AM - 02:00 AM	43.6	42.8	-	38.9	33.9	5.0
02:00 AM - 02:05 AM	40.6	39.8	-	35.9	33.7	2.2
02:05 AM - 02:10 AM	38.7	37.9	-	34.0	33.7	0.3
02:10 AM - 02:15 AM	38.9	38.1	-	34.2	33.5	0.7
02:15 AM - 02:20 AM	43.3	42.5	-	38.6	33.9	4.7
02:20 AM - 02:25 AM	37.3	36.5	-	32.6	33.8	-1.2
02:25 AM - 02:30 AM	46.9	46.1	-	42.2	33.7	8.5
02:30 AM - 02:35 AM	38.9	38.1	-	34.2	34.6	-0.4
02:35 AM - 02:40 AM	46.8	46.0	-	42.1	33.7	8.4
02:40 AM - 02:45 AM	37.8	37.0	-	33.1	33.7	-0.6
02:45 AM - 02:50 AM	36.7	35.9	-	32.0	33.0	-1.0
02:50 AM - 02:55 AM	39.4	38.6	-	34.7	33.2	1.5
02:55 AM - 03:00 AM	41.5	40.7	-	36.8	33.7	3.1
03:00 AM - 03:05 AM	37.9	37.1	-	33.2	33.7	-0.5
03:05 AM - 03:10 AM	42.0	41.2	-	37.3	33.9	3.4
03:10 AM - 03:15 AM	41.7	40.9	-	37.0	33.6	3.1
03:15 AM - 03:20 AM	44.5	43.7	-	39.8	33.6	6.1
03:20 AM - 03:25 AM	37.5	36.7	-	32.8	34.2	-1.4
03:25 AM - 03:30 AM	37.1	36.3	-	32.4	33.6	-1.2
03:30 AM - 03:35 AM	38.4	37.6	-	33.7	32.7	1.0
03:35 AM - 03:40 AM	37.0	36.2	-	32.3	33.0	-0.7
03:40 AM - 03:45 AM	49.0	48.2	-	44.3	34.5	9.8
03:45 AM - 03:50 AM	37.8	37.0	-	33.1	34.2	-1.1

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023535-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-9
Parameter เสียงรบกวน
Location N2 : มัสยิดบุโลมัสลาม
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 823390

เวลา	ระดับเสียง (dB(A))					
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:50 AM - 03:55 AM	38.5	37.7	-	33.8	34.9	-1.1
03:55 AM - 04:00 AM	41.7	40.9	-	37.0	33.2	3.8
04:00 AM - 04:05 AM	40.0	39.2	-	35.3	32.0	3.3
04:05 AM - 04:10 AM	35.7	34.9	-	31.0	31.5	-0.5
04:10 AM - 04:15 AM	35.5	34.7	-	30.8	32.1	-1.3
04:15 AM - 04:20 AM	37.7	36.9	-	33.0	32.4	0.6
04:20 AM - 04:25 AM	42.0	41.2	-	37.3	37.2	0.1
04:25 AM - 04:30 AM	49.6	48.8	-	44.9	37.9	7.0
04:30 AM - 04:35 AM	63.4	62.6	-	58.7	38.3	20.4
04:35 AM - 04:40 AM	43.2	42.4	-	38.5	35.8	2.7
04:40 AM - 04:45 AM	39.3	38.5	-	34.6	34.7	-0.1
04:45 AM - 04:50 AM	39.8	39.0	-	35.1	35.3	-0.2
04:50 AM - 04:55 AM	41.7	40.4	-	36.5	34.9	1.6
04:55 AM - 05:00 AM	43.5	42.7	-	38.8	34.9	3.9
05:00 AM - 05:05 AM	49.9	40.5	-	36.2	35.4	0.8
05:05 AM - 05:10 AM	44.3	43.5	-	39.6	35.2	4.4
05:10 AM - 05:15 AM	53.0	52.2	-	48.3	34.6	13.7
05:15 AM - 05:20 AM	44.4	43.6	-	39.7	33.8	5.9
05:20 AM - 05:25 AM	42.5	41.7	-	37.8	33.6	4.2
05:25 AM - 05:30 AM	43.7	42.9	-	39.0	34.5	4.5
05:30 AM - 05:35 AM	49.5	48.7	-	44.8	35.0	9.8
05:35 AM - 05:40 AM	49.1	48.3	-	44.4	35.8	8.6
05:40 AM - 05:45 AM	56.6	55.8	-	51.9	40.7	11.2
05:45 AM - 05:50 AM	56.3	55.5	-	51.6	39.3	12.3
05:50 AM - 05:55 AM	51.9	51.1	-	47.2	40.0	7.2
05:55 AM - 06:00 AM	54.4	53.6	-	49.7	37.2	12.5
06:00 AM - 07:00 AM	55.6	55.0	48.1	-	41.2	6.9
07:00 AM - 08:00 AM	62.0	61.2	54.3	-	41.2	12.6
08:00 AM - 09:00 AM	58.0	57.2	50.3	-	41.6	8.7
09:00 AM - 10:00 AM	55.3	54.5	47.6	-	41.0	6.6
10:00 AM - 11:00 AM	55.8	55.0	48.1	-	43.3	4.8
11:00 AM - 12:00 PM	55.3	54.5	47.6	-	43.8	3.8
ค่าบวกรบกวน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง ระดับเสียงรบกวนจากแหล่งกำเนิดเสียงประเภทโรงงาน ระดับเสียงที่ไม่เกินมาตรฐาน ลงวันที่ 24 มกราคม พ.ศ. 2567

มาตรฐาน
1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง กำหนดค่าระดับเสียงรบกวนและวิธีการตรวจวัดระดับเสียงรบกวนจากแหล่งกำเนิดเสียงประเภทโรงงาน พ.ศ. 2549
2. ประกาศกรมการขนส่งทางบก เรื่อง การกำหนดค่ามาตรฐานและลักษณะเครื่องยนต์ที่ติดตั้งในรถบรรทุก, รถบรรทุกที่ใช้เป็นรถแข่งขันกีฬาทางบก พ.ศ. 2561

Remark:
1. ระดับเสียงรบกวนขณะดำเนินการ หมายถึง วันที่ 30-31 พฤษภาคม 2567
2. ระดับเสียงที่อยู่ขณะระดับเสียงรบกวนไม่มีการรบกวน (Sample No.2450169-9 วันที่ตรวจวัด 30-31 พฤษภาคม 2567)
3. n/a: ไม่สามารถคำนวณค่าระดับเสียงรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดเสียงมีผลกระทบต่อระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023536-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-10
Parameter เสียงรบกวน
Location N2 : มัสยิดบุโลมัสลาม
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 823390

เวลา	ระดับเสียง (dB(A))					
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	57.8	57.0	50.1	-	47.4	2.7
01:00 PM - 02:00 PM	53.2	54.4	47.5	-	42.2	5.3
02:00 PM - 03:00 PM	54.6	53.8	46.9	-	39.6	7.3
03:00 PM - 04:00 PM	56.2	55.4	48.5	-	41.6	6.9
04:00 PM - 05:00 PM	58.9	58.1	52.2	-	47.9	4.3
05:00 PM - 06:00 PM	64.0	63.2	56.3	-	43.2	13.1
06:00 PM - 07:00 PM	58.1	57.3	50.4	-	48.0	2.4
07:00 PM - 08:00 PM	56.9	56.1	49.2	-	48.1	1.1
08:00 PM - 09:00 PM	58.6	57.8	50.9	-	47.7	3.2
09:00 PM - 10:00 PM	51.4	50.6	41.7	-	37.5	6.2
10:00 PM - 10:05 PM	45.5	44.7	-	40.8	38.3	2.5
10:05 PM - 10:10 PM	49.4	48.6	-	44.7	38.8	5.9
10:10 PM - 10:15 PM	45.8	45.0	-	41.1	38.5	2.6
10:15 PM - 10:20 PM	46.2	45.4	-	41.5	38.2	3.3
10:20 PM - 10:25 PM	49.6	48.8	-	44.9	35.9	9.0
10:25 PM - 10:30 PM	47.4	46.6	-	42.7	38.9	3.8
10:30 PM - 10:35 PM	44.8	44.0	-	40.1	39.0	1.1
10:35 PM - 10:40 PM	55.5	54.7	-	50.8	38.8	12.0
10:40 PM - 10:45 PM	50.2	49.4	-	45.5	35.9	9.6
10:45 PM - 10:50 PM	44.3	43.5	-	39.6	34.9	4.7
10:50 PM - 10:55 PM	50.7	49.9	-	46.0	35.7	10.3
10:55 PM - 11:00 PM	58.2	57.4	-	53.5	36.7	16.8
11:00 PM - 11:05 PM	46.7	45.9	-	42.0	36.9	5.1
11:05 PM - 11:10 PM	43.0	42.2	-	38.3	35.9	2.4
11:10 PM - 11:15 PM	54.5	53.7	-	49.8	36.8	13.0
11:15 PM - 11:20 PM	42.2	41.5	-	37.6	36.4	1.2
11:20 PM - 11:25 PM	50.1	49.3	-	45.4	36.3	9.1
11:25 PM - 11:30 PM	43.1	42.5	-	38.6	35.6	3.0
11:30 PM - 11:35 PM	52.1	51.3	-	47.4	36.4	11.0
11:35 PM - 11:40 PM	44.9	44.1	-	40.2	35.7	4.5
11:40 PM - 11:45 PM	45.0	44.2	-	40.3	35.2	5.1
11:45 PM - 11:50 PM	47.7	46.9	-	43.0	35.5	7.5
11:50 PM - 11:55 PM	44.0	43.2	-	39.3	35.8	3.5
11:55 PM - 12:00 AM	45.7	44.9	-	41.0	36.5	4.5
12:00 AM - 12:05 AM	42.1	41.3	-	37.4	35.3	2.1
12:05 AM - 12:10 AM	44.5	43.7	-	39.8	36.4	3.4
12:10 AM - 12:15 AM	42.9	42.1	-	38.2	36.1	2.1
12:15 AM - 12:20 AM	53.4	52.6	-	48.7	35.7	13.0
12:20 AM - 12:25 AM	41.5	40.7	-	36.8	35.4	1.4
12:25 AM - 12:30 AM	43.6	42.8	-	38.9	36.8	2.1

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023536-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-10
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaikhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	41.8	41.0		37.1	35.5	1.6
12:35 AM - 12:40 AM	40.1	39.1		35.4	36.8	-1.4
12:40 AM - 12:45 AM	44.2	43.5	-	39.6	34.7	4.9
12:45 AM - 12:50 AM	40.6	39.8	-	35.9	33.8	2.1
12:50 AM - 12:55 AM	44.2	43.4	-	39.5	34.2	5.3
12:55 AM - 01:00 AM	43.7	42.9	-	39.0	34.3	4.7
01:00 AM - 01:05 AM	40.0	39.2	-	35.3	33.8	1.5
01:05 AM - 01:10 AM	37.8	37.0	-	33.1	34.3	1.2
01:10 AM - 01:15 AM	39.5	38.7	-	34.8	34.7	0.1
01:15 AM - 01:20 AM	38.1	37.3	-	33.4	34.4	-1.0
01:20 AM - 01:25 AM	40.8	40.0	-	36.1	34.2	1.9
01:25 AM - 01:30 AM	55.9	55.1	-	51.2	33.7	17.5
01:30 AM - 01:35 AM	41.7	40.9	-	37.0	33.3	3.7
01:35 AM - 01:40 AM	40.4	39.6	-	35.7	33.5	2.2
01:40 AM - 01:45 AM	47.2	46.4	-	42.5	33.3	9.2
01:45 AM - 01:50 AM	38.2	37.4	-	33.5	32.7	0.8
01:50 AM - 01:55 AM	36.3	35.5	-	31.6	32.3	-0.7
01:55 AM - 02:00 AM	36.5	35.7	-	31.8	33.3	-1.5
02:00 AM - 02:05 AM	37.0	36.2	-	32.3	33.3	-1.0
02:05 AM - 02:10 AM	38.4	37.6	-	33.7	33.0	0.7
02:10 AM - 02:15 AM	37.2	36.4	-	32.5	32.2	0.3
02:15 AM - 02:20 AM	38.3	37.5	-	33.6	33.8	-0.2
02:20 AM - 02:25 AM	38.1	37.3	-	33.4	33.9	-0.5
02:25 AM - 02:30 AM	42.7	41.9	-	38.0	34.6	3.4
02:30 AM - 02:35 AM	37.7	36.9	-	33.0	34.0	-1.0
02:35 AM - 02:40 AM	61.3	60.5	-	56.6	35.0	21.6
02:40 AM - 02:45 AM	40.1	39.3	-	35.4	34.5	0.9
02:45 AM - 02:50 AM	38.9	38.1	-	34.2	33.5	0.7
02:50 AM - 02:55 AM	41.4	40.6	-	36.7	33.9	2.8
02:55 AM - 03:00 AM	41.6	40.8	-	36.9	33.9	3.0
03:00 AM - 03:05 AM	37.1	36.3	-	32.4	33.5	-1.1
03:05 AM - 03:10 AM	36.7	35.9	-	32.0	33.6	-1.6
03:10 AM - 03:15 AM	39.0	38.2	-	34.3	34.8	-0.5
03:15 AM - 03:20 AM	40.6	39.8	-	35.9	34.8	1.1
03:20 AM - 03:25 AM	39.6	38.8	-	34.9	34.2	0.7
03:25 AM - 03:30 AM	38.7	37.9	-	34.0	33.8	0.2
03:30 AM - 03:35 AM	44.2	43.4	-	39.5	34.3	5.2
03:35 AM - 03:40 AM	39.7	38.9	-	35.0	34.4	0.6
03:40 AM - 03:45 AM	37.0	36.2	-	32.3	33.9	-1.6
03:45 AM - 03:50 AM	39.9	39.1	-	35.2	33.5	1.7

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023536-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-10
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaikhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
01:50 AM - 01:55 AM	40.0	39.2		35.3	33.7	1.6
01:55 AM - 02:00 AM	36.8	36.0		32.1	34.0	-1.9
04:00 AM - 04:05 AM	48.6	47.8	-	43.9	34.5	9.4
04:05 AM - 04:10 AM	44.6	43.8	-	39.9	35.6	4.3
04:10 AM - 04:15 AM	49.5	48.7	-	44.8	36.1	8.7
04:15 AM - 04:20 AM	51.1	50.3		46.4	45.6	0.8
04:20 AM - 04:25 AM	62.1	61.3		57.4	49.2	8.2
04:25 AM - 04:30 AM	58.2	57.5		53.6	41.6	12.0
04:30 AM - 04:35 AM	50.4	49.6		45.7	42.3	3.4
04:35 AM - 04:40 AM	53.2	52.4		48.5	41.4	7.1
04:40 AM - 04:45 AM	44.3	43.5		39.6	40.9	-1.3
04:45 AM - 04:50 AM	44.6	43.8		39.9	40.4	-0.5
04:50 AM - 04:55 AM	44.2	43.4		39.5	40.0	-0.5
04:55 AM - 05:00 AM	46.0	45.2		41.3	40.3	1.0
05:00 AM - 05:05 AM	48.0	47.2		43.3	41.5	1.8
05:05 AM - 05:10 AM	46.6	45.8		41.9	40.8	1.1
05:10 AM - 05:15 AM	50.3	49.5		45.6	41.3	4.3
05:15 AM - 05:20 AM	47.0	46.2	-	42.3	40.8	1.5
05:20 AM - 05:25 AM	50.6	49.8		45.9	41.8	4.1
05:25 AM - 05:30 AM	59.0	58.2		54.3	47.2	12.1
05:30 AM - 05:35 AM	50.1	49.3		45.4	41.4	4.0
05:35 AM - 05:40 AM	49.6	48.8		44.9	39.1	5.8
05:40 AM - 05:45 AM	51.9	51.1		47.2	40.3	6.9
05:45 AM - 05:50 AM	57.2	56.4		52.5	44.5	8.0
05:50 AM - 05:55 AM	52.3	51.5		47.6	40.1	7.5
05:55 AM - 06:00 AM	56.8	56.0		52.1	41.4	10.7
06:00 AM - 07:00 AM	58.1	57.3	52.4		43.7	8.7
07:00 AM - 08:00 AM	63.9	63.1	56.2		58.0	1.8
08:00 AM - 09:00 AM	58.1	57.3	50.4		47.3	3.1
09:00 AM - 10:00 AM	58.4	57.6	50.7		44.2	6.5
10:00 AM - 11:00 AM	56.2	55.4	48.5		45.0	3.5
11:00 AM - 12:00 PM	54.6	53.8	46.9		42.6	4.3
ค่าเฉลี่ยรวม						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567 มาตรฐาน
1. ประกาศกรมควบคุมมลพิษ เรื่อง กำหนดค่าระดับเสียงรบกวนและค่าแม่แบบที่เกี่ยวข้องจากประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกรมควบคุมมลพิษ เรื่อง กำหนดมาตรฐานและวิธีตรวจวัดเสียงสำหรับกิจการที่ประกอบกิจการที่เป็นเหตุรำคาญต่อชุมชน พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ตรวจวันที่ 31 พฤษภาคม-01 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-10 ในมัสยิดฯ วันที่ 31 พฤษภาคม-01 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดต่ำกว่าระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023537-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-11
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaikhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	60.4	59.6	50.7		54.6	1.9
01:00 PM - 02:00 PM	58.7	57.9	51.0		44.1	6.9
02:00 PM - 03:00 PM	57.1	56.3	49.4		45.0	4.4
03:00 PM - 04:00 PM	59.4	58.6	51.7		40.8	10.9
04:00 PM - 05:00 PM	56.6	55.7	49.1		45.4	3.8
05:00 PM - 06:00 PM	57.9	56.8	51.4		45.6	4.8
06:00 PM - 07:00 PM	58.9	57.8	52.4		48.5	3.9
07:00 PM - 08:00 PM	61.5	60.4	55.0		57.5	7.5
08:00 PM - 09:00 PM	56.2	55.1	49.7		41.7	8.0
09:00 PM - 10:00 PM	55.2	54.1	40.7		39.9	8.8
10:00 PM - 10:05 PM	59.0	57.9		55.5	38.6	16.9
10:05 PM - 10:10 PM	54.4	53.7		50.9	39.7	11.2
10:10 PM - 10:15 PM	46.0	44.9		42.5	39.4	3.1
10:15 PM - 10:20 PM	48.0	46.9		44.5	38.9	5.6
10:20 PM - 10:25 PM	51.9	50.8		48.4	39.4	9.0
10:25 PM - 10:30 PM	45.6	44.5		42.1	38.7	3.4
10:30 PM - 10:35 PM	46.2	45.1		42.7	39.7	3.0
10:35 PM - 10:40 PM	47.4	46.3		43.9	40.7	3.2
10:40 PM - 10:45 PM	47.4	46.3		43.9	40.8	3.1
10:45 PM - 10:50 PM	51.9	50.8		48.4	40.9	7.5
10:50 PM - 10:55 PM	50.5	49.4		47.0	41.9	5.1
10:55 PM - 11:00 PM	50.1	49.0		46.6	41.3	5.3
11:00 PM - 11:05 PM	59.0	57.9		55.5	44.9	19.6
11:05 PM - 11:10 PM	50.9	49.8		47.4	46.9	0.5
11:10 PM - 11:15 PM	57.1	56.0		53.6	46.8	6.8
11:15 PM - 11:20 PM	47.8	46.7		44.3	45.1	-0.8
11:20 PM - 11:25 PM	50.7	49.6		47.2	46.8	0.4
11:25 PM - 11:30 PM	50.6	49.5	-	47.1	47.7	-0.6
11:30 PM - 11:35 PM	51.2	50.1		47.7	48.3	-0.6
11:35 PM - 11:40 PM	54.7	53.6		51.2	50.9	0.3
11:40 PM - 11:45 PM	53.7	52.6		50.2	49.8	0.4
11:45 PM - 11:50 PM	50.1	49.0		46.6	46.1	0.5
11:50 PM - 11:55 PM	54.5	53.4		51.0	44.8	6.2
11:55 PM - 12:00 AM	47.8	46.9		43.5	41.7	0.2
12:00 AM - 12:05 AM	51.2	50.1		47.7	46.2	1.5
12:05 AM - 12:10 AM	54.1	53.0		50.6	50.7	-0.1
12:10 AM - 12:15 AM	56.0	54.9		52.5	52.9	-0.4
12:15 AM - 12:20 AM	56.7	55.6		53.2	52.3	0.9
12:20 AM - 12:25 AM	56.8	55.7		53.3	54.4	-1.1
12:25 AM - 12:30 AM	55.1	54.0		51.6	51.7	-0.1

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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023537-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-11
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaikhana
Sound Level Meter 623390

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	52.6	51.5		49.1	49.3	0.2
12:35 AM - 12:40 AM	51.8	50.7		48.3	46.7	1.6
12:40 AM - 12:45 AM	53.0	51.9		49.5	45.5	4.0
12:45 AM - 12:50 AM	51.9	50.8		48.4	45.1	3.3
12:50 AM - 12:55 AM	49.1	48.0		45.6	45.0	0.6
12:55 AM - 01:00 AM	47.4	46.3		43.9	42.8	1.1
01:00 AM - 01:05 AM	48.1	47.0		44.6	42.5	2.1
01:05 AM - 01:10 AM	46.2	45.1		42.7	42.1	0.6
01:10 AM - 01:15 AM	45.6	44.5		42.1	41.2	0.9
01:15 AM - 01:20 AM	44.8	43.7		41.3	40.0	1.3
01:20 AM - 01:25 AM	41.4	40.3		39.9	37.0	2.9
01:25 AM - 01:30 AM	40.4	39.3		36.9	36.3	0.6
01:30 AM - 01:35 AM	41.9	40.8		38.4	36.6	1.8
01:35 AM - 01:40 AM	41.8	40.7		38.3	37.2	1.1
01:40 AM - 01:45 AM	41.5	40.4		38.0	37.6	0.4
01:45 AM - 01:50 AM	41.4	40.3		37.9	36.8	1.1
01:50 AM - 01:55 AM	44.7	43.6		41.2	37.0	4.2
01:55 AM - 02:00 AM	42.6	41.5		39.1	39.7	-0.6
02:00 AM - 02:05 AM	44.3	43.2		40.8	39.0	1.8
02:05 AM - 02:10 AM	44.5	43.4		41.0	38.8	2.2
02:10 AM - 02:15 AM	42.7	41.6		39.2	37.8	1.4
02:15 AM - 02:20 AM	44.5	43.4		41.0	38.1	2.9
02:20 AM - 02:25 AM	40.9	39.8		37.4	37.4	0.0
02:25 AM - 02:30 AM	39.7	38.6		36.2	37.0	-0.8
02:30 AM - 02:35 AM	61.5	60.4		58.0	40.0	18.0
02:35 AM - 02:40 AM	43.6	42.5		40.1	37.5	2.6
02:40 AM - 02:45 AM	43.2	42.1		39.8	37.1	2.7
02:45 AM - 02:50 AM	41.0	39.9		37.5	34.5	3.0
02:50 AM - 02:55 AM	39.7	38.6		36.2	35.6	0.6
02:55 AM - 03:00 AM	43.5	42.4		40.0	37.3	2.7
03:00 AM - 03:05 AM	40.0	38.9		36.5	37.0	-0.5
03:05 AM - 03:10 AM	43.6	42.5		40.1	37.0	3.1
03:10 AM - 03:15 AM	41.7	40.6		38.2	37.6	0.6
03:15 AM - 03:20 AM	42.1	41.0		38.6	37.5	3.1
03:20 AM - 03:25 AM	43.6	42.5		40.1	37.2	2.9
03:25 AM - 03:30 AM	41.7	40.6		38.2	37.0	2.6
03:30 AM - 03:35 AM	47.1	46.0		43.6	37.4	6.4
03:35 AM - 03:40 AM	45.3	44.2		41.8	38.6	3.6
03:40 AM - 03:45 AM	40.7	39.6		37.2	36.7	0.5
03:45 AM - 03:50 AM	39.6	38.5		36.1	36.7	-0.6

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023537-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-11
Parameter เสียงรบกวน
Location NZ : มัสยิดบุรีสัตตาน
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:50 AM - 03:55 AM	42.1	41.0	-	38.6	26.5	2.1
03:55 AM - 04:00 AM	41.2	40.1	-	37.7	37.3	0.4
04:00 AM - 04:05 AM	40.8	39.7	-	37.1	36.7	0.6
04:05 AM - 04:10 AM	40.3	39.2	-	36.8	35.9	0.9
04:10 AM - 04:15 AM	45.1	44.0	-	41.6	36.9	4.7
04:15 AM - 04:20 AM	50.5	49.4	-	47.0	36.3	10.7
04:20 AM - 04:25 AM	43.0	41.9	-	39.5	36.7	2.8
04:25 AM - 04:30 AM	48.6	47.5	-	45.1	36.7	8.4
04:30 AM - 04:35 AM	40.7	39.6	-	37.2	36.1	1.1
04:35 AM - 04:40 AM	50.8	49.7	-	47.3	35.8	11.5
04:40 AM - 04:45 AM	65.4	64.3	-	61.9	39.1	22.8
04:45 AM - 04:50 AM	46.0	44.9	-	42.5	39.0	3.5
04:50 AM - 04:55 AM	51.5	50.4	-	48.0	39.5	8.5
04:55 AM - 05:00 AM	51.1	50.0	-	47.6	39.4	8.2
05:00 AM - 05:05 AM	43.1	42.0	-	39.5	38.2	1.3
05:05 AM - 05:10 AM	44.1	43.0	-	40.6	38.6	2.0
05:10 AM - 05:15 AM	48.1	47.0	-	44.6	38.1	6.5
05:15 AM - 05:20 AM	67.3	66.2	-	63.8	37.5	26.3
05:20 AM - 05:25 AM	45.7	44.6	-	42.2	37.7	4.5
05:25 AM - 05:30 AM	54.6	53.5	-	51.1	39.2	11.9
05:30 AM - 05:35 AM	49.1	48.0	-	45.6	38.7	6.9
05:35 AM - 05:40 AM	54.9	53.8	-	51.4	40.4	11.0
05:40 AM - 05:45 AM	53.1	52.2	-	49.8	40.7	9.1
05:45 AM - 05:50 AM	50.9	49.8	-	47.4	40.3	7.1
05:50 AM - 05:55 AM	55.0	53.9	-	51.5	41.6	9.9
05:55 AM - 06:00 AM	55.7	54.6	-	52.2	41.8	10.4
06:00 AM - 07:00 AM	57.4	56.3	50.9	-	44.1	6.8
07:00 AM - 08:00 AM	57.0	55.9	50.5	-	43.2	7.3
08:00 AM - 09:00 AM	54.7	53.6	48.2	-	47.4	5.8
09:00 AM - 10:00 AM	59.5	58.4	53.0	-	46.2	6.8
10:00 AM - 11:00 AM	61.3	60.2	54.8	-	49.5	5.3
11:00 AM - 12:00 PM	62.4	61.3	55.9	-	47.4	8.5
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระยะเวลาเฝ้าสังเกตอย่างต่อเนื่อง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการปรับลดเครื่องกำเนิดเสียงรบกวน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงรบกวนและค่าความสั่นสะเทือนที่เกิดจากการประกอบกิจการที่มีผลกระทบต่อชุมชน พ.ศ. 2561

Remark:
1. ระดับเสียงรบกวนแหล่งกำเนิด ตามตารางวัน วันที่ 01-02 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-11 วันที่ตารางวัน 01-02 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนนี้ได้จากระดับเสียงรบกวนแหล่งกำเนิดและการระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023538-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-12
Parameter เสียงรบกวน
Location NZ : มัสยิดบุรีสัตตาน
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	58.0	56.9	51.5	-	46.6	4.9
01:00 PM - 02:00 PM	53.6	52.5	47.1	-	40.2	6.8
02:00 PM - 03:00 PM	54.1	53.0	47.6	-	40.3	7.5
03:00 PM - 04:00 PM	58.1	57.0	51.6	-	41.6	10.0
04:00 PM - 05:00 PM	57.1	56.0	50.6	-	41.8	8.8
05:00 PM - 06:00 PM	56.4	55.3	49.9	-	44.1	5.8
06:00 PM - 07:00 PM	59.1	58.0	52.8	-	47.2	5.6
07:00 PM - 08:00 PM	57.0	55.9	50.5	-	45.8	4.7
08:00 PM - 09:00 PM	56.1	55.0	49.6	-	47.4	2.2
09:00 PM - 10:00 PM	50.9	49.8	44.4	-	40.8	3.6
10:00 PM - 10:05 PM	45.9	44.8	-	42.4	39.7	2.7
10:05 PM - 10:10 PM	52.3	51.2	-	48.8	39.7	9.1
10:10 PM - 10:15 PM	53.8	52.7	-	50.3	40.2	10.1
10:15 PM - 10:20 PM	49.0	47.9	-	45.5	39.2	6.3
10:20 PM - 10:25 PM	45.4	44.3	-	41.9	39.4	2.5
10:25 PM - 10:30 PM	46.6	45.5	-	43.1	39.3	3.8
10:30 PM - 10:35 PM	47.7	46.6	-	44.2	40.8	3.4
10:35 PM - 10:40 PM	48.4	47.3	-	44.9	39.6	5.3
10:40 PM - 10:45 PM	50.7	49.6	-	47.2	39.8	7.4
10:45 PM - 10:50 PM	56.9	55.8	-	53.4	39.8	13.8
10:50 PM - 10:55 PM	48.4	47.3	-	44.9	39.7	5.2
10:55 PM - 11:00 PM	51.4	50.3	-	47.9	39.0	8.9
11:00 PM - 11:05 PM	57.7	56.6	-	54.2	38.3	15.9
11:05 PM - 11:10 PM	43.6	42.5	-	40.1	39.2	0.9
11:10 PM - 11:15 PM	41.7	42.6	-	40.2	38.7	1.5
11:15 PM - 11:20 PM	45.9	44.8	-	42.4	40.0	2.4
11:20 PM - 11:25 PM	45.2	44.1	-	41.7	40.3	1.4
11:25 PM - 11:30 PM	45.6	44.5	-	42.1	40.6	1.5
11:30 PM - 11:35 PM	43.9	42.8	-	40.4	39.4	1.0
11:35 PM - 11:40 PM	43.8	42.7	-	40.3	39.5	0.8
11:40 PM - 11:45 PM	53.6	52.5	-	50.1	39.8	10.3
11:45 PM - 11:50 PM	46.1	45.0	-	42.6	39.9	2.7
11:50 PM - 11:55 PM	49.0	47.9	-	45.5	40.1	5.4
11:55 PM - 12:00 AM	47.9	46.8	-	44.4	39.4	5.0
12:00 AM - 12:05 AM	49.3	48.2	-	45.8	38.2	7.6
12:05 AM - 12:10 AM	43.9	42.8	-	40.4	37.5	2.9
12:10 AM - 12:15 AM	44.3	43.4	-	41.0	37.7	3.3
12:15 AM - 12:20 AM	45.4	44.3	-	41.9	38.1	3.8
12:20 AM - 12:25 AM	44.2	44.1	-	41.7	39.5	2.7
12:25 AM - 12:30 AM	42.5	41.4	-	39.0	38.0	1.0

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023538-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-12
Parameter เสียงรบกวน
Location NZ : มัสยิดบุรีสัตตาน
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	45.1	44.2	-	41.8	38.2	3.6
12:35 AM - 12:40 AM	50.4	49.3	-	46.9	38.9	8.0
12:40 AM - 12:45 AM	45.7	44.6	-	42.2	37.9	4.3
12:45 AM - 12:50 AM	44.2	43.1	-	40.7	36.8	3.9
12:50 AM - 12:55 AM	48.4	47.3	-	44.9	37.0	7.9
12:55 AM - 01:00 AM	42.9	41.8	-	39.4	37.1	2.3
01:00 AM - 01:05 AM	48.1	47.0	-	44.5	37.6	7.0
01:05 AM - 01:10 AM	41.6	40.5	-	38.1	37.3	0.8
01:10 AM - 01:15 AM	40.4	39.3	-	36.9	37.5	-0.6
01:15 AM - 01:20 AM	57.7	56.6	-	54.2	37.1	17.1
01:20 AM - 01:25 AM	43.5	42.4	-	40.0	36.4	3.6
01:25 AM - 01:30 AM	44.6	43.5	-	41.1	37.5	3.6
01:30 AM - 01:35 AM	46.8	45.7	-	43.3	36.7	6.6
01:35 AM - 01:40 AM	48.4	47.3	-	44.9	36.2	8.7
01:40 AM - 01:45 AM	42.4	41.3	-	38.9	36.8	2.1
01:45 AM - 01:50 AM	39.3	38.0	-	35.6	36.1	-0.5
01:50 AM - 01:55 AM	44.2	43.1	-	40.7	36.5	4.2
01:55 AM - 02:00 AM	43.1	44.0	-	41.6	36.1	5.5
02:00 AM - 02:05 AM	42.1	41.0	-	38.6	35.9	2.7
02:05 AM - 02:10 AM	40.2	39.1	-	36.7	35.9	0.8
02:10 AM - 02:15 AM	40.4	39.3	-	36.9	35.7	1.2
02:15 AM - 02:20 AM	44.8	43.7	-	41.3	35.1	5.7
02:20 AM - 02:25 AM	38.8	37.7	-	35.3	36.0	-0.7
02:25 AM - 02:30 AM	48.4	47.3	-	44.9	35.9	9.0
02:30 AM - 02:35 AM	40.4	39.3	-	36.9	36.8	0.1
02:35 AM - 02:40 AM	48.3	47.2	-	44.8	35.9	8.9
02:40 AM - 02:45 AM	39.3	38.2	-	35.8	35.9	-0.1
02:45 AM - 02:50 AM	36.2	37.1	-	34.7	35.2	-0.5
02:50 AM - 02:55 AM	40.9	39.8	-	37.4	35.4	2.0
02:55 AM - 03:00 AM	43.0	41.9	-	39.5	35.9	3.6
03:00 AM - 03:05 AM	39.4	38.3	-	35.9	35.9	0.0
03:05 AM - 03:10 AM	43.5	42.4	-	40.0	36.1	3.9
03:10 AM - 03:15 AM	43.2	42.1	-	39.7	36.1	3.6
03:15 AM - 03:20 AM	46.0	44.9	-	42.5	35.8	6.7
03:20 AM - 03:25 AM	39.0	37.9	-	35.5	36.4	-0.9
03:25 AM - 03:30 AM	38.6	37.5	-	35.1	35.8	-0.7
03:30 AM - 03:35 AM	39.9	38.8	-	36.4	34.9	1.5
03:35 AM - 03:40 AM	38.5	37.4	-	35.0	35.2	-0.2
03:40 AM - 03:45 AM	50.5	49.4	-	47.0	36.7	10.3
03:45 AM - 03:50 AM	39.2	38.2	-	35.8	36.4	-0.6

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023538-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-12
Parameter เสียงรบกวน
Location NZ : มัสยิดบุรีสัตตาน
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:50 AM - 03:55 AM	40.0	38.9	-	36.5	37.1	-0.6
03:55 AM - 04:00 AM	43.2	42.1	-	39.7	35.4	4.3
04:00 AM - 04:05 AM	41.5	40.4	-	38.0	34.2	3.8
04:05 AM - 04:10 AM	37.2	36.1	-	33.7	33.7	0.0
04:10 AM - 04:15 AM	37.0	35.9	-	33.5	34.3	-0.8
04:15 AM - 04:20 AM	39.2	38.1	-	35.7	34.6	1.1
04:20 AM - 04:25 AM	43.3	42.2	-	40.0	39.4	0.6
04:25 AM - 04:30 AM	51.1	50.0	-	47.6	40.1	7.5
04:30 AM - 04:35 AM	64.9	63.8	-	61.4	40.5	20.9
04:35 AM - 04:40 AM	44.7	43.6	-	41.2	38.0	3.2
04:40 AM - 04:45 AM	40.8	39.7	-	37.3	36.9	0.4
04:45 AM - 04:50 AM	41.3	40.2	-	37.8	37.5	0.3
04:50 AM - 04:55 AM	42.7	41.6	-	39.2	37.1	2.1
04:55 AM - 05:00 AM	45.0	43.9	-	41.5	37.1	4.4
05:00 AM - 05:05 AM	42.4	41.3	-	38.9	37.6	1.3
05:05 AM - 05:10 AM	45.8	44.7	-	42.3	37.4	4.9
05:10 AM - 05:15 AM	54.5	53.4	-	51.0	37.0	14.0
05:15 AM - 05:20 AM	45.9	44.8	-	42.4	36.0	6.4
05:20 AM - 05:25 AM	44.0	42.9	-	40.5	35.8	4.7
05:25 AM - 05:30 AM	43.2	44.1	-	41.7	36.7	5.0
05:30 AM - 05:35 AM	51.0	49.9	-	47.5	37.2	10.3
05:35 AM - 05:40 AM	50.6	49.5	-	47.1	38.0	9.1
05:40 AM - 05:45 AM	58.1	57.0	-	54.6	42.9	11.7
05:45 AM - 05:50 AM	57.8	56.7	-	54.3	41.7	12.6
05:50 AM - 05:55 AM	53.4	52.3	-	49.9	42.2	7.7
05:55 AM - 06:00 AM	55.9	54.8	-	52.4	39.4	13.0
06:00 AM - 07:00 AM	57.1	56.2	50.8	-	43.4	7.4
07:00 AM - 08:00 AM	63.5	62.4	57.0	-	43.9	13.1
08:00 AM - 09:00 AM	59.5	58.4	53.0	-	45.8	7.2
09:00 AM - 10:00 AM	56.8	55.7	50.3	-	43.2	7.1
10:00 AM - 11:00 AM	57.3	56.2	50.8	-	45.5	5.3
11:00 AM - 12:00 PM	56.7	55.7	49.8	-	46.0	3.8
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระยะเวลาเฝ้าสังเกตอย่างต่อเนื่อง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการปรับลดเครื่องกำเนิดเสียงรบกวน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงรบกวนและค่าความสั่นสะเทือนที่เกิดจากการประกอบกิจการที่มีผลกระทบต่อชุมชน พ.ศ. 2561

Remark:
1. ระดับเสียงรบกวนแหล่งกำเนิด ตามตารางวัน วันที่ 02-03 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-12 วันที่ตารางวัน 02-03 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนนี้ได้จากระดับเสียงรบกวนแหล่งกำเนิดและการระดับเสียงขณะไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023539-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-13
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	59.2	58.2	52.3	-	49.6	2.7
01:00 PM - 02:00 PM	56.6	55.6	49.7	-	44.4	5.3
02:00 PM - 03:00 PM	56.0	55.0	49.1	-	41.8	7.3
03:00 PM - 04:00 PM	57.6	56.6	50.7	-	43.8	6.9
04:00 PM - 05:00 PM	60.0	59.0	53.1	-	49.6	3.5
05:00 PM - 06:00 PM	62.3	61.3	55.4	-	47.6	7.8
06:00 PM - 07:00 PM	59.5	58.5	57.6	-	50.2	2.4
07:00 PM - 08:00 PM	58.3	57.3	51.4	-	50.3	1.1
08:00 PM - 09:00 PM	60.0	59.0	53.1	-	49.9	3.2
09:00 PM - 10:00 PM	52.8	51.8	45.9	-	39.7	6.2
10:00 PM - 10:05 PM	46.9	45.9	-	43.0	40.5	2.5
10:05 PM - 10:10 PM	50.8	49.8	-	46.9	41.0	5.9
10:10 PM - 10:15 PM	47.2	46.2	-	43.3	40.7	2.6
10:15 PM - 10:20 PM	47.6	46.6	-	43.7	40.4	3.3
10:20 PM - 10:25 PM	51.0	50.0	-	47.1	38.1	9.0
10:25 PM - 10:30 PM	48.8	47.8	-	44.9	41.1	3.8
10:30 PM - 10:35 PM	46.2	45.2	-	42.3	41.2	1.1
10:35 PM - 10:40 PM	56.9	55.9	-	53.0	41.0	12.0
10:40 PM - 10:45 PM	51.6	50.6	-	47.7	38.1	9.6
10:45 PM - 10:50 PM	45.7	44.7	-	41.8	37.1	4.7
10:50 PM - 10:55 PM	52.1	51.1	-	48.2	37.9	10.3
10:55 PM - 11:00 PM	59.6	58.6	-	55.7	38.9	16.8
11:00 PM - 11:05 PM	48.1	47.1	-	44.2	39.1	5.1
11:05 PM - 11:10 PM	44.4	43.4	-	40.5	38.1	2.4
11:10 PM - 11:15 PM	55.9	54.9	-	52.0	39.0	13.0
11:15 PM - 11:20 PM	43.7	42.7	-	39.8	38.6	1.2
11:20 PM - 11:25 PM	51.5	50.5	-	47.6	38.5	9.1
11:25 PM - 11:30 PM	44.7	43.7	-	40.8	37.8	3.0
11:30 PM - 11:35 PM	53.5	52.5	-	49.6	38.6	11.0
11:35 PM - 11:40 PM	46.3	45.3	-	42.4	37.9	4.5
11:40 PM - 11:45 PM	46.4	45.4	-	42.5	37.4	5.1
11:45 PM - 11:50 PM	49.1	48.1	-	45.2	37.7	7.5
11:50 PM - 11:55 PM	45.4	44.4	-	41.5	38.0	3.5
11:55 PM - 12:00 AM	47.1	46.1	-	43.2	38.7	4.5
12:00 AM - 12:05 AM	43.5	42.5	-	39.6	37.5	2.1
12:05 AM - 12:10 AM	45.9	44.9	-	42.0	38.6	3.4
12:10 AM - 12:15 AM	44.3	43.3	-	40.4	38.3	2.1
12:15 AM - 12:20 AM	54.8	53.8	-	50.9	37.9	13.0
12:20 AM - 12:25 AM	42.9	41.9	-	39.0	37.6	1.4
12:25 AM - 12:30 AM	45.0	44.0	-	41.1	39.0	2.1

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023539-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-13
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	43.2	42.2	-	39.3	37.7	1.6
12:35 AM - 12:40 AM	41.5	40.5	-	37.6	39.0	-1.4
12:40 AM - 12:45 AM	45.7	44.7	-	41.8	36.9	4.9
12:45 AM - 12:50 AM	42.0	41.0	-	38.1	36.0	2.1
12:50 AM - 12:55 AM	45.8	44.8	-	41.7	36.4	5.3
12:55 AM - 01:00 AM	45.1	44.1	-	41.2	36.5	4.7
01:00 AM - 01:05 AM	41.4	40.4	-	37.5	36.0	1.5
01:05 AM - 01:10 AM	39.2	38.2	-	35.3	36.5	-1.2
01:10 AM - 01:15 AM	40.9	39.9	-	37.0	36.9	0.1
01:15 AM - 01:20 AM	39.5	38.5	-	35.6	36.6	-1.0
01:20 AM - 01:25 AM	42.2	41.2	-	38.3	36.4	1.9
01:25 AM - 01:30 AM	52.3	51.3	-	48.4	35.9	17.5
01:30 AM - 01:35 AM	43.1	42.1	-	39.2	35.5	3.7
01:35 AM - 01:40 AM	41.8	40.8	-	37.9	35.7	2.2
01:40 AM - 01:45 AM	48.6	47.6	-	44.7	35.5	9.2
01:45 AM - 01:50 AM	39.6	38.6	-	35.7	34.9	0.8
01:50 AM - 01:55 AM	37.7	36.7	-	33.8	34.5	-0.7
01:55 AM - 02:00 AM	37.9	36.9	-	34.0	35.5	-1.5
02:00 AM - 02:05 AM	38.4	37.4	-	34.5	35.5	-1.0
02:05 AM - 02:10 AM	39.8	38.8	-	35.9	35.2	0.7
02:10 AM - 02:15 AM	38.6	37.6	-	34.7	34.4	0.3
02:15 AM - 02:20 AM	39.7	38.7	-	35.8	36.0	-0.2
02:20 AM - 02:25 AM	39.5	38.5	-	35.6	36.1	-0.5
02:25 AM - 02:30 AM	44.1	43.1	-	40.2	36.8	3.4
02:30 AM - 02:35 AM	39.1	38.1	-	35.2	36.2	-1.0
02:35 AM - 02:40 AM	62.7	61.7	-	58.8	37.2	21.6
02:40 AM - 02:45 AM	41.5	40.5	-	37.6	36.7	0.9
02:45 AM - 02:50 AM	40.3	39.3	-	36.4	36.1	0.3
02:50 AM - 02:55 AM	42.8	41.8	-	38.9	36.1	2.8
02:55 AM - 03:00 AM	41.6	40.6	-	37.7	36.1	1.6
03:00 AM - 03:05 AM	38.5	37.5	-	34.6	35.7	-1.1
03:05 AM - 03:10 AM	38.1	37.1	-	34.2	35.8	-1.6
03:10 AM - 03:15 AM	40.4	39.4	-	36.5	37.0	-0.5
03:15 AM - 03:20 AM	42.0	41.0	-	38.1	37.0	1.1
03:20 AM - 03:25 AM	41.0	40.0	-	37.1	36.4	0.7
03:25 AM - 03:30 AM	40.1	39.1	-	36.2	36.0	0.2
03:30 AM - 03:35 AM	45.6	44.6	-	41.7	36.5	5.2
03:35 AM - 03:40 AM	41.1	40.1	-	37.2	36.6	0.6
03:40 AM - 03:45 AM	38.4	37.4	-	34.5	36.1	-1.6
03:45 AM - 03:50 AM	41.3	40.3	-	37.4	35.7	1.7

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023539-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-13
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:50 AM - 03:55 AM	41.4	40.4	-	37.5	35.9	1.6
03:55 AM - 04:00 AM	38.2	37.2	-	34.3	36.2	-1.9
04:00 AM - 04:05 AM	50.0	49.0	-	46.1	36.7	9.4
04:05 AM - 04:10 AM	46.0	45.0	-	42.1	37.8	4.3
04:10 AM - 04:15 AM	50.9	49.9	-	47.0	38.3	8.7
04:15 AM - 04:20 AM	57.5	51.5	-	48.6	47.8	0.8
04:20 AM - 04:25 AM	63.5	62.5	-	59.6	51.4	8.2
04:25 AM - 04:30 AM	59.7	58.7	-	55.8	43.8	12.0
04:30 AM - 04:35 AM	51.8	50.8	-	47.9	44.5	3.4
04:35 AM - 04:40 AM	54.6	53.6	-	50.7	43.6	7.1
04:40 AM - 04:45 AM	45.7	44.7	-	41.8	41.1	1.3
04:45 AM - 04:50 AM	46.0	45.0	-	42.1	42.6	-0.5
04:50 AM - 04:55 AM	43.6	42.6	-	41.7	42.2	-0.5
04:55 AM - 05:00 AM	47.4	46.4	-	43.5	42.5	1.0
05:00 AM - 05:05 AM	49.4	48.4	-	45.5	43.7	1.8
05:05 AM - 05:10 AM	48.0	47.0	-	44.1	43.0	1.1
05:10 AM - 05:15 AM	51.7	50.7	-	47.8	43.5	4.3
05:15 AM - 05:20 AM	48.4	47.4	-	44.5	43.0	1.5
05:20 AM - 05:25 AM	52.0	51.0	-	48.1	44.0	4.1
05:25 AM - 05:30 AM	60.4	59.4	-	56.5	44.4	12.1
05:30 AM - 05:35 AM	51.5	50.5	-	47.6	43.6	4.0
05:35 AM - 05:40 AM	51.0	50.0	-	47.1	41.3	5.8
05:40 AM - 05:45 AM	53.3	52.3	-	49.4	42.5	6.9
05:45 AM - 05:50 AM	58.6	57.6	-	54.7	46.7	8.0
05:50 AM - 05:55 AM	53.7	52.7	-	49.8	42.5	7.3
05:55 AM - 06:00 AM	58.2	57.2	-	54.3	43.6	10.7
06:00 AM - 07:00 AM	59.5	58.5	52.6	-	45.9	6.7
07:00 AM - 08:00 AM	65.3	64.3	58.4	-	60.2	1.8
08:00 AM - 09:00 AM	59.5	58.5	52.6	-	49.5	3.1
09:00 AM - 10:00 AM	59.8	58.8	52.9	-	46.4	6.5
10:00 AM - 11:00 AM	57.6	56.6	50.7	-	47.2	3.5
11:00 AM - 12:00 PM	56.0	55.0	49.1	-	44.8	4.3
ค่าสูงสุด						21.6

Reference Method
1 ISO 1996-1
2 ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากรถยนต์ ขณะเดินเครื่องยนต์เพื่อการตรวจสภาพรถ ตามกฎกระทรวงว่าด้วยการกำหนดมาตรฐานการปล่อยเสียงจากรถยนต์ พ.ศ. 2547 และฉบับที่ 2 พ.ศ. 2560
3 ประกาศกรมการขนส่งทางบก เรื่อง กำหนดหลักเกณฑ์และวิธีการตรวจวัดระดับเสียงจากรถที่ใช้เครื่องยนต์สันดาปภายในขับเคลื่อนและรถที่มีเครื่องยนต์สันดาปภายในขับเคลื่อนร่วมกับเครื่องยนต์ไฟฟ้า พ.ศ. 2548 และฉบับที่ 2 พ.ศ. 2561

Remark:
1 ระดับเสียงรบกวนแหล่งกำเนิด ตรวจสอบวันที่ 03-04 มิถุนายน 2567
2 ระดับเสียงพื้นฐานของระดับเสียงรบกวน ไม่มีการรบกวน (Sample No.2450168-13 ระดับเสียงวันที่ 03-04 มิถุนายน 2567)
3 หมายเหตุ: ไม่สามารถตรวจวัดระดับเสียงรบกวนในพื้นที่ได้ เนื่องจากมีเสียงรบกวนอื่นๆ ที่ดังกว่าเสียงรบกวนแหล่งกำเนิดในบริเวณรอบข้าง

The above results are valid only for the sample(s) 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. As a Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023540-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-14
Parameter เสียงรบกวน
Location N2 : มัสยิดนูรุลอิสลาม
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:00 PM - 01:00 PM	61.8	60.8	54.9	-	56.8	1.9
01:00 PM - 02:00 PM	57.1	56.1	50.2	-	41.7	8.5
02:00 PM - 03:00 PM	58.3	57.3	49.4	-	45.2	4.2
03:00 PM - 04:00 PM	56.4	55.4	49.5	-	45.7	3.8
04:00 PM - 05:00 PM	60.6	59.6	53.7	-	49.1	4.6
05:00 PM - 06:00 PM	64.2	63.2	57.3	-	49.8	7.5
06:00 PM - 07:00 PM	58.4	57.4	51.5	-	43.6	5.9
07:00 PM - 08:00 PM	58.5	57.5	51.6	-	50.4	1.2
08:00 PM - 09:00 PM	57.9	56.9	51.0	-	42.2	8.8
09:00 PM - 10:00 PM	52.5	51.5	45.6	-	38.4	7.2
10:00 PM - 10:05 PM	48.2	47.2	-	44.3	37.7	6.6
10:05 PM - 10:10 PM	50.8	49.8	-	46.9	37.5	9.4
10:10 PM - 10:15 PM	51.3	50.3	-	48.4	37.1	11.3
10:15 PM - 10:20 PM	49.5	48.5	-	45.6	37.2	8.4
10:20 PM - 10:25 PM	43.6	42.6	-	39.7	36.1	3.4
10:25 PM - 10:30 PM	52.7	51.7	-	48.8	36.7	12.1
10:30 PM - 10:35 PM	57.6	56.6	-	53.7	35.9	17.6
10:35 PM - 10:40 PM	50.7	49.7	-	46.8	36.5	10.1
10:40 PM - 10:45 PM	44.8	43.8	-	40.9	35.7	5.2
10:45 PM - 10:50 PM	48.5	47.5	-	44.6	35.3	9.3
10:50 PM - 10:55 PM	49.7	48.7	-	45.8	35.4	10.4
10:55 PM - 11:00 PM	42.1	41.1	-	38.2	35.0	3.2
11:00 PM - 11:05 PM	48.9	47.9	-	45.0	26.8	8.3
11:05 PM - 11:10 PM	39.6	38.6	-	35.7	35.2	0.5
11:10 PM - 11:15 PM	38.2	37.2	-	34.3	35.3	-1.0
11:15 PM - 11:20 PM	45.4	44.4	-	41.5	35.5	6.0
11:20 PM - 11:25 PM	41.3	40.3	-	37.4	35.3	4.1
11:25 PM - 11:30 PM	40.9	39.9	-	37.0	35.4	1.6
11:30 PM - 11:35 PM	46.6	45.6	-	42.7	35.5	7.2
11:35 PM - 11:40 PM	57.6	51.0	-	48.1	35.7	12.4
11:40 PM - 11:45 PM	41.3	40.3	-	37.4	34.4	2.9
11:45 PM - 11:50 PM	53.8	52.8	-	49.9	34.3	15.6
11:50 PM - 11:55 PM	49.2	48.2	-	45.3	33.4	12.4
11:55 PM - 12:00 AM	44.5	43.5	-	40.6	33.1	7.5
12:00 AM - 12:05 AM	43.9	42.9	-	40.0	33.5	6.5
12:05 AM - 12:10 AM	49.8	48.8	-	45.9	34.2	11.7
12:10 AM - 12:15 AM	41.5	40.5	-	37.6	33.6	4.0
12:15 AM - 12:20 AM	47.6	46.6	-	43.7	34.4	9.3
12:20 AM - 12:25 AM	51.5	50.5	-	47.6	33.3	14.3
12:25 AM - 12:30 AM	44.6	43.6	-	40.7	34.0	6.7

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023540-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-14
Parameter เสียงรบกวน
Location N2 : มัสยิดรุ่งอิสลาม
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:30 AM - 12:35 AM	40.8	39.8	-	36.9	34.3	2.6
12:35 AM - 12:40 AM	47.8	46.8	-	42.9	35.3	8.6
12:40 AM - 12:45 AM	43.4	42.4	-	39.5	34.9	4.6
12:45 AM - 12:50 AM	41.2	40.2	-	37.3	34.5	2.8
12:50 AM - 12:55 AM	43.8	42.8	-	39.9	34.8	5.1
12:55 AM - 01:00 AM	39.3	38.3	-	35.4	34.7	0.7
01:00 AM - 01:05 AM	40.0	39.0	-	36.1	35.1	1.0
01:05 AM - 01:10 AM	47.2	46.2	-	43.3	34.9	8.4
01:10 AM - 01:15 AM	40.4	39.4	-	36.5	35.2	1.3
01:15 AM - 01:20 AM	41.4	40.4	-	37.5	34.8	2.7
01:20 AM - 01:25 AM	43.9	42.9	-	40.0	34.4	5.6
01:25 AM - 01:30 AM	37.5	36.5	-	33.7	34.3	-0.6
01:30 AM - 01:35 AM	40.1	39.1	-	36.2	34.4	1.8
01:35 AM - 01:40 AM	48.6	48.0	-	42.7	33.9	8.8
01:40 AM - 01:45 AM	47.9	47.3	-	43.0	33.8	9.2
01:45 AM - 01:50 AM	47.9	47.3	-	42.0	33.3	8.7
01:50 AM - 01:55 AM	39.3	38.7	-	33.4	33.0	0.4
01:55 AM - 02:00 AM	35.4	34.8	-	29.5	32.8	-3.3
02:00 AM - 02:05 AM	36.3	35.7	-	30.4	32.9	-2.5
02:05 AM - 02:10 AM	35.5	34.9	-	29.6	32.3	-2.7
02:10 AM - 02:15 AM	41.9	41.3	-	36.0	32.6	3.4
02:15 AM - 02:20 AM	40.9	40.3	-	35.0	33.5	1.5
02:20 AM - 02:25 AM	37.5	37.0	-	31.7	33.9	-2.2
02:25 AM - 02:30 AM	56.4	55.8	-	50.5	34.6	15.9
02:30 AM - 02:35 AM	37.5	37.0	-	32.0	34.7	-2.7
02:35 AM - 02:40 AM	39.1	38.5	-	33.2	34.9	-1.7
02:40 AM - 02:45 AM	37.9	37.3	-	32.0	35.4	-3.4
02:45 AM - 02:50 AM	38.0	37.4	-	32.1	35.8	-3.7
02:50 AM - 02:55 AM	43.5	42.9	-	37.6	35.3	2.3
02:55 AM - 03:00 AM	37.9	37.3	-	32.0	35.9	-3.9
03:00 AM - 03:05 AM	39.9	39.3	-	34.0	35.9	-1.9
03:05 AM - 03:10 AM	38.5	37.9	-	32.5	35.7	-3.1
03:10 AM - 03:15 AM	44.3	43.7	-	38.4	37.7	0.7
03:15 AM - 03:20 AM	40.3	39.7	-	34.4	36.4	-2.0
03:20 AM - 03:25 AM	38.8	38.2	-	32.9	36.1	-3.2
03:25 AM - 03:30 AM	41.8	40.8	-	35.5	36.2	-0.7
03:30 AM - 03:35 AM	40.1	39.5	-	34.2	36.2	-2.0
03:35 AM - 03:40 AM	39.8	39.2	-	33.9	36.8	-2.9
03:40 AM - 03:45 AM	41.2	40.7	-	35.4	36.4	-1.0
03:45 AM - 03:50 AM	45.8	45.2	-	39.9	36.5	3.4

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Approved by
Wilawan Borkak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023540-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-14
Parameter เสียงรบกวน
Location N2 : มัสยิดรุ่งอิสลาม
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623390

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
02:50 AM - 02:55 AM	38.2	37.6	-	32.3	35.9	-3.6
02:55 AM - 03:00 AM	41.5	40.9	-	35.6	36.0	-0.4
03:00 AM - 03:05 AM	57.6	57.0	-	51.7	36.4	15.3
03:05 AM - 03:10 AM	50.5	49.9	-	44.6	46.3	-1.7
03:10 AM - 03:15 AM	52.8	52.2	-	46.9	48.2	-1.3
03:15 AM - 03:20 AM	43.7	43.1	-	37.8	36.4	1.4
03:20 AM - 03:25 AM	62.6	62.0	-	56.7	36.7	20.0
03:25 AM - 03:30 AM	65.3	64.7	-	59.4	44.3	15.1
03:30 AM - 03:35 AM	48.2	47.6	-	42.3	44.6	-2.3
03:35 AM - 03:40 AM	48.7	48.1	-	43.8	44.5	-1.7
03:40 AM - 03:45 AM	51.8	51.2	-	45.9	44.0	1.9
03:45 AM - 03:50 AM	48.5	47.9	-	42.6	43.8	-1.2
03:50 AM - 03:55 AM	46.6	46.0	-	40.7	44.1	-3.4
03:55 AM - 04:00 AM	51.6	51.0	-	45.7	43.7	2.0
04:00 AM - 04:05 AM	58.5	57.9	-	52.6	44.6	8.0
04:05 AM - 04:10 AM	52.3	51.7	-	46.4	42.3	4.1
04:10 AM - 04:15 AM	47.1	46.5	-	41.2	39.0	2.2
04:15 AM - 04:20 AM	44.2	43.6	-	38.3	38.4	-0.1
04:20 AM - 04:25 AM	53.7	53.1	-	47.8	40.0	7.8
04:25 AM - 04:30 AM	47.4	46.8	-	41.5	39.2	2.3
04:30 AM - 04:35 AM	45.6	45.0	-	39.7	38.7	1.0
04:35 AM - 04:40 AM	47.0	46.4	-	41.1	39.8	1.3
04:40 AM - 04:45 AM	51.3	50.9	-	45.6	41.0	4.6
04:45 AM - 04:50 AM	56.0	55.4	-	50.1	44.5	5.6
04:50 AM - 04:55 AM	55.7	55.1	-	49.8	43.1	6.7
04:55 AM - 05:00 AM	59.6	59.0	-	53.7	49.1	4.6
06:00 AM - 07:00 AM	59.8	59.2	59.9	-	50.3	0.6
07:00 AM - 08:00 AM	59.1	58.5	50.2	-	46.0	4.2
08:00 AM - 09:00 AM	56.1	55.5	47.2	-	44.9	2.3
09:00 AM - 10:00 AM	58.1	57.5	49.2	-	44.4	4.8
10:00 AM - 11:00 AM	57.7	57.1	48.8	-	47.9	0.9
11:00 AM - 12:00 PM	53.9	53.3	47.0	-	43.7	1.3
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง ระดับเสียงที่เครื่องจักรในโรงงานจะปล่อยออกสู่สิ่งแวดล้อมได้ ลงวันที่ 24 มีนาคม พ.ศ. 2549

มาตรฐาน
1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เครื่องจักรในโรงงานจะปล่อยออกสู่ภายนอกโรงงาน พ.ศ. 2549
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานของเสียอันตรายที่เครื่องจักรจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการวัดวันที่ 04-05 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-14 วันที่ตรงวัน 04-05 มิถุนายน 2567)
3. n/a: ไม่สามารถทำการแปลผลค่าเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above results are used only for the one and 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
Wilawan Borkak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023541-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-15
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นา 5
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 10:05 AM	46.5	45.5	39.6	-	40.0	-0.4
10:05 AM - 10:10 AM	48.1	47.1	41.2	-	41.0	0.2
10:10 AM - 10:15 AM	48.3	47.3	41.4	-	41.0	0.4
10:15 AM - 10:20 AM	48.4	47.4	41.5	-	40.2	1.3
10:20 AM - 10:25 AM	46.5	45.5	39.6	-	38.3	1.3
10:25 AM - 10:30 AM	45.3	44.3	38.4	-	37.2	1.2
10:30 AM - 10:35 AM	46.0	45.0	39.1	-	40.2	-1.1
10:35 AM - 10:40 AM	47.2	46.2	40.3	-	42.3	-2.0
10:40 AM - 10:45 AM	46.2	45.2	39.3	-	41.9	-2.6
10:45 AM - 10:50 AM	49.7	48.7	42.8	-	47.0	-4.2
10:50 AM - 10:55 AM	48.9	47.9	42.0	-	46.1	-4.1
10:55 AM - 11:00 AM	47.0	46.0	40.1	-	44.8	-4.7
11:00 AM - 11:05 AM	45.5	44.5	-	41.6	43.2	-1.6
11:05 AM - 11:10 AM	46.0	45.0	-	42.1	44.1	-2.0
11:10 AM - 11:15 AM	46.5	45.5	-	42.6	44.7	-2.1
11:15 AM - 11:20 AM	46.6	45.6	-	42.7	44.8	-2.1
11:20 AM - 11:25 PM	45.9	44.9	-	42.0	44.2	-2.2
11:25 PM - 11:30 PM	49.2	48.2	-	45.3	44.4	0.9
11:30 PM - 11:35 PM	47.7	46.7	-	43.8	45.0	-1.2
11:35 PM - 11:40 PM	47.5	46.5	-	43.6	45.2	-1.6
11:40 PM - 11:45 PM	47.2	46.2	-	43.3	45.6	-2.3
11:45 PM - 11:50 PM	49.5	48.5	-	45.6	46.0	-0.4
11:50 PM - 11:55 PM	47.7	46.7	-	43.8	45.9	-2.1
11:55 PM - 12:00 AM	47.8	46.8	-	43.9	46.0	-2.1
12:00 AM - 12:05 AM	49.4	48.4	-	45.5	46.4	-0.9
12:05 AM - 12:10 AM	49.2	48.2	-	45.3	46.1	-0.8
12:10 AM - 12:15 AM	48.6	47.6	-	44.7	46.1	-1.4
12:15 AM - 12:20 AM	47.8	46.8	-	43.9	45.8	-1.9
12:20 AM - 12:25 AM	47.7	46.7	-	43.8	46.0	-2.2
12:25 PM - 12:30 PM	48.4	47.4	-	44.5	46.5	-2.0
12:30 PM - 12:35 PM	49.2	48.2	-	45.3	46.8	-1.5
12:35 PM - 12:40 PM	48.2	47.2	-	44.3	46.4	-2.1
12:40 PM - 12:45 PM	47.1	46.1	-	43.2	45.3	-2.1
12:45 PM - 12:50 PM	47.4	46.4	-	43.5	45.4	-1.9
12:50 PM - 12:55 PM	49.1	48.1	-	45.2	45.2	0.0
12:55 PM - 13:00 AM	48.3	47.3	-	44.4	45.7	-1.3
13:00 AM - 13:05 AM	46.8	45.8	-	42.9	44.8	-1.9
13:05 AM - 13:10 AM	48.9	47.9	-	45.0	44.7	0.3
13:10 AM - 13:15 AM	47.0	46.0	-	43.1	44.6	-1.5
13:15 AM - 13:20 AM	47.0	46.0	-	43.1	45.1	-2.0

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Approved by
Wilawan Borkak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023541-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-15
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นา 5
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	47.3	46.3	-	43.4	45.1	-1.7
12:25 AM - 12:30 AM	46.6	45.6	-	42.7	44.7	-2.0
12:30 AM - 12:35 AM	46.3	45.3	-	42.4	44.6	-2.2
12:35 AM - 12:40 AM	46.2	45.2	-	42.3	44.2	-1.9
12:40 AM - 12:45 AM	46.4	45.4	-	42.5	44.7	-2.2
12:45 AM - 12:50 AM	45.5	44.5	-	41.6	43.5	-1.9
12:50 AM - 12:55 AM	45.7	44.7	-	41.8	41.8	-2.0
12:55 AM - 01:00 AM	45.3	44.3	-	41.4	43.5	-2.1
01:00 AM - 01:05 AM	49.7	48.7	-	45.8	44.1	1.7
01:05 AM - 01:10 AM	45.9	44.9	-	42.0	43.9	-1.9
01:10 AM - 01:15 AM	45.4	44.4	-	41.5	43.7	-2.2
01:15 AM - 01:20 AM	45.2	44.2	-	41.3	43.1	-1.8
01:20 AM - 01:25 AM	44.3	43.3	-	40.4	42.6	-2.2
01:25 AM - 01:30 AM	44.1	43.1	-	40.2	42.1	-1.9
01:30 AM - 01:35 AM	44.4	43.4	-	40.5	42.6	-2.1
01:35 AM - 01:40 AM	45.3	44.3	-	41.4	43.3	-1.9
01:40 AM - 01:45 AM	45.4	44.4	-	41.5	43.5	-2.0
01:45 AM - 01:50 AM	45.2	44.2	-	41.3	43.4	-2.1
01:50 AM - 01:55 AM	44.6	43.6	-	40.7	42.6	-1.9
01:55 AM - 02:00 AM	44.4	43.4	-	40.5	42.5	-2.0
02:00 AM - 02:05 AM	44.2	43.2	-	40.3	42.2	-1.9
02:05 AM - 02:10 AM	44.1	43.1	-	40.2	42.4	-2.2
02:10 AM - 02:15 AM	44.4	43.4	-	40.5	42.6	-2.1
02:15 AM - 02:20 AM	44.2	43.2	-	40.3	41.6	-1.3
02:20 AM - 02:25 AM	44.4	43.4	-	40.5	41.8	-1.3
02:25 AM - 02:30 AM	47.9	46.9	-	44.0	41.9	2.1
02:30 AM - 02:35 AM	44.8	43.8	-	40.9	42.2	-1.3
02:35 AM - 02:40 AM	52.4	51.4	-	48.5	46.5	2.0
02:40 AM - 02:45 AM	56.3	55.3	-	53.4	44.6	7.8
02:45 AM - 02:50 AM	44.5	43.5	-	40.6	42.7	-2.1
02:50 AM - 02:55 AM	44.9	43.9	-	41.0	43.1	-2.1
02:55 AM - 03:00 AM	45.0	44.0	-	41.1	42.6	-1.5
03:00 AM - 03:05 AM	44.9	43.9	-	41.0	42.1	-1.1
03:05 AM - 03:10 AM	44.2	43.2	-	40.3	41.9	-1.6
03:10 AM - 03:15 AM	42.7	41.7	-	38.8	40.4	-1.6
03:15 AM - 03:20 AM	42.5	41.5	-	38.6	40.1	-1.5
03:20 AM - 03:25 AM	42.8	41.8	-	38.9	40.7	-1.8
03:25 AM - 03:30 AM	42.4	41.4	-	38.5	40.6	-2.1
03:30 AM - 03:35 AM	42.9	41.9	-	39.0	40.9	-1.9
03:35 AM - 03:40 AM	44.2	43.2	-	40.3	41.2	-0.9

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Approved by
Wilawan Borkak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023541-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-15
Parameter เสียงนานาน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	46.6	45.6	-	40.7	38.1	4.6
03:45 AM - 03:50 AM	48.3	47.3	-	44.4	39.2	5.2
03:50 AM - 03:55 AM	44.7	43.7	-	40.8	39.9	0.9
03:55 AM - 04:00 AM	43.3	42.3	-	39.4	40.4	-1.0
04:00 AM - 04:05 AM	41.7	40.7	-	39.8	41.5	-1.7
04:05 AM - 04:10 AM	44.1	43.1	-	40.2	42.1	1.9
04:10 AM - 04:15 AM	44.2	43.2	-	40.3	42.3	2.0
04:15 AM - 04:20 AM	43.9	42.9	-	40.0	41.9	1.9
04:20 AM - 04:25 AM	43.6	42.6	-	40.7	40.9	-0.2
04:25 AM - 04:30 AM	45.7	44.7	-	41.8	39.9	1.9
04:30 AM - 04:35 AM	41.3	40.3	-	37.4	38.3	-1.9
04:35 AM - 04:40 AM	41.4	40.4	-	37.5	39.1	-1.5
04:40 AM - 04:45 AM	42.1	41.1	-	38.2	39.7	1.5
04:45 AM - 04:50 AM	41.4	40.4	-	37.5	39.0	1.5
04:50 AM - 04:55 AM	43.2	42.2	-	39.3	39.2	2.1
04:55 AM - 05:00 AM	45.4	44.4	-	41.5	39.1	2.4
05:00 AM - 05:05 AM	44.0	43.0	-	40.1	39.7	0.4
05:05 AM - 05:10 AM	47.4	46.4	-	43.5	40.2	3.3
05:10 AM - 05:15 AM	47.8	46.8	-	43.9	41.6	2.3
05:15 AM - 05:20 AM	48.6	47.6	-	44.7	43.2	1.5
05:20 AM - 05:25 AM	48.8	47.8	-	44.9	42.1	2.8
05:25 AM - 05:30 AM	48.6	47.6	-	44.7	42.2	2.5
05:30 AM - 05:35 AM	50.4	49.4	-	46.5	42.3	4.2
05:35 AM - 05:40 AM	49.7	48.7	-	45.8	42.7	3.1
05:40 AM - 05:45 AM	49.3	48.3	-	45.4	43.4	2.0
05:45 AM - 05:50 AM	50.4	49.4	-	46.5	44.2	2.3
05:50 AM - 05:55 AM	49.3	48.3	-	45.4	43.9	1.5
05:55 AM - 06:00 AM	48.4	47.4	-	44.5	42.9	1.6
06:00 AM - 07:00 AM	55.2	54.2	48.3	-	43.5	4.8
07:00 AM - 08:00 AM	50.7	49.7	43.8	-	47.0	1.8
08:00 AM - 09:00 AM	48.8	47.8	41.1	-	47.1	1.0
09:00 AM - 10:00 AM	47.7	46.7	40.8	-	47.5	-0.7
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากรถยนต์ ระดับเสียงเกินกว่า 24 เดซิเบล และระดับเสียงสูงสุดที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2562
ยกเลิก
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงจากรถยนต์ ระดับเสียงที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2548
2. ประกาศกรมควบคุมมลพิษ เรื่อง กำหนดมาตรฐานและวิธีการตรวจวัดระดับเสียงที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2561
Remark:
1. ระดับเสียงจากแหล่งกำเนิด ช่วงการตรวจวัด วันที่ 29-30 พฤษภาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-15 วันที่ตรวจวัด 29-30 พฤษภาคม 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดอยู่นอกระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the given sample(s) as indicated in this report. No part of this report or (unless it 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
Wilawan Borirak
Manager

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023542-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-16
Parameter เสียงนานาน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	46.9	45.9	40.0	-	40.4	-0.4
11:00 AM - 12:00 PM	46.5	45.5	39.6	-	39.2	0.4
12:00 PM - 01:00 PM	46.5	45.5	39.6	-	38.5	1.1
01:00 PM - 02:00 PM	45.8	44.8	38.9	-	40.1	-1.2
02:00 PM - 03:00 PM	45.6	44.6	38.7	-	39.7	-1.0
03:00 PM - 04:00 PM	49.1	48.1	42.2	-	40.4	1.8
04:00 PM - 05:00 PM	48.2	47.2	41.3	-	40.0	1.3
05:00 PM - 06:00 PM	57.9	56.9	51.0	-	43.3	7.7
06:00 PM - 07:00 PM	48.5	47.5	41.6	-	47.4	-0.8
07:00 PM - 08:00 PM	50.6	49.6	43.7	-	47.9	-4.2
08:00 PM - 09:00 PM	48.5	47.5	41.6	-	45.7	-4.1
09:00 PM - 10:00 PM	48.3	47.3	41.4	-	43.6	-2.2
10:00 PM - 10:05 PM	46.1	45.1	-	42.2	43.0	0.8
10:05 PM - 10:10 PM	44.9	43.9	-	41.0	41.6	-0.6
10:10 PM - 10:15 PM	44.7	43.7	-	40.8	41.8	-1.0
10:15 PM - 10:20 PM	45.8	44.8	-	41.9	44.0	-2.1
10:20 PM - 10:25 PM	47.4	46.4	-	43.5	44.7	-1.2
10:25 PM - 10:30 PM	48.2	47.2	-	44.3	45.6	-2.3
10:30 PM - 10:35 PM	48.6	47.6	-	44.7	45.4	-0.7
10:35 PM - 10:40 PM	46.3	45.3	-	42.4	41.5	1.1
10:40 PM - 10:45 PM	45.0	44.0	-	41.1	43.0	1.9
10:45 PM - 10:50 PM	45.1	44.1	-	41.2	42.0	1.8
10:50 PM - 10:55 PM	44.9	43.9	-	41.0	42.4	-1.4
10:55 PM - 11:00 PM	48.0	47.0	-	44.1	44.8	0.7
11:00 PM - 11:05 PM	49.3	48.3	-	45.4	45.7	-0.3
11:05 PM - 11:10 PM	47.9	46.9	-	44.0	45.5	1.5
11:10 PM - 11:15 PM	47.4	46.4	-	43.5	44.9	1.4
11:15 PM - 11:20 PM	48.0	47.0	-	44.1	45.3	1.2
11:20 PM - 11:25 PM	47.3	46.3	-	43.4	44.7	1.3
11:25 PM - 11:30 PM	47.3	46.3	-	43.4	45.0	1.6
11:30 PM - 11:35 PM	47.1	46.1	-	43.2	43.8	0.6
11:35 PM - 11:40 PM	46.5	45.5	-	42.6	43.6	1.0
11:40 PM - 11:45 PM	47.2	46.2	-	43.3	44.5	1.2
11:45 PM - 11:50 PM	47.0	46.0	-	43.1	44.8	1.7
11:50 PM - 11:55 PM	47.1	46.1	-	43.2	44.7	1.5
11:55 PM - 12:00 AM	45.4	44.4	-	41.5	42.5	2.0
12:00 AM - 12:05 AM	46.3	45.3	-	42.6	44.1	1.5
12:05 AM - 12:10 AM	49.6	48.6	-	45.7	43.9	1.8
12:10 AM - 12:15 AM	46.3	45.3	-	42.6	43.7	1.1
12:15 AM - 12:20 AM	49.8	48.8	-	45.9	42.6	3.3

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Approved by
Wilawan Borirak
Manager

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023542-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-16
Parameter เสียงนานาน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	45.1	44.1	-	41.2	41.2	2.0
12:25 AM - 12:30 AM	44.5	43.5	-	40.6	42.2	-1.6
12:30 AM - 12:35 AM	43.4	42.4	-	39.5	41.2	-1.7
12:35 AM - 12:40 AM	43.1	42.1	-	39.2	40.8	-1.6
12:40 AM - 12:45 AM	42.0	41.0	-	38.1	40.0	1.9
12:45 AM - 12:50 AM	49.6	48.6	-	45.7	40.3	5.4
12:50 AM - 12:55 AM	46.9	45.9	-	43.0	40.8	2.2
12:55 AM - 01:00 AM	44.1	43.1	-	40.2	41.4	1.2
01:00 AM - 01:05 AM	45.0	44.0	-	41.1	42.1	2.0
01:05 AM - 01:10 AM	46.9	45.9	-	43.0	42.5	0.5
01:10 AM - 01:15 AM	45.5	44.5	-	41.6	41.6	2.0
01:15 AM - 01:20 AM	45.7	44.7	-	41.8	41.1	-1.1
01:20 AM - 01:25 AM	44.2	43.2	-	40.3	41.2	0.9
01:25 AM - 01:30 AM	46.1	45.1	-	42.2	44.2	2.0
01:30 AM - 01:35 AM	46.1	45.1	-	42.2	44.0	1.8
01:35 AM - 01:40 AM	45.2	44.2	-	41.3	43.1	1.8
01:40 AM - 01:45 AM	44.6	43.6	-	40.7	43.4	1.7
01:45 AM - 01:50 AM	45.0	44.0	-	41.1	42.4	1.3
01:50 AM - 01:55 AM	45.4	44.4	-	41.5	43.7	2.7
01:55 AM - 02:00 AM	45.4	44.4	-	41.5	43.7	2.2
02:00 AM - 02:05 AM	45.8	44.8	-	41.9	42.2	-0.3
02:05 AM - 02:10 AM	44.7	43.7	-	40.8	41.2	0.4
02:10 AM - 02:15 AM	45.2	44.2	-	41.3	43.5	2.2
02:15 AM - 02:20 AM	45.0	44.0	-	41.1	42.5	1.6
02:20 AM - 02:25 AM	45.1	44.1	-	41.2	42.7	1.5
02:25 AM - 02:30 AM	48.7	47.7	-	44.8	44.9	-0.1
02:30 AM - 02:35 AM	48.1	47.1	-	44.4	44.2	0.2
02:35 AM - 02:40 AM	48.6	47.6	-	44.7	44.1	2.6
02:40 AM - 02:45 AM	57.1	56.1	-	53.4	43.1	9.1
02:45 AM - 02:50 AM	46.7	45.7	-	42.8	45.0	2.2
02:50 AM - 02:55 AM	45.1	44.1	-	41.2	43.0	1.8
02:55 AM - 03:00 AM	44.5	43.5	-	40.6	42.0	1.4
03:00 AM - 03:05 AM	43.9	42.9	-	40.0	40.6	0.6
03:05 AM - 03:10 AM	45.9	44.9	-	42.0	42.9	0.9
03:10 AM - 03:15 AM	48.2	47.2	-	44.3	45.3	1.0
03:15 AM - 03:20 AM	47.8	46.8	-	43.9	41.4	2.5
03:20 AM - 03:25 AM	45.7	44.7	-	41.8	41.5	0.3
03:25 AM - 03:30 AM	42.5	41.5	-	38.6	39.8	1.2
03:30 AM - 03:35 AM	40.6	39.6	-	36.7	38.5	1.8
03:35 AM - 03:40 AM	40.9	39.9	-	37.0	37.7	-0.7

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Approved by
Wilawan Borirak
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023542-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-16
Parameter เสียงนานาน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	42.2	41.2	-	38.3	38.3	0.0
03:45 AM - 03:50 AM	41.4	40.4	-	37.5	38.2	-0.7
03:50 AM - 03:55 AM	40.4	39.4	-	36.5	38.1	-1.6
03:55 AM - 04:00 AM	41.7	40.7	-	37.8	38.4	-0.6
04:00 AM - 04:05 AM	49.9	48.9	-	46.0	39.3	6.7
04:05 AM - 04:10 AM	52.0	51.0	-	48.1	41.2	6.9
04:10 AM - 04:15 AM	49.2	48.2	-	45.3	40.5	4.8
04:15 AM - 04:20 AM	48.1	47.1	-	44.2	39.9	4.3
04:20 AM - 04:25 AM	44.8	43.8	-	40.9	40.6	0.2
04:25 AM - 04:30 AM	42.7	41.7	-	38.8	40.3	-1.5
04:30 AM - 04:35 AM	44.3	43.3	-	40.4	41.3	0.9
04:35 AM - 04:40 AM	50.0	49.0	-	46.1	40.1	6.0
04:40 AM - 04:45 AM	52.3	51.3	-	48.4	38.3	10.1
04:45 AM - 04:50 AM	51.0	50.0	-	47.1	36.3	10.8
04:50 AM - 04:55 AM	49.7	48.7	-	45.8	35.1	9.7
04:55 AM - 05:00 AM	51.3	50.3	-	47.4	36.7	10.7
05:00 AM - 05:05 AM	43.8	42.8	-	39.9	39.2	1.7
05:05 AM - 05:10 AM	48.9	47.9	-	45.0	39.2	6.8
05:10 AM - 05:15 AM	45.2	44.2	-	41.3	37.4	3.9
05:15 AM - 05:20 AM	44.4	43.4	-	40.5	38.0	2.5
05:20 AM - 05:25 AM	46.1	45.1	-	42.2	38.4	3.8
05:25 AM - 05:30 AM	43.2	42.2	-	39.3	39.6	-0.3
05:30 AM - 05:35 AM	48.0	47.0	-	44.1	39.8	4.3
05:35 AM - 05:40 AM	49.0	48.0	-	45.1	40.1	5.0
05:40 AM - 05:45 AM	48.4	47.4	-	44.5	39.9	4.6
05:45 AM - 05:50 AM	51.2	50.2	-	47.3	39.9	7.4
05:50 AM - 05:55 AM	54.3	53.3	-	50.4	40.6	9.8
05:55 AM - 06:00 AM	49.4	47.4	-	44.5	39.2	5.3
06:00 AM - 07:00 AM	52.7	51.7	45.8	-	41.4	4.4
07:00 AM - 08:00 AM	56.4	55.4	49.5	-	47.3	7.2
08:00 AM - 09:00 AM	49.9	48.9	43.0	-	41.4	1.6
09:00 AM - 10:00 AM	47.4	46.4	40.5	-	40.2	0.3
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากรถยนต์ ระดับเสียงเกินกว่า 24 เดซิเบล และระดับเสียงสูงสุดที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2562
ยกเลิก
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงจากรถยนต์ ระดับเสียงที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2548
2. ประกาศกรมควบคุมมลพิษ เรื่อง กำหนดมาตรฐานและวิธีการตรวจวัดระดับเสียงที่เครื่องกลกรณีปกติจากโรงงาน พ.ศ. 2561
Remark:
1. ระดับเสียงจากแหล่งกำเนิด ช่วงการตรวจวัด วันที่ 30-31 พฤษภาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-16 วันที่ตรวจวัด 30-31 พฤษภาคม 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดอยู่นอกระดับเสียงขณะไม่มีการรบกวน

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023543-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-17
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไข่มุก 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	48.3	47.3	41.4	-	40.3	1.1
11:00 AM - 12:00 PM	48.4	47.4	41.5	-	39.2	2.3
12:00 PM - 01:00 PM	44.9	43.9	38.0	-	38.2	-0.2
01:00 PM - 02:00 PM	47.9	46.9	41.0	-	40.6	0.4
02:00 PM - 03:00 PM	47.1	46.1	40.2	-	40.6	-0.4
03:00 PM - 04:00 PM	47.3	46.3	40.4	-	40.3	0.1
04:00 PM - 05:00 PM	46.6	45.6	39.7	-	40.7	-1.0
05:00 PM - 06:00 PM	49.0	48.0	42.1	-	42.2	-0.1
06:00 PM - 07:00 PM	49.2	48.2	42.8	-	43.1	-0.3
07:00 PM - 08:00 PM	50.2	49.2	43.3	-	47.0	-3.7
08:00 PM - 09:00 PM	50.1	49.1	43.4	-	44.6	-1.2
09:00 PM - 10:00 PM	46.4	45.4	39.5	-	44.5	-5.0
10:00 PM - 10:05 PM	46.1	45.1	-	42.2	44.4	-2.2
10:05 PM - 10:10 PM	43.4	44.4	-	41.5	42.4	-0.9
10:10 PM - 10:15 PM	46.6	45.6	-	42.7	43.1	-0.4
10:15 PM - 10:20 PM	46.4	45.4	-	42.5	42.7	-0.2
10:20 PM - 10:25 PM	46.4	45.4	-	42.5	44.6	-2.1
10:25 PM - 10:30 PM	46.8	45.8	-	42.9	45.1	-2.2
10:30 PM - 10:35 PM	46.5	45.5	-	42.6	44.7	-2.1
10:35 PM - 10:40 PM	46.7	45.7	-	42.8	44.7	-1.9
10:40 PM - 10:45 PM	46.2	45.2	-	42.3	43.9	-1.6
10:45 PM - 10:50 PM	44.1	43.1	-	40.2	40.9	-0.7
10:50 PM - 10:55 PM	42.1	41.1	-	38.2	40.0	-1.8
10:55 PM - 11:00 PM	44.2	43.2	-	40.3	40.8	-0.5
11:00 PM - 11:05 PM	47.2	46.2	-	43.3	44.8	-1.5
11:05 PM - 11:10 PM	47.2	46.2	-	43.3	45.4	-2.1
11:10 PM - 11:15 PM	46.3	45.3	-	42.4	43.6	-1.2
11:15 PM - 11:20 PM	43.2	42.2	-	39.3	39.1	0.2
11:20 PM - 11:25 PM	42.9	41.9	-	39.0	40.2	-1.2
11:25 PM - 11:30 PM	43.7	42.7	-	39.8	42.0	-2.2
11:30 PM - 11:35 PM	44.5	43.5	-	40.6	42.2	-1.6
11:35 PM - 11:40 PM	45.5	44.5	-	41.6	43.3	-1.7
11:40 PM - 11:45 PM	46.9	45.9	-	43.0	44.8	-1.8
11:45 PM - 11:50 PM	47.5	46.5	-	43.6	45.7	-2.1
11:50 PM - 11:55 PM	48.2	47.2	-	44.3	46.3	-2.0
11:55 PM - 12:00 AM	48.8	47.8	-	44.9	46.9	-2.0
12:00 AM - 12:05 AM	49.0	48.0	-	45.1	46.7	-1.6
12:05 AM - 12:10 AM	48.1	47.1	-	44.2	46.2	-2.0
12:10 AM - 12:15 AM	48.8	47.8	-	44.9	46.8	-1.9
12:15 AM - 12:20 AM	49.8	48.8	-	45.9	47.8	-1.9

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023543-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-17
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไข่มุก 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	49.4	48.4	-	45.5	47.7	-2.2
12:25 AM - 12:30 AM	49.1	48.1	-	45.2	47.3	-2.1
12:30 AM - 12:35 AM	48.6	47.6	-	44.7	46.9	-2.2
12:35 AM - 12:40 AM	49.0	48.0	-	45.1	47.2	-2.1
12:40 AM - 12:45 AM	49.1	48.1	-	45.2	47.3	-2.1
12:45 AM - 12:50 AM	49.2	48.2	-	45.3	47.0	-1.7
12:50 AM - 12:55 AM	49.3	48.3	-	45.4	46.9	-1.5
12:55 AM - 01:00 AM	48.4	47.4	-	44.5	45.4	-1.9
01:00 AM - 01:05 AM	48.4	47.4	-	44.5	46.5	-2.0
01:05 AM - 01:10 AM	48.4	47.4	-	44.5	46.3	-1.8
01:10 AM - 01:15 AM	47.9	46.9	-	44.0	46.1	-2.1
01:15 AM - 01:20 AM	48.7	47.7	-	44.8	46.8	-2.0
01:20 AM - 01:25 AM	48.8	47.8	-	44.9	46.8	-1.9
01:25 AM - 01:30 AM	48.7	47.7	-	44.8	46.8	-2.0
01:30 AM - 01:35 AM	49.6	48.6	-	45.7	47.6	-1.9
01:35 AM - 01:40 AM	49.9	48.9	-	46.0	48.1	-2.1
01:40 AM - 01:45 AM	50.8	49.8	-	46.9	47.8	-0.9
01:45 AM - 01:50 AM	48.7	47.7	-	44.8	43.2	1.6
01:50 AM - 01:55 AM	50.2	49.2	-	46.3	48.3	-2.0
01:55 AM - 02:00 AM	50.4	49.4	-	46.5	48.6	-2.1
02:00 AM - 02:05 AM	50.4	49.4	-	46.5	48.7	-2.2
02:05 AM - 02:10 AM	50.1	49.1	-	46.2	48.2	-2.0
02:10 AM - 02:15 AM	49.3	48.3	-	45.4	47.4	-2.0
02:15 AM - 02:20 AM	49.1	48.1	-	45.2	47.2	-2.0
02:20 AM - 02:25 AM	49.3	48.3	-	45.4	47.4	-2.0
02:25 AM - 02:30 AM	49.4	48.4	-	45.5	47.5	-2.0
02:30 AM - 02:35 AM	49.8	48.8	-	45.9	48.1	-2.2
02:35 AM - 02:40 AM	49.8	48.8	-	45.9	47.9	-2.0
02:40 AM - 02:45 AM	49.5	48.5	-	45.6	47.8	-2.2
02:45 AM - 02:50 AM	49.3	48.3	-	45.4	47.3	-1.9
02:50 AM - 02:55 AM	50.1	49.1	-	46.2	46.9	-0.7
02:55 AM - 03:00 AM	48.1	47.1	-	44.2	45.9	-1.7
03:00 AM - 03:05 AM	47.8	46.8	-	43.9	45.5	-1.6
03:05 AM - 03:10 AM	46.8	45.8	-	42.9	44.7	-1.8
03:10 AM - 03:15 AM	47.8	46.8	-	43.9	45.4	-1.5
03:15 AM - 03:20 AM	46.8	45.8	-	42.9	44.2	-1.3
03:20 AM - 03:25 AM	46.9	45.9	-	43.0	44.6	-1.6
03:25 AM - 03:30 AM	46.3	45.3	-	42.4	43.3	-0.9
03:30 AM - 03:35 AM	45.2	44.2	-	41.4	42.6	-1.2
03:35 AM - 03:40 AM	46.6	45.6	-	42.7	44.5	-1.8

This above results are valid only for the sample/tested sample(s) as indicated in this report. No part of the 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023543-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-17
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไข่มุก 5
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	46.0	45.0	-	42.1	43.3	-1.2
03:45 AM - 03:50 AM	46.9	45.9	-	43.0	44.9	-1.9
03:50 AM - 03:55 AM	46.3	45.3	-	42.4	44.2	-2.0
03:55 AM - 04:00 AM	45.5	44.5	-	41.6	43.4	-1.8
04:00 AM - 04:05 AM	44.2	43.2	-	40.3	42.3	-2.0
04:05 AM - 04:10 AM	44.4	43.4	-	40.5	42.1	-1.6
04:10 AM - 04:15 AM	43.4	42.4	-	39.5	41.4	-1.9
04:15 AM - 04:20 AM	42.5	41.5	-	38.6	40.6	-2.0
04:20 AM - 04:25 AM	42.3	41.3	-	38.4	40.3	-1.9
04:25 AM - 04:30 AM	42.4	41.4	-	38.5	40.3	-1.8
04:30 AM - 04:35 AM	42.5	41.5	-	38.6	40.3	-1.7
04:35 AM - 04:40 AM	42.2	41.2	-	38.3	40.2	-1.9
04:40 AM - 04:45 AM	42.6	41.6	-	38.7	40.5	-1.8
04:45 AM - 04:50 AM	49.5	48.5	-	45.6	41.2	4.4
04:50 AM - 04:55 AM	43.0	42.0	-	39.1	41.0	-1.9
04:55 AM - 05:00 AM	42.8	41.8	-	38.9	40.8	-1.9
05:00 AM - 05:05 AM	46.0	45.0	-	42.1	40.3	1.8
05:05 AM - 05:10 AM	46.1	45.1	-	42.2	44.3	-2.1
05:10 AM - 05:15 AM	46.2	45.2	-	42.3	44.2	-1.9
05:15 AM - 05:20 AM	46.2	45.2	-	42.3	43.8	-1.5
05:20 AM - 05:25 AM	46.6	45.6	-	42.7	44.1	1.4
05:25 AM - 05:30 AM	46.5	45.5	-	42.6	44.5	-1.9
05:30 AM - 05:35 AM	45.4	44.4	-	41.5	43.4	-1.9
05:35 AM - 05:40 AM	43.2	42.2	-	39.8	41.9	-2.1
05:40 AM - 05:45 AM	45.1	44.1	-	41.2	42.3	1.1
05:45 AM - 05:50 AM	47.8	46.8	-	43.9	42.1	1.8
05:50 AM - 05:55 AM	46.0	45.4	-	40.1	42.1	-2.0
05:55 AM - 06:00 AM	44.2	43.6	-	38.3	41.8	-3.5
06:00 AM - 07:00 AM	52.2	51.6	43.3	-	42.4	0.9
07:00 AM - 08:00 AM	53.5	52.9	44.6	-	43.4	1.2
08:00 AM - 09:00 AM	53.5	52.9	44.6	-	43.8	2.8
09:00 AM - 10:00 AM	53.5	52.9	44.6	-	43.1	1.5
ค่าระดับการรบกวน						5.10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัด-ค่าเสียงรบกวน ระดับเสียงรวมตลอด 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องวัดระดับเสียงรบกวนต้องมีการปรับมาตรฐาน พ.ศ. 2567
มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเสียงสำหรับเขตนิคมอุตสาหกรรมและเขตเสียงที่เครื่องจักรในประเภทโรงงานจะต้องไม่เกินมาตรฐาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเสียงสำหรับมาตรฐานและวิธีการตรวจวัดเสียงจากเครื่องจักรที่ก่อให้เกิดเสียงรบกวนของโรงงาน พ. ศ. 2561
Remark:
1. ระดับเสียงรวมตลอดเวลาจริง ทางคณะฯวัดใน วันที่ 31 พฤษภาคม-01 มิถุนายน 2567
2. ระดับเสียงที่อยู่ของระดับเสียงของไม่มีการรบกวน (Sample No.2450169-17 วันที่ตรวจวัด 31 พฤษภาคม 01 มิถุนายน 2567)
3. กฎ/ข: ไม่สามารถคำนวณระดับเสียงของการมีการรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงรบกวนไม่มีการรบกวน

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023544-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-18
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไข่มุก 5
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	51.9	51.3	43.0	-	47.6	-0.4
11:00 AM - 12:00 PM	49.2	48.6	40.3	-	41.9	-1.6
12:00 PM - 01:00 PM	49.9	49.3	41.0	-	42.1	-1.1
01:00 PM - 02:00 PM	49.4	48.8	40.5	-	43.7	-3.2
02:00 PM - 03:00 PM	48.5	47.9	39.6	-	42.7	-2.1
03:00 PM - 04:00 PM	43.5	44.0	36.6	-	40.5	3.5
04:00 PM - 05:00 PM	45.3	44.7	36.4	-	40.0	3.6
05:00 PM - 06:00 PM	47.2	46.6	38.3	-	42.0	3.7
06:00 PM - 07:00 PM	46.8	46.2	37.9	-	42.7	4.8
07:00 PM - 08:00 PM	49.6	49.0	40.7	-	47.7	-7.0
08:00 PM - 09:00 PM	48.6	48.0	39.7	-	47.1	-7.4
09:00 PM - 10:00 PM	47.9	47.3	39.0	-	46.9	-7.6
10:00 PM - 10:05 PM	47.7	47.1	-	41.8	45.3	-3.5
10:05 PM - 10:10 PM	48.0	47.4	-	42.1	46.0	-3.9
10:10 PM - 10:15 PM	47.9	47.3	-	42.0	46.5	-4.5
10:15 PM - 10:20 PM	48.1	47.5	-	42.2	46.4	-4.1
10:20 PM - 10:25 PM	47.6	47.0	-	41.7	45.5	-3.8
10:25 PM - 10:30 PM	47.5	46.9	-	41.6	45.2	-3.6
10:30 PM - 10:35 PM	47.4	46.8	-	41.5	45.0	-3.5
10:35 PM - 10:40 PM	46.9	46.3	-	41.0	45.1	-4.1
10:40 PM - 10:45 PM	47.4	46.8	-	41.5	45.0	-3.5
10:45 PM - 10:50 PM	46.8	46.2	-	40.9	44.8	-3.9
10:50 PM - 10:55 PM	50.6	50.0	-	44.7	45.8	-3.1
10:55 PM - 11:00 PM	47.2	46.6	-	41.3	44.8	-3.5
11:00 PM - 11:05 PM	46.6	46.0	-	40.7	44.0	-3.3
11:05 PM - 11:10 PM	46.0	45.4	-	40.1	43.9	-3.8
11:10 PM - 11:15 PM	46.2	45.6	-	40.3	43.9	-3.6
11:15 PM - 11:20 PM	46.0	45.4	-	40.1	44.2	-4.1
11:20 PM - 11:25 PM	47.5	46.9	-	41.6	45.1	-3.5
11:25 PM - 11:30 PM	47.0	46.4	-	41.1	44.2	-3.1
11:30 PM - 11:35 PM	47.2	46.6	-	41.3	44.4	-3.1
11:35 PM - 11:40 PM	46.1	45.5	-	40.2	44.1	-3.9
11:40 PM - 11:45 PM	46.1	45.7	-	40.4	43.9	-3.5
11:45 PM - 11:50 PM	43.2	44.6	-	39.3	43.2	-3.9
11:50 PM - 11:55 PM	45.8	43.2	-	39.9	43.8	-3.9
11:55 PM - 12:00 AM	46.2	45.6	-	40.3	44.0	-3.7
12:00 AM - 12:05 AM	43.9	45.3	-	40.0	44.0	-4.0
12:05 AM - 12:10 AM	46.1	45.5	-	40.2	44.1	-3.9
12:10 AM - 12:15 AM	45.6	45.0	-	39.7	43.5	-3.8
12:15 AM - 12:20 AM	46.3	45.7	-	40.4	44.5	-4.1

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023544-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-18
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	45.5	44.9	-	39.6	43.6	-4.0
12:25 AM - 12:30 AM	47.5	46.9	-	41.6	44.7	-3.1
12:30 AM - 12:35 AM	46.1	45.7	-	40.4	44.9	-4.5
12:35 AM - 12:40 AM	46.1	45.5	-	40.2	44.6	-4.4
12:40 AM - 12:45 AM	46.8	46.2	-	40.9	44.0	1.1
12:45 AM - 12:50 AM	46.8	46.2	-	40.9	44.6	-1.7
12:50 AM - 12:55 AM	46.8	46.2	-	40.9	45.0	-4.1
12:55 AM - 01:00 AM	47.1	46.5	-	41.2	45.3	-4.1
01:00 AM - 01:05 AM	46.6	46.0	-	40.7	45.1	-4.4
01:05 AM - 01:10 AM	46.7	46.1	-	40.8	45.4	-4.6
01:10 AM - 01:15 AM	46.4	45.8	-	40.5	45.1	-4.6
01:15 AM - 01:20 AM	46.1	45.5	-	40.2	44.6	-4.4
01:20 AM - 01:25 AM	45.6	45.0	-	39.7	43.7	-4.0
01:25 AM - 01:30 AM	45.1	44.7	-	39.4	42.5	-3.1
01:30 AM - 01:35 AM	43.5	42.9	-	37.6	42.1	-4.5
01:35 AM - 01:40 AM	45.1	44.7	-	39.4	43.1	-3.7
01:40 AM - 01:45 AM	45.9	45.3	-	40.0	44.1	-4.1
01:45 AM - 01:50 AM	44.6	44.0	-	38.7	42.6	-3.9
01:50 AM - 01:55 AM	44.3	43.7	-	38.4	42.1	-3.7
01:55 AM - 02:00 AM	44.9	44.3	-	38.9	43.5	-4.6
02:00 AM - 02:05 AM	44.9	44.3	-	39.0	43.5	-4.5
02:05 AM - 02:10 AM	53.8	53.2	-	47.9	44.2	3.7
02:10 AM - 02:15 AM	54.0	53.4	-	48.1	45.7	2.4
02:15 AM - 02:20 AM	52.5	51.9	-	46.6	45.2	1.4
02:20 AM - 02:25 AM	54.4	53.8	-	48.5	41.8	6.9
02:25 AM - 02:30 AM	44.9	44.3	-	39.0	43.6	-4.6
02:30 AM - 02:35 AM	45.9	45.3	-	40.0	44.3	-4.3
02:35 AM - 02:40 AM	45.3	44.7	-	39.4	43.9	-4.5
02:40 AM - 02:45 AM	44.4	43.8	-	38.5	41.7	2.2
02:45 AM - 02:50 AM	43.7	43.1	-	37.8	41.0	2.2
02:50 AM - 02:55 AM	43.0	42.4	-	37.1	40.8	-3.7
02:55 AM - 03:00 AM	47.2	46.6	-	41.3	40.3	1.0
03:00 AM - 03:05 AM	42.1	41.5	-	36.2	40.5	-4.3
03:05 AM - 03:10 AM	45.7	45.1	-	39.8	42.9	3.1
03:10 AM - 03:15 AM	44.8	44.2	-	38.9	43.3	-4.4
03:15 AM - 03:20 AM	44.0	43.4	-	38.1	42.6	4.5
03:20 AM - 03:25 AM	43.9	43.3	-	38.0	40.5	2.5
03:25 AM - 03:30 AM	41.9	41.3	-	36.0	39.6	3.6
03:30 AM - 03:35 AM	41.7	41.1	-	35.8	39.7	3.9
03:35 AM - 03:40 AM	42.4	41.8	-	36.5	40.7	4.2

Approved by

Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023544-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-18
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	42.2	41.6	-	36.3	39.8	3.5
03:45 AM - 03:50 AM	42.4	41.8	-	36.5	40.6	4.3
03:50 AM - 03:55 AM	41.1	40.5	-	35.2	39.3	4.1
03:55 AM - 04:00 AM	49.6	49.0	-	43.7	39.8	3.9
04:00 AM - 04:05 AM	54.5	53.9	-	48.6	40.9	7.7
04:05 AM - 04:10 AM	51.2	50.6	-	45.3	41.1	4.2
04:10 AM - 04:15 AM	48.8	48.2	-	42.9	41.1	1.8
04:15 AM - 04:20 AM	42.7	42.1	-	37.8	41.0	3.2
04:20 AM - 04:25 AM	50.1	49.5	-	44.2	41.2	3.0
04:25 AM - 04:30 AM	50.5	49.9	-	44.6	41.8	2.8
04:30 AM - 04:35 AM	50.9	50.3	-	45.0	41.7	3.3
04:35 AM - 04:40 AM	48.5	47.9	-	42.6	41.0	1.6
04:40 AM - 04:45 AM	49.2	48.6	-	43.3	40.3	3.0
04:45 AM - 04:50 AM	55.0	54.4	-	49.1	40.4	8.7
04:50 AM - 04:55 AM	53.2	52.6	-	47.3	40.2	7.1
04:55 AM - 05:00 AM	54.3	53.7	-	48.4	40.3	8.1
05:00 AM - 05:05 AM	53.4	52.8	-	47.5	40.6	6.9
05:05 AM - 05:10 AM	53.0	52.4	-	47.1	41.1	6.0
05:10 AM - 05:15 AM	52.8	52.2	-	46.9	41.2	5.7
05:15 AM - 05:20 AM	53.9	53.3	-	48.0	40.4	7.6
05:20 AM - 05:25 AM	52.5	51.9	-	46.6	41.5	5.1
05:25 AM - 05:30 AM	55.5	54.9	-	49.6	41.4	8.2
05:30 AM - 05:35 AM	56.2	55.6	-	50.3	41.2	9.1
05:35 AM - 05:40 AM	53.0	52.4	-	47.1	42.5	4.6
05:40 AM - 05:45 AM	46.0	45.4	-	40.1	42.7	2.6
05:45 AM - 05:50 AM	53.4	54.8	-	49.5	41.4	6.1
05:50 AM - 05:55 AM	45.5	44.9	-	39.6	49.1	-4.5
05:55 AM - 06:00 AM	45.7	45.1	-	39.8	44.3	-4.5
06:00 AM - 07:00 AM	49.0	48.4	40.1		41.2	1.1
07:00 AM - 08:00 AM	48.6	48.0	39.7		40.5	-0.8
08:00 AM - 09:00 AM	47.6	47.0	38.7		41.4	2.7
09:00 AM - 10:00 AM	50.5	49.9	41.6		40.9	0.7
ค่าเฉลี่ยรายชั่วโมง						5.19

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567
มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากแหล่งกำเนิดเสียงที่ก่อให้เกิดรำคาญจากประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานควบคุมเสียงที่เกิดจากการประกอบกิจการที่เป็นเหตุรำคาญต่อสุขลักษณะ พ.ศ. 2561
Remark:
1. ระดับเสียงรบกวนแหล่งกำเนิด ตำบลมาบข่า วันที่ 01-02 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-18 วันที่ตรงกัน 01-02 มิถุนายน 2567)
3. n/a: ไม่สามารถตรวจวัดระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงรบกวนแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

Approved by

Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023545-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-19
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	47.1	46.5	38.2		40.9	2.7
11:00 AM - 12:00 PM	47.8	47.2	38.9		42.6	1.7
12:00 PM - 01:00 PM	48.1	47.7	39.4		43.5	2.1
01:00 PM - 02:00 PM	49.6	49.0	40.7		42.1	1.4
02:00 PM - 03:00 PM	51.6	51.0	42.7		41.9	0.8
03:00 PM - 04:00 PM	50.0	49.4	41.1		42.5	-1.4
04:00 PM - 05:00 PM	47.5	46.9	38.6		40.8	2.2
05:00 PM - 06:00 PM	48.0	47.4	39.1		41.8	2.7
06:00 PM - 07:00 PM	47.3	46.7	38.4		42.9	4.5
07:00 PM - 08:00 PM	52.9	52.3	44.0		47.4	3.4
08:00 PM - 09:00 PM	50.2	49.6	41.3		48.0	-8.7
09:00 PM - 10:00 PM	51.0	50.4	44.1		48.8	-4.7
10:00 PM - 10:05 PM	50.6	50.0		44.7	45.9	4.2
10:05 PM - 10:10 PM	50.1	49.5		44.2	48.6	-4.4
10:10 PM - 10:15 PM	50.5	49.9		44.6	45.0	-4.4
10:15 PM - 10:20 PM	50.0	49.4		44.1	48.7	-4.6
10:20 PM - 10:25 PM	51.5	50.9		45.6	45.1	3.5
10:25 PM - 10:30 PM	51.3	50.7		45.4	48.8	1.4
10:30 PM - 10:35 PM	51.1	50.5		45.2	49.4	4.7
10:35 PM - 10:40 PM	50.6	50.0		44.7	45.1	-4.4
10:40 PM - 10:45 PM	50.4	49.8		44.5	49.0	-4.5
10:45 PM - 10:50 PM	50.2	49.6		44.3	48.8	-4.5
10:50 PM - 10:55 PM	50.3	50.1		44.8	49.0	-4.7
10:55 PM - 11:00 PM	49.8	49.2		41.9	48.4	4.5
11:00 PM - 11:05 PM	49.8	49.3		44.0	47.1	3.1
11:05 PM - 11:10 PM	51.2	50.6		45.3	48.1	2.8
11:10 PM - 11:15 PM	49.5	48.9	-	43.6	47.1	3.5
11:15 PM - 11:20 PM	48.5	47.9		42.6	45.9	3.3
11:20 PM - 11:25 PM	50.2	49.6		44.3	48.2	1.9
11:25 PM - 11:30 PM	51.0	50.4		45.1	45.8	0.7
11:30 PM - 11:35 PM	49.1	48.5		43.2	47.7	-4.5
11:35 PM - 11:40 PM	49.1	48.5		43.2	47.6	-4.4
11:40 PM - 11:45 PM	49.5	48.9		43.6	48.0	-4.4
11:45 PM - 11:50 PM	49.0	48.4		43.1	47.6	-4.5
11:50 PM - 11:55 PM	49.4	48.8		43.5	47.5	4.0
11:55 PM - 12:00 AM	49.0	48.4		43.1	45.4	3.3
12:00 AM - 12:05 AM	48.6	48.0		42.7	47.3	4.6
12:05 AM - 12:10 AM	49.1	48.5		43.2	47.1	4.1
12:10 AM - 12:15 AM	48.8	48.2		42.9	45.9	4.0
12:15 AM - 12:20 AM	48.0	47.4		42.1	45.8	3.7

Approved by

Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023545-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-19
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่นุก 5
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	49.6	49.0		43.7	47.1	3.4
12:25 AM - 12:30 AM	49.4	48.8		43.5	47.2	4.2
12:30 AM - 12:35 AM	48.4	47.8		42.5	45.8	3.3
12:35 AM - 12:40 AM	47.7	47.1		41.8	44.7	2.9
12:40 AM - 12:45 AM	48.1	47.5		42.2	46.4	-4.2
12:45 AM - 12:50 AM	47.8	47.2		41.9	46.2	-4.3
12:50 AM - 12:55 AM	47.2	46.6		41.3	43.7	3.4
12:55 AM - 01:00 AM	44.7	44.1		38.8	42.6	1.8
01:00 AM - 01:05 AM	46.5	45.9		40.6	43.7	3.1
01:05 AM - 01:10 AM	47.1	46.5		41.2	44.0	2.8
01:10 AM - 01:15 AM	48.1	47.5		42.2	46.5	-4.3
01:15 AM - 01:20 AM	48.0	47.4		42.1	46.3	-4.2
01:20 AM - 01:25 AM	47.8	47.2		41.9	46.3	-4.4
01:25 AM - 01:30 AM	47.9	47.3		42.0	46.4	-4.4
01:30 AM - 01:35 AM	47.8	47.2		41.9	46.3	-4.4
01:35 AM - 01:40 AM	47.8	47.2		41.9	46.0	-4.1
01:40 AM - 01:45 AM	47.8	47.2		41.9	46.2	-4.3
01:45 AM - 01:50 AM	47.7	47.1		41.8	46.4	-4.6
01:50 AM - 01:55 AM	47.7	47.1		41.8	46.1	-4.3
01:55 AM - 02:00 AM	55.4	54.8		49.5	47.1	2.4
02:00 AM - 02:05 AM	55.5	54.9		49.6	48.6	1.0
02:05 AM - 02:10 AM	49.4	48.8		43.5	46.3	2.8
02:10 AM - 02:15 AM	47.9	47.3		42.0	46.5	-4.5
02:15 AM - 02:20 AM	47.6	47.0		41.7	46.1	-4.4
02:20 AM - 02:25 AM	47.2	46.6		41.3	45.5	-4.2
02:25 AM - 02:30 AM	47.7	47.1		41.8	45.8	4.0
02:30 AM - 02:35 AM	46.1	45.7		40.4	44.2	3.8
02:35 AM - 02:40 AM	45.4	44.8		39.5	43.7	4.2
02:40 AM - 02:45 AM	46.1	45.5		40.2	41.6	4.5
02:45 AM - 02:50 AM	44.8	44.2		38.9	43.2	4.3
02:50 AM - 02:55 AM	46.7	46.1		40.8	43.2	3.4
02:55 AM - 03:00 AM	46.1	45.5		40.2	43.2	3.8
03:00 AM - 03:05 AM	44.8	44.2		38.9	42.4	3.5
03:05 AM - 03:10 AM	43.3	42.7		37.4	41.8	4.4
03:10 AM - 03:15 AM	43.5	42.9		37.6	41.9	4.1
03:15 AM - 03:20 AM	43.7	43.1		37.8	41.3	4.5
03:20 AM - 03:25 AM	43.3	42.7		37.4	41.3	3.9
03:25 AM - 03:30 AM	42.8	42.2		36.9	41.3	4.2
03:30 AM - 03:35 AM	44.8	44.2		38.9	41.3	3.4
03:35 AM - 03:40 AM	47.7	47.1		41.8	40.9	5.9

Approved by

Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023546-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-19
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไชนา 5
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	49.8	49.0	-	43.7	40.9	2.8
03:45 AM - 03:50 AM	42.8	42.2	-	36.9	41.3	-4.4
03:50 AM - 03:55 AM	42.6	42.0	-	36.7	40.9	-4.2
03:55 AM - 04:00 AM	41.5	40.9	-	35.6	40.0	-4.4
04:00 AM - 04:05 AM	48.0	47.4	-	42.1	40.2	1.9
04:05 AM - 04:10 AM	48.9	48.3	-	42.9	39.6	3.4
04:10 AM - 04:15 AM	40.9	40.3	-	35.0	39.2	-4.2
04:15 AM - 04:20 AM	49.4	48.8	-	43.5	40.0	3.5
04:20 AM - 04:25 AM	43.5	42.9	-	37.6	42.3	-4.7
04:25 AM - 04:30 AM	41.7	41.1	-	41.8	42.2	-0.4
04:30 AM - 04:35 AM	49.0	48.3	-	44.0	41.3	2.7
04:35 AM - 04:40 AM	47.2	46.6	-	41.3	41.3	0.0
04:40 AM - 04:45 AM	47.2	46.6	-	41.3	40.2	1.1
04:45 AM - 04:50 AM	51.0	50.4	-	45.1	39.4	5.7
04:50 AM - 04:55 AM	50.1	49.5	-	44.2	37.9	6.3
04:55 AM - 05:00 AM	45.9	45.3	-	40.0	38.3	1.7
05:00 AM - 05:05 AM	40.4	39.8	-	34.5	38.1	-3.6
05:05 AM - 05:10 AM	40.6	40.0	-	34.7	38.3	-3.6
05:10 AM - 05:15 AM	42.0	41.4	-	36.1	39.3	-3.2
05:15 AM - 05:20 AM	48.4	47.8	-	42.5	39.2	3.3
05:20 AM - 05:25 AM	52.8	52.2	-	46.9	39.5	7.4
05:25 AM - 05:30 AM	50.9	50.3	-	45.0	40.1	4.9
05:30 AM - 05:35 AM	49.7	49.1	-	43.8	41.0	2.8
05:35 AM - 05:40 AM	49.6	49.0	-	43.7	41.0	2.7
05:40 AM - 05:45 AM	48.2	47.6	-	42.3	42.2	0.1
05:45 AM - 05:50 AM	48.0	47.4	-	42.1	42.2	-0.1
05:50 AM - 05:55 AM	60.6	60.0	-	54.7	42.1	12.6
05:55 AM - 06:00 AM	64.1	63.5	-	58.2	42.1	16.1
06:00 AM - 07:00 AM	48.5	47.9	39.6	-	41.2	-1.6
07:00 AM - 08:00 AM	53.0	52.5	43.4	-	40.9	2.5
08:00 AM - 09:00 AM	47.1	46.7	36.3	-	38.8	-2.3
09:00 AM - 10:00 AM	48.0	47.6	37.4	-	38.9	-1.5
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรมงาน ระดับเสียงเกิน 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าของแต่ละระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง การแต่งตั้งพนักงานเจ้าหน้าที่และหลักเกณฑ์วิธีการปฏิบัติงานของพนักงานเจ้าหน้าที่ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-19 วันที่ตรวจวัด 02-03 มิถุนายน 2567)
3. n/a: ไม่สามารถทำการตรวจวัดเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above result 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023546-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-20
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไชนา 5
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	50.3	49.9	39.7	-	38.7	1.0
11:00 AM - 12:00 PM	44.8	44.4	34.2	-	37.3	-3.1
12:00 PM - 01:00 PM	43.1	44.7	34.5	-	38.2	-3.7
01:00 PM - 02:00 PM	42.8	42.4	32.2	-	38.0	-5.8
02:00 PM - 03:00 PM	47.1	46.7	36.5	-	38.9	-2.4
03:00 PM - 04:00 PM	47.2	46.8	36.6	-	41.4	-4.8
04:00 PM - 05:00 PM	47.4	47.0	36.8	-	40.7	-3.9
05:00 PM - 06:00 PM	46.0	45.6	35.4	-	40.7	-5.3
06:00 PM - 07:00 PM	47.0	46.6	36.4	-	41.5	-5.1
07:00 PM - 08:00 PM	50.8	50.4	40.2	-	47.8	-7.6
08:00 PM - 09:00 PM	48.5	48.1	37.9	-	46.9	-9.0
09:00 PM - 10:00 PM	48.2	47.8	37.6	-	45.1	-7.5
10:00 PM - 10:05 PM	47.4	47.0	-	39.8	45.7	-5.9
10:05 PM - 10:10 PM	48.2	47.8	-	40.6	46.0	-5.4
10:10 PM - 10:15 PM	48.7	48.3	-	41.1	46.2	-5.1
10:15 PM - 10:20 PM	48.6	48.2	-	41.0	46.2	-5.2
10:20 PM - 10:25 PM	48.1	47.7	-	40.5	46.1	-5.6
10:25 PM - 10:30 PM	47.1	46.7	-	39.5	45.6	-6.1
10:30 PM - 10:35 PM	46.2	45.8	-	39.1	43.9	-4.8
10:35 PM - 10:40 PM	48.2	47.8	-	40.6	45.7	-5.1
10:40 PM - 10:45 PM	47.1	46.7	-	39.5	45.8	-6.3
10:45 PM - 10:50 PM	46.9	46.5	-	39.3	44.3	-5.0
10:50 PM - 10:55 PM	47.1	46.7	-	39.5	45.8	-6.3
10:55 PM - 11:00 PM	47.0	46.6	-	39.4	45.7	-6.3
11:00 PM - 11:05 PM	46.7	46.3	-	39.1	45.5	-6.4
11:05 PM - 11:10 PM	46.9	46.5	-	39.3	43.5	-6.2
11:10 PM - 11:15 PM	47.5	47.1	-	39.9	45.2	-5.3
11:15 PM - 11:20 PM	46.8	46.4	-	39.2	45.2	-6.0
11:20 PM - 11:25 PM	46.4	46.0	-	38.8	43.0	-6.2
11:25 PM - 11:30 PM	46.3	45.9	-	38.7	44.8	-6.1
11:30 PM - 11:35 PM	46.5	46.1	-	38.9	43.0	-6.1
11:35 PM - 11:40 PM	46.6	46.2	-	39.0	45.1	-6.1
11:40 PM - 11:45 PM	46.1	45.7	-	38.5	44.9	-6.4
11:45 PM - 11:50 PM	45.3	44.9	-	37.7	44.1	-6.4
11:50 PM - 11:55 PM	45.7	45.3	-	38.1	44.3	-6.2
11:55 PM - 12:00 AM	45.6	45.2	-	38.0	44.5	-6.5
12:00 AM - 12:05 AM	46.1	45.7	-	38.5	44.7	-6.2
12:05 AM - 12:10 AM	45.4	45.0	-	37.8	44.3	-6.5
12:10 AM - 12:15 AM	45.2	44.8	-	37.6	44.0	-6.4
12:15 AM - 12:20 AM	45.2	44.8	-	37.6	43.8	-6.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023546-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-20
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไชนา 5
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	44.3	43.9	-	36.7	41.5	-4.8
12:25 AM - 12:30 AM	45.1	44.5	-	37.2	42.5	-4.8
12:30 AM - 12:35 AM	46.0	45.6	-	38.4	44.1	-5.7
12:35 AM - 12:40 AM	45.7	45.3	-	38.1	44.1	-6.0
12:40 AM - 12:45 AM	45.2	44.8	-	37.6	43.9	-6.3
12:45 AM - 12:50 AM	45.8	45.4	-	38.2	44.1	-6.1
12:50 AM - 12:55 AM	44.8	44.4	-	37.2	41.9	-4.7
12:55 AM - 01:00 AM	48.8	48.4	-	41.2	41.1	0.1
01:00 AM - 01:05 AM	43.6	43.2	-	38.0	43.8	-5.8
01:05 AM - 01:10 AM	48.0	47.6	-	40.4	44.2	+3.8
01:10 AM - 01:15 AM	44.9	44.5	-	37.3	43.8	-6.5
01:15 AM - 01:20 AM	43.7	43.3	-	38.1	42.9	-5.8
01:20 AM - 01:25 AM	42.4	42.0	-	34.8	39.9	-5.1
01:25 AM - 01:30 AM	49.1	48.9	-	41.7	43.3	+1.6
01:30 AM - 01:35 AM	49.5	49.1	-	41.9	43.0	-1.1
01:35 AM - 01:40 AM	44.2	43.8	-	36.6	43.0	-6.4
01:40 AM - 01:45 AM	54.3	53.9	-	46.7	45.4	1.3
01:45 AM - 01:50 AM	54.3	53.9	-	46.7	45.6	1.1
01:50 AM - 01:55 AM	50.4	50.0	-	42.8	41.8	1.0
01:55 AM - 02:00 AM	45.0	44.6	-	37.4	43.9	-6.5
02:00 AM - 02:05 AM	45.3	44.9	-	37.7	44.1	-6.4
02:05 AM - 02:10 AM	44.7	44.3	-	37.1	43.5	-6.4
02:10 AM - 02:15 AM	44.8	44.4	-	37.2	43.6	-6.4
02:15 AM - 02:20 AM	44.8	44.4	-	37.2	43.7	-6.5
02:20 AM - 02:25 AM	44.6	44.2	-	37.0	43.6	-6.6
02:25 AM - 02:30 AM	44.9	44.5	-	37.3	43.7	-6.4
02:30 AM - 02:35 AM	44.7	44.3	-	37.1	43.5	-6.4
02:35 AM - 02:40 AM	43.2	43.2	-	35.7	42.1	-6.0
02:40 AM - 02:45 AM	44.8	44.4	-	37.2	42.5	-5.3
02:45 AM - 02:50 AM	45.9	45.2	-	38.0	44.4	-6.4
02:50 AM - 02:55 AM	42.9	42.5	-	35.3	40.7	-5.4
02:55 AM - 03:00 AM	43.5	43.2	-	36.0	40.5	-4.5
03:00 AM - 03:05 AM	44.2	43.8	-	36.6	40.8	-4.2
03:05 AM - 03:10 AM	42.3	41.9	-	34.7	41.2	-6.5
03:10 AM - 03:15 AM	42.8	42.4	-	35.2	40.9	-5.7
03:15 AM - 03:20 AM	42.3	41.9	-	34.7	40.7	-6.0
03:20 AM - 03:25 AM	42.4	42.0	-	34.8	41.0	-6.2
03:25 AM - 03:30 AM	43.5	43.1	-	35.9	41.6	-5.7
03:30 AM - 03:35 AM	54.3	53.9	-	46.7	41.8	4.9
03:35 AM - 03:40 AM	56.2	55.8	-	48.6	41.6	7.0

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023546-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-20
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไชนา 5
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	42.1	41.7	-	34.7	40.3	-5.6
03:45 AM - 03:50 AM	42.4	42.0	-	34.8	41.4	-6.6
03:50 AM - 03:55 AM	42.5	42.1	-	34.9	41.3	-6.4
03:55 AM - 04:00 AM	42.1	41.7	-	34.5	40.8	-6.3
04:00 AM - 04:05 AM	50.8	50.4	-	47.2	40.1	3.1
04:05 AM - 04:10 AM	48.1	47.7	-	40.5	39.4	1.1
04:10 AM - 04:15 AM	40.6	40.2	-	33.0	39.1	-6.1
04:15 AM - 04:20 AM	51.7	51.3	-	44.1	38.7	5.4
04:20 AM - 04:25 AM	52.0	51.6	-	44.4	39.9	4.5
04:25 AM - 04:30 AM	54.7	54.3	-	47.1	40.7	6.4
04:30 AM - 04:35 AM	47.6	47.2	-	40.0	41.1	-1.1
04:35 AM - 04:40 AM	57.3	56.9	-	49.7	39.7	10.0
04:40 AM - 04:45 AM	51.7	51.3	-	44.1	38.1	8.0
04:45 AM - 04:50 AM	56.8	56.4	-	49.0	38.5	10.5
04:50 AM - 04:55 AM	55.0	54.6	-	47.4	38.8	8.6
04:55 AM - 05:00 AM	54.6	54.2	-	47.0	38.1	8.9
05:00 AM - 05:05 AM	52.0	51.6	-	44.4	38.3	6.1
05:05 AM - 05:10 AM	52.4	52.0	-	44.8	38.8	6.0
05:10 AM - 05:15 AM	55.1	54.7	-	47.5	39.7	7.8
05:15 AM - 05:20 AM	55.8	55.4	-	48.2	40.3	7.9
05:20 AM - 05:25 AM	56.3	55.9	-	48.7	41.4	7.3
05:25 AM - 05:30 AM	55.8	55.4	-	48.2	41.2	7.0
05:30 AM - 05:35 AM	54.8	54.4	-	47.2	42.0	5.2
05:35 AM - 05:40 AM	56.0	55.6	-	48.4	42.2	6.2
05:40 AM - 05:45 AM	55.4	55.0	-	47.8	42.3	5.5
05:45 AM - 05:50 AM	50.1	49.7	-	42.5	42.6	-1.1
05:50 AM - 05:55 AM	51.0	50.6	-	43.4	42.6	0.6
05:55 AM - 06:00 AM	49.2	48.8	-	41.6	42.0	-0.4
06:00 AM - 07:00 AM	51.4	51.0	40.8	-	43.4	-2.6
07:00 AM - 08:00 AM	52.3	51.9	41.7	-	44.8	-3.1
08:00 AM - 09:00 AM	52.1	51.7	41.5	-	41.6	-0.1
09:00 AM - 10:00 AM	46.3	45.9	35.7	-	39.4	-3.7
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรมงาน ระดับเสียงเกิน 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าของแต่ละระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง การแต่งตั้งพนักงานเจ้าหน้าที่และหลักเกณฑ์วิธีการปฏิบัติงานของพนักงานเจ้าหน้าที่ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-20 วันที่ตรวจวัด 03-04 มิถุนายน 2567)
3. n/a: ไม่สามารถทำการตรวจวัดเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023547-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-21
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่มก 5
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	44.6	44.0	35.7	-	39.3	3.6
11:00 AM - 12:00 PM	46.9	45.8	40.4	-	38.8	1.8
12:00 PM - 01:00 PM	40.9	45.8	40.4	-	35.6	3.8
01:00 PM - 02:00 PM	43.5	42.4	37.0	-	37.3	-0.3
02:00 PM - 03:00 PM	44.8	43.7	38.3	-	38.8	-0.5
03:00 PM - 04:00 PM	46.5	45.4	40.0	-	40.8	-0.8
04:00 PM - 05:00 PM	46.6	45.5	40.1	-	40.0	0.1
05:00 PM - 06:00 PM	51.5	50.4	45.0	-	40.2	4.8
06:00 PM - 07:00 PM	45.6	45.5	40.1	-	41.1	1.0
07:00 PM - 08:00 PM	50.5	49.4	44.0	-	46.7	2.7
08:00 PM - 09:00 PM	49.4	48.3	42.9	-	45.9	3.0
09:00 PM - 10:00 PM	47.6	46.5	41.1	-	44.7	3.6
10:00 PM - 10:05 PM	47.8	46.7	-	44.3	45.8	1.5
10:05 PM - 10:10 PM	49.5	48.4	-	46.0	47.2	1.2
10:10 PM - 10:15 PM	48.5	47.4	-	45.0	45.7	-0.7
10:15 PM - 10:20 PM	47.5	46.4	-	44.0	45.5	-1.5
10:20 PM - 10:25 PM	47.4	46.3	-	43.9	45.4	-1.5
10:25 PM - 10:30 PM	47.8	46.7	-	44.3	45.6	1.3
10:30 PM - 10:35 PM	47.8	46.7	-	44.3	45.6	1.3
10:35 PM - 10:40 PM	49.3	48.2	-	45.8	46.5	-0.7
10:40 PM - 10:45 PM	48.5	47.4	-	45.0	46.6	-1.6
10:45 PM - 10:50 PM	49.0	47.9	-	45.5	46.9	1.4
10:50 PM - 10:55 PM	49.4	48.3	-	45.9	47.0	1.1
10:55 PM - 11:00 PM	47.6	46.5	-	44.1	45.7	1.4
11:00 PM - 11:05 PM	49.0	47.9	-	45.5	46.8	1.3
11:05 PM - 11:10 PM	47.9	46.8	-	44.4	45.9	1.5
11:10 PM - 11:15 PM	47.9	46.8	-	44.4	46.0	1.6
11:15 PM - 11:20 PM	47.4	46.3	-	43.9	44.0	-0.1
11:20 PM - 11:25 PM	46.9	45.8	-	43.4	44.1	-0.7
11:25 PM - 11:30 PM	47.7	46.6	-	44.2	45.5	1.3
11:30 PM - 11:35 PM	47.2	46.1	-	43.7	45.3	-1.6
11:35 PM - 11:40 PM	46.7	45.6	-	43.2	43.5	-0.3
11:40 PM - 11:45 PM	45.7	44.6	-	42.2	43.6	-0.4
11:45 PM - 11:50 PM	44.0	42.9	-	40.5	42.0	-1.5
11:50 PM - 11:55 PM	44.4	43.3	-	40.9	41.9	1.0
11:55 PM - 12:00 AM	45.6	44.5	-	42.1	43.4	1.3
12:00 AM - 12:05 AM	45.4	44.3	-	41.9	43.4	1.5
12:05 AM - 12:10 AM	45.1	44.0	-	41.6	43.2	1.7
12:10 AM - 12:15 AM	45.5	44.4	-	42.0	43.6	1.6
12:15 AM - 12:20 AM	45.8	44.7	-	42.3	44.0	1.7

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023547-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-21
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่มก 5
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	46.5	45.4	-	43.0	44.2	1.2
12:25 AM - 12:30 AM	46.1	45.0	-	42.6	44.0	1.4
12:30 AM - 12:35 AM	45.4	44.3	-	41.9	43.1	1.2
12:35 AM - 12:40 AM	45.5	44.4	-	42.0	43.7	1.7
12:40 AM - 12:45 AM	45.0	43.9	-	41.5	43.1	1.6
12:45 AM - 12:50 AM	45.5	44.4	-	42.0	43.4	1.4
12:50 AM - 12:55 AM	45.9	44.8	-	42.4	43.8	1.4
12:55 AM - 01:00 AM	45.4	44.3	-	41.9	43.6	1.7
01:00 AM - 01:05 AM	45.7	44.6	-	42.2	43.8	1.6
01:05 AM - 01:10 AM	45.9	44.8	-	42.4	44.1	1.7
01:10 AM - 01:15 AM	45.1	44.0	-	41.6	43.1	1.5
01:15 AM - 01:20 AM	45.6	44.5	-	42.1	43.4	1.3
01:20 AM - 01:25 AM	44.3	43.2	-	40.8	42.3	1.5
01:25 AM - 01:30 AM	48.8	47.7	-	45.3	43.2	2.1
01:30 AM - 01:35 AM	45.2	44.6	-	42.2	42.5	0.3
01:35 AM - 01:40 AM	55.2	54.1	-	51.7	45.8	5.9
01:40 AM - 01:45 AM	44.7	43.6	-	41.2	41.8	0.6
01:45 AM - 01:50 AM	44.0	42.9	-	40.5	41.3	0.8
01:50 AM - 01:55 AM	42.7	41.6	-	39.2	40.5	1.3
01:55 AM - 02:00 AM	42.7	41.6	-	39.2	40.3	1.1
02:00 AM - 02:05 AM	42.7	41.6	-	39.2	40.6	1.4
02:05 AM - 02:10 AM	55.6	54.5	-	52.1	41.8	10.3
02:10 AM - 02:15 AM	46.0	44.9	-	42.5	44.1	1.6
02:15 AM - 02:20 AM	45.2	45.1	-	42.7	44.3	1.6
02:20 AM - 02:25 AM	46.2	45.1	-	42.7	44.3	1.6
02:25 AM - 02:30 AM	46.3	45.2	-	42.8	44.2	1.4
02:30 AM - 02:35 AM	46.3	45.2	-	42.8	43.8	1.9
02:35 AM - 02:40 AM	46.7	45.6	-	43.2	44.1	0.9
02:40 AM - 02:45 AM	46.6	45.5	-	43.1	44.5	1.4
02:45 AM - 02:50 AM	45.5	44.4	-	42.0	43.4	1.4
02:50 AM - 02:55 AM	43.8	42.7	-	40.3	41.9	1.6
02:55 AM - 03:00 AM	44.6	43.5	-	41.1	42.5	1.4
03:00 AM - 03:05 AM	45.0	43.9	-	41.5	42.6	1.1
03:05 AM - 03:10 AM	44.6	43.5	-	41.1	42.6	1.5
03:10 AM - 03:15 AM	45.0	43.9	-	41.5	43.1	1.6
03:15 AM - 03:20 AM	45.8	44.7	-	42.3	43.1	0.8
03:20 AM - 03:25 AM	45.6	44.5	-	42.1	43.0	0.9
03:25 AM - 03:30 AM	47.0	45.9	-	43.5	45.0	1.5
03:30 AM - 03:35 AM	46.5	45.4	-	43.0	43.8	0.6
03:35 AM - 03:40 AM	46.9	45.8	-	43.4	44.5	1.1

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023547-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-21
Parameter เสียงรบกวน
Location N3 : หมู่บ้านไร่มก 5
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472130

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	47.0	45.9	-	43.5	45.1	1.6
03:45 AM - 03:50 AM	48.1	47.0	-	44.6	44.5	0.1
03:50 AM - 03:55 AM	45.5	44.4	-	42.0	42.5	-0.5
03:55 AM - 04:00 AM	44.4	43.3	-	40.9	42.4	1.5
04:00 AM - 04:05 AM	46.2	45.1	-	42.7	43.6	-0.9
04:05 AM - 04:10 AM	45.1	44.0	-	41.6	42.4	-0.8
04:10 AM - 04:15 AM	55.6	54.5	-	52.1	42.1	10.0
04:15 AM - 04:20 AM	54.1	53.0	-	50.6	41.7	8.9
04:20 AM - 04:25 AM	43.7	42.6	-	40.2	41.4	1.2
04:25 AM - 04:30 AM	51.7	50.6	-	48.2	40.9	7.3
04:30 AM - 04:35 AM	48.4	47.3	-	44.9	40.0	4.9
04:35 AM - 04:40 AM	50.0	48.9	-	46.5	39.2	7.3
04:40 AM - 04:45 AM	52.8	51.7	-	49.3	38.9	10.4
04:45 AM - 04:50 AM	54.7	53.6	-	51.2	39.0	12.2
04:50 AM - 04:55 AM	52.2	51.1	-	48.7	38.9	10.7
04:55 AM - 05:00 AM	54.9	53.8	-	51.4	38.4	13.0
05:00 AM - 05:05 AM	53.8	52.7	-	50.3	39.1	11.0
05:05 AM - 05:10 AM	53.6	52.5	-	50.1	38.4	11.7
05:10 AM - 05:15 AM	55.1	54.0	-	51.6	38.0	13.6
05:15 AM - 05:20 AM	51.5	52.4	-	50.0	39.2	10.8
05:20 AM - 05:25 AM	55.4	54.3	-	51.9	38.4	13.5
05:25 AM - 05:30 AM	53.1	52.2	-	49.8	38.7	11.6
05:30 AM - 05:35 AM	50.3	49.2	-	46.8	38.2	8.6
05:35 AM - 05:40 AM	54.8	53.7	-	51.3	40.6	10.7
05:40 AM - 05:45 AM	55.9	54.8	-	52.4	41.8	10.6
05:45 AM - 05:50 AM	56.1	55.0	-	52.6	41.6	11.0
05:50 AM - 05:55 AM	49.1	48.0	-	45.6	41.6	4.0
05:55 AM - 06:00 AM	46.4	45.3	-	42.9	41.8	1.1
06:00 AM - 07:00 AM	57.7	53.1	47.7	-	47.2	5.5
07:00 AM - 08:00 AM	49.9	48.8	43.4	-	44.4	1.8
08:00 AM - 09:00 AM	50.6	49.5	44.1	-	42.1	2.0
09:00 AM - 10:00 AM	49.9	48.8	43.4	-	39.9	4.4
ค่าสูงสุด						5.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง ให้กำหนดประเภทและขนาดของโรงงานจำแนกตามประเภทและขนาดของโรงงานอุตสาหกรรม ตามมาตรา 12 ทวิ แห่งพระราชบัญญัติโรงงาน พ.ศ. 2512 (ฉบับที่ 4) พ.ศ. 2560 ลงวันที่ 24 มีนาคม พ.ศ. 2560

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากแหล่งกำเนิดเสียงประเภทอาคารและโรงงานอุตสาหกรรมที่ก่อให้เกิดเสียงรบกวนชุมชน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากแหล่งกำเนิดเสียงประเภทอาคารและโรงงานอุตสาหกรรมที่ก่อให้เกิดเสียงรบกวนชุมชน (ฉบับที่ 2) พ.ศ. 2560

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ตามคำขอรับบริการ วันที่ 04-05 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-21 วันที่ตรวจวัด 04-05 มิถุนายน 2567)
3. ค่า dB ไม่สามารถตรวจวัดระดับเสียงขณะมีการรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดเสียงประเภทอาคารและโรงงานอุตสาหกรรมที่ก่อให้เกิดเสียงรบกวนชุมชนมีค่าต่ำกว่าระดับเสียงพื้นฐาน

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023548-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-22
Parameter เสียงรบกวน
Location N4 : ที่ทำการหมู่บ้านไร่มก หมู่ 5 ปากคลองตึกดี
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	53.4	52.8	44.5	-	46.1	1.6
11:00 AM - 12:00 PM	53.2	52.6	44.3	-	45.3	1.9
12:00 PM - 01:00 PM	52.4	51.8	43.5	-	47.2	3.7
01:00 PM - 02:00 PM	52.5	51.9	43.6	-	48.1	4.5
02:00 PM - 03:00 PM	51.7	51.1	42.8	-	47.2	4.4
03:00 PM - 04:00 PM	53.5	52.9	44.6	-	48.4	3.8
04:00 PM - 05:00 PM	53.2	52.6	44.3	-	47.9	3.6
05:00 PM - 06:00 PM	53.8	53.2	44.9	-	47.8	2.9
06:00 PM - 07:00 PM	55.1	54.5	46.2	-	49.2	3.0
07:00 PM - 08:00 PM	55.4	54.8	46.5	-	51.6	5.1
08:00 PM - 09:00 PM	54.8	54.2	45.9	-	51.3	5.9
09:00 PM - 10:00 PM	52.7	52.1	43.8	-	49.8	6.8
10:00 PM - 10:05 PM	54.5	53.9	-	48.6	50.1	1.5
10:05 PM - 10:10 PM	53.7	53.1	-	47.8	50.1	2.3
10:10 PM - 10:15 PM	52.4	51.8	-	46.5	49.5	3.0
10:15 PM - 10:20 PM	53.3	52.7	-	47.4	49.3	1.9
10:20 PM - 10:25 PM	54.4	53.8	-	48.5	49.9	1.4
10:25 PM - 10:30 PM	54.7	54.1	-	48.8	48.9	1.1
10:30 PM - 10:35 PM	53.4	52.8	-	47.5	49.0	1.5
10:35 PM - 10:40 PM	54.1	53.5	-	48.2	49.5	1.3
10:40 PM - 10:45 PM	53.0	52.4	-	47.1	49.2	2.2
10:45 PM - 10:50 PM	52.2	51.6	-	46.3	49.1	2.6
10:50 PM - 10:55 PM	53.2	52.6	-	47.3	50.0	2.7
10:55 PM - 11:00 PM	54.2	53.6	-	48.3	50.0	1.7
11:00 PM - 11:05 PM	53.1	52.5	-	47.2	49.9	2.7
11:05 PM - 11:10 PM	54.9	54.3	-	49.0	49.7	0.7
11:10 PM - 11:15 PM	53.0	52.4	-	47.1	48.9	1.8
11:15 PM - 11:20 PM	54.1	53.5	-	48.2	48.5	0.3
11:20 PM - 11:25 PM	52.0	51.4	-	46.1	48.0	1.9
11:25 PM - 11:30 PM	51.9	51.3	-	46.0	48.2	2.2
11:30 PM - 11:35 PM	51.4	50.8	-	45.5	48.1	2.8
11:35 PM - 11:40 PM	51.7	51.1	-	45.8	48.8	3.0
11:40 PM - 11:45 PM	52.6	52.0	-	46.7	49.8	2.3
11:45 PM - 11:50 PM	51.4	50.8	-	45.5	48.6	3.1
11:50 PM - 11:55 PM	51.4	50.8	-	45.5	48.0	2.5
11:55 PM - 12:00 AM	52.4	51.8	-	46.5	48.8	2.5
12:00 AM - 12:05 AM	51.8	51.2	-	45.9	48.4	2.5
12:05 AM - 12:10 AM	51.3	50.7	-	45.4	47.8	2.4
12:10 AM - 12:15 AM	50.6	50.0	-	44.7	47.5	2.8
12:15 AM - 12:20 AM	52.1	51.5	-	46.2	47.9	1.7

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023548-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-22
Parameter เสียงรบกวน
Location N4 : ที่ทำการหมู่บ้านบริวาณหมู่ 5 ปานสุเกศ์
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	52.1	51.5	-	46.2	47.8	-1.6
12:25 AM - 12:30 AM	51.2	50.6	-	45.1	47.7	-2.6
12:30 AM - 12:35 AM	50.0	49.4	-	44.1	47.7	-3.6
12:35 AM - 12:40 AM	49.4	48.8	-	43.5	47.3	-3.8
12:40 AM - 12:45 AM	59.7	59.1	-	53.8	47.3	6.5
12:45 AM - 12:50 AM	52.9	52.3	-	47.0	48.3	-1.3
12:50 AM - 12:55 AM	50.4	49.8	-	44.5	47.7	-3.2
12:55 AM - 01:00 AM	50.8	50.2	-	44.9	46.6	-1.7
01:00 AM - 01:05 AM	50.2	49.6	-	44.2	47.1	-2.8
01:05 AM - 01:10 AM	55.7	55.1	-	49.8	46.8	3.0
01:10 AM - 01:15 AM	49.1	48.5	-	43.2	47.0	-3.8
01:15 AM - 01:20 AM	51.6	50.4	-	45.1	46.9	-1.8
01:20 AM - 01:25 AM	48.8	48.2	-	42.9	46.8	-3.9
01:25 AM - 01:30 AM	48.4	47.8	-	42.5	46.5	-4.0
01:30 AM - 01:35 AM	49.7	49.1	-	43.8	46.7	-2.9
01:35 AM - 01:40 AM	48.3	47.7	-	42.4	46.2	-3.8
01:40 AM - 01:45 AM	48.8	48.2	-	42.9	45.9	-3.0
01:45 AM - 01:50 AM	48.1	47.5	-	42.2	46.1	-3.9
01:50 AM - 01:55 AM	50.2	49.6	-	44.3	46.5	-2.2
01:55 AM - 02:00 AM	48.8	48.2	-	42.9	46.2	-3.3
02:00 AM - 02:05 AM	48.5	47.9	-	42.6	46.2	-3.6
02:05 AM - 02:10 AM	47.7	47.1	-	41.8	45.7	-3.9
02:10 AM - 02:15 AM	48.0	47.4	-	42.1	45.8	-3.7
02:15 AM - 02:20 AM	47.8	47.2	-	41.9	45.6	-3.7
02:20 AM - 02:25 AM	47.2	46.6	-	41.3	45.7	-4.2
02:25 AM - 02:30 AM	47.6	47.0	-	41.7	45.7	-4.0
02:30 AM - 02:35 AM	51.0	50.4	-	45.1	45.7	-0.6
02:35 AM - 02:40 AM	48.7	48.1	-	42.8	45.4	-2.6
02:40 AM - 02:45 AM	47.6	47.0	-	41.7	45.7	-4.0
02:45 AM - 02:50 AM	51.2	50.6	-	45.3	46.1	-0.8
02:50 AM - 02:55 AM	47.6	47.0	-	41.7	45.6	-3.9
02:55 AM - 03:00 AM	47.9	47.3	-	42.0	45.7	-3.7
03:00 AM - 03:05 AM	48.7	48.1	-	42.8	46.2	-3.4
03:05 AM - 03:10 AM	49.7	49.1	-	43.8	46.4	-2.6
03:10 AM - 03:15 AM	48.6	48.0	-	42.7	45.6	-2.9
03:15 AM - 03:20 AM	50.5	49.9	-	44.6	45.4	-0.8
03:20 AM - 03:25 AM	51.6	51.0	-	45.7	45.7	0.0
03:25 AM - 03:30 AM	48.1	47.7	-	42.4	45.6	-3.2
03:30 AM - 03:35 AM	50.0	49.4	-	44.1	45.7	-1.6
03:35 AM - 03:40 AM	48.4	47.8	-	42.5	46.2	-3.7

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงงาน ระดับเสียงเกินหนึ่ง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2547 เกณฑ์ฐาน
1. ประกาศกรมควบคุมมลพิษ เรื่อง ค่ามลพิษเพิ่มเติมของการปลดปล่อยจากแหล่งกำเนิดเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกรมควบคุมมลพิษ เรื่อง ค่าระดับเสียงมาตรฐานและหลักการวัดระดับเสียงรบกวนในการประเมินผลกระทบด้านเสียงตามพระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ พ.ศ. 2561
Remark:
1. ระดับเสียงรบกวนแหล่งกำเนิด ทดสอบระหว่าง 1เมษายน 2567 ถึง 30 เมษายน 2567
2. ระดับเสียงที่บริเวณขอบรั้วโครงการ (Sample No.2450169-22 วันที่ตรวจวัด 29-30 พฤษภาคม 2567)
3. ตู้ละ ไม่สามารถตามหาแหล่งเสียงมาเปรียบเทียบกับการรบกวนเนื่องจากแหล่งกำเนิดเสียงจากแหล่งอื่นมีผลกระทบต่อระดับเสียงรบกวนในบริเวณการรบกวน

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023548-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-22
Parameter เสียงรบกวน
Location N4 : ที่ทำการหมู่บ้านบริวาณหมู่ 5 ปานสุเกศ์
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	48.7	48.1	-	42.8	46.3	+3.3
03:45 AM - 03:50 AM	47.8	47.2	-	41.9	45.8	-3.9
03:50 AM - 03:55 AM	48.5	47.9	-	42.6	46.3	-3.7
03:55 AM - 04:00 AM	47.6	47.0	-	41.7	45.9	-4.2
04:00 AM - 04:05 AM	48.4	47.8	-	42.5	45.8	-3.3
04:05 AM - 04:10 AM	48.1	47.5	-	42.2	45.7	-3.5
04:10 AM - 04:15 AM	48.8	48.2	-	42.9	46.0	-3.1
04:15 AM - 04:20 AM	50.2	49.6	-	44.3	46.0	-1.7
04:20 AM - 04:25 AM	51.2	50.6	-	45.3	46.0	-0.7
04:25 AM - 04:30 AM	49.0	48.4	-	43.1	45.8	-2.7
04:30 AM - 04:35 AM	48.4	47.8	-	42.5	45.7	-3.2
04:35 AM - 04:40 AM	48.3	47.7	-	42.4	46.0	-3.6
04:40 AM - 04:45 AM	51.2	50.6	-	45.2	46.3	-1.0
04:45 AM - 04:50 AM	51.4	50.8	-	45.5	47.1	-1.6
04:50 AM - 04:55 AM	50.4	49.8	-	44.5	47.1	-2.6
04:55 AM - 05:00 AM	49.8	49.2	-	43.9	47.5	-3.6
05:00 AM - 05:05 AM	48.9	48.3	-	43.0	46.8	-3.8
05:05 AM - 05:10 AM	51.2	50.6	-	45.3	47.0	-1.7
05:10 AM - 05:15 AM	53.7	53.1	-	47.8	48.0	-0.2
05:15 AM - 05:20 AM	52.5	51.9	-	46.6	48.0	-1.4
05:20 AM - 05:25 AM	53.5	52.7	-	47.4	49.1	-1.7
05:25 AM - 05:30 AM	53.9	53.3	-	48.0	50.1	-2.1
05:30 AM - 05:35 AM	54.7	54.1	-	48.8	49.3	-0.5
05:35 AM - 05:40 AM	52.2	51.6	-	46.3	48.3	-2.0
05:40 AM - 05:45 AM	52.3	51.7	-	46.4	48.2	-1.8
05:45 AM - 05:50 AM	50.9	50.3	-	45.0	48.2	-3.2
05:50 AM - 05:55 AM	52.7	52.1	-	46.8	48.3	-1.7
05:55 AM - 06:00 AM	52.1	51.5	-	46.2	48.6	-2.4
06:00 AM - 07:00 AM	52.9	52.3	44.0	-	48.2	-4.2
07:00 AM - 08:00 AM	53.0	52.4	44.1	-	47.7	-3.6
08:00 AM - 09:00 AM	50.9	50.3	42.0	-	46.3	-4.3
09:00 AM - 10:00 AM	50.8	50.2	41.9	-	45.9	-4.0
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงงาน ระดับเสียงเกินหนึ่ง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2547 เกณฑ์ฐาน
1. ประกาศกรมควบคุมมลพิษ เรื่อง ค่ามลพิษเพิ่มเติมของการปลดปล่อยจากแหล่งกำเนิดเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกรมควบคุมมลพิษ เรื่อง ค่าระดับเสียงมาตรฐานและหลักการวัดระดับเสียงรบกวนในการประเมินผลกระทบด้านเสียงตามพระราชบัญญัติส่งเสริมและรักษาคุณภาพสิ่งแวดล้อมแห่งชาติ พ.ศ. 2561
Remark:
1. ระดับเสียงรบกวนแหล่งกำเนิด ทดสอบระหว่าง 1เมษายน 2567 ถึง 30 เมษายน 2567
2. ระดับเสียงที่บริเวณขอบรั้วโครงการ (Sample No.2450169-22 วันที่ตรวจวัด 29-30 พฤษภาคม 2567)
3. ตู้ละ ไม่สามารถตามหาแหล่งเสียงมาเปรียบเทียบกับการรบกวนเนื่องจากแหล่งกำเนิดเสียงจากแหล่งอื่นมีผลกระทบต่อระดับเสียงรบกวนในบริเวณการรบกวน

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023549-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-23
Parameter เสียงรบกวน
Location N4 : ที่ทำการหมู่บ้านบริวาณหมู่ 5 ปานสุเกศ์
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	54.2	53.7	43.4	-	48.2	+2.8
11:00 AM - 12:00 PM	55.7	55.1	46.8	-	49.0	+2.2
12:00 PM - 01:00 PM	52.5	51.9	43.6	-	45.0	-1.4
01:00 PM - 02:00 PM	50.6	50.0	41.7	-	46.6	-4.9
02:00 PM - 03:00 PM	52.2	51.5	41.9	-	47.7	-3.8
03:00 PM - 04:00 PM	51.1	50.1	44.2	-	45.9	-1.7
04:00 PM - 05:00 PM	53.6	52.6	46.7	-	47.9	-1.2
05:00 PM - 06:00 PM	53.6	52.6	46.7	-	49.3	-2.6
06:00 PM - 07:00 PM	54.4	53.4	47.5	-	49.1	-1.6
07:00 PM - 08:00 PM	52.9	51.9	46.0	-	48.7	-2.7
08:00 PM - 09:00 PM	52.2	51.2	45.3	-	48.7	-3.4
09:00 PM - 10:00 PM	52.5	51.5	45.6	-	48.0	-2.4
10:00 PM - 10:05 PM	53.6	52.6	-	49.7	47.8	1.9
10:05 PM - 10:10 PM	59.4	58.4	-	55.5	49.0	6.5
10:10 PM - 10:15 PM	53.8	52.8	-	49.9	50.1	-0.2
10:15 PM - 10:20 PM	54.1	53.1	-	50.2	51.0	-0.8
10:20 PM - 10:25 PM	54.5	53.5	-	50.6	50.1	0.5
10:25 PM - 10:30 PM	54.6	53.6	-	50.7	51.0	-0.3
10:30 PM - 10:35 PM	55.2	54.2	-	51.3	51.4	-0.1
10:35 PM - 10:40 PM	54.9	53.9	-	51.0	51.7	-0.2
10:40 PM - 10:45 PM	54.5	53.5	-	50.6	50.2	0.4
10:45 PM - 10:50 PM	56.5	55.5	-	52.6	51.8	0.8
10:50 PM - 10:55 PM	54.5	53.5	-	50.6	51.5	-0.9
10:55 PM - 11:00 PM	55.4	54.4	-	51.5	52.3	-0.8
11:00 PM - 11:05 PM	55.0	54.0	-	51.1	52.1	-1.0
11:05 PM - 11:10 PM	54.9	53.9	-	51.0	52.1	-1.1
11:10 PM - 11:15 PM	54.7	53.7	-	50.8	51.4	-0.6
11:15 PM - 11:20 PM	55.3	54.3	-	51.4	52.6	-1.2
11:20 PM - 11:25 PM	55.7	54.7	-	51.8	53.2	-1.4
11:25 PM - 11:30 PM	55.8	54.8	-	51.9	52.7	-0.8
11:30 PM - 11:35 PM	55.6	54.6	-	51.7	52.5	-0.8
11:35 PM - 11:40 PM	54.4	53.4	-	50.5	51.5	-1.0
11:40 PM - 11:45 PM	58.2	57.2	-	54.3	51.9	2.4
11:45 PM - 11:50 PM	55.3	54.3	-	51.4	52.6	-1.2
11:50 PM - 11:55 PM	55.5	54.5	-	51.6	52.3	-0.7
11:55 PM - 12:00 AM	56.9	55.9	-	53.0	53.7	-0.7
12:00 AM - 12:05 AM	57.1	56.1	-	53.2	54.4	-1.2
12:05 AM - 12:10 AM	56.7	55.7	-	52.8	53.6	-0.8
12:10 AM - 12:15 AM	56.5	55.5	-	52.6	52.9	-0.3
12:15 AM - 12:20 AM	56.1	55.1	-	52.2	52.4	-0.2

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023549-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-23
Parameter เสียงรบกวน
Location N4 : ที่ทำการหมู่บ้านบริวาณหมู่ 5 ปานสุเกศ์
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	57.5	56.8	-	53.7	52.3	1.4
12:25 AM - 12:30 AM	56.4	55.4	-	52.5	53.0	-0.1
12:30 AM - 12:35 AM	56.1	55.1	-	52.2	53.0	-0.8
12:35 AM - 12:40 AM	56.3	55.3	-	52.4	52.5	-0.1
12:40 AM - 12:45 AM	56.6	55.6	-	52.7	52.6	0.1
12:45 AM - 12:50 AM	57.6	56.6	-	53.7	53.8	-0.1
12:50 AM - 12:55 AM	57.7	56.7	-	53.8	54.4	-0.6
12:55 AM - 01:00 AM	56.9	55.9	-	53.0	53.2	-0.2
01:00 AM - 01:05 AM	55.7	54.7	-	51.8	52.8	-1.0
01:05 AM - 01:10 AM	56.5	55.5	-	52.6	52.6	0.0
01:10 AM - 01:15 AM	56.3	55.3	-	52.4	52.7	-0.3
01:15 AM - 01:20 AM	55.6	54.6	-	51.7	52.2	-0.5
01:20 AM - 01:25 AM	55.6	54.6	-	51.7	52.7	-1.0
01:25 AM - 01:30 AM	56.7	55.7	-	52.8	53.9	-1.1
01:30 AM - 01:35 AM	55.8	54.8	-	51.9	52.7	-0.8
01:35 AM - 01:40 AM	54.5	53.5	-	50.6	48.4	2.2
01:40 AM - 01:45 AM	55.1	54.1	-	51.2	51.4	-0.2
01:45 AM - 01:50 AM	54.1	53.1	-	50.2	50.6	-0.4
01:50 AM - 01:55 AM	54.4	53.4	-	50.5	47.1	3.4
01:55 AM - 02:00 AM	55.5	54.5	-	51.6	52.2	-0.6
02:00 AM - 02:05 AM	55.1	54.1	-	51.2	50.6	0.6
02:05 AM - 02:10 AM	54.3	53.3	-	50.4	50.9	-0.5
02:10 AM - 02:15 AM	54.2	53.2	-	50.3	50.5	-0.2
02:15 AM - 02:20 AM	53.3	52.3	-	49.4	49.4	0.0
02:20 AM - 02:25 AM	52.7	51.3	-	48.4	46.8	1.6
02:25 AM - 02:30 AM	51.7	50.7	-	47.8	47.6	0.2
02:30 AM - 02:35 AM	52.8	51.8	-	48.9	48.3	0.6
02:35 AM - 02:40 AM	51.2	50.2	-	47.3	46.5	0.8
02:40 AM - 02:45 AM	52.1	51.1	-	48.2	45.8	2.4
02:45 AM - 02:50 AM	49.6	48.6	-	45.7	45.1	0.6
02:50 AM - 02:55 AM	49.6	48.6	-	45.7	45.5	0.2
02:55 AM - 03:00 AM	51.4	50.4	-	47.5	46.2	1.3
03:00 AM - 03:05 AM	49.6	48.6	-	45.7	45.4	0.3
03:05 AM - 03:10 AM	47.8	46.8	-	43.9	45.0	-1.1
03:10 AM - 03:15 AM	47.9	46.9	-	44.0	44.9	-0.9
03:15 AM - 03:20 AM	48.2	47.2	-	44.3	45.1	-0.8
03:20 AM - 03:25 AM	49.0	48.0	-	45.1	45.2	-0.1
03:25 AM - 03:30 AM	51.3	50.3	-	47.4	45.1	2.3
03:30 AM - 03:35 AM	49.9	48.9	-	46.0	45.1	0.9
03:35 AM - 03:40 AM	49.4	48.4	-	45.5	45.1	0.4

Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023549-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-23
Parameter เสียงนอกงาน
Location N4 : ที่พักอาศัยบริเวณหมู่ 5 บ้านสุรศักดิ์
Measurement Date May 30 - 31, 2024
Measurement by Santi Chakhana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการจราจรบนทางหลวง	เสียงขณะมีการจราจรบนทางหลวง กลางวัน	เสียงขณะมีการจราจรบนทางหลวง กลางคืน	เสียงพื้นฐาน	ค่าระดับ การจราจร
03:40 AM - 03:45 AM	51.3	50.3	-	47.4	45.4	2.0
03:45 AM - 03:50 AM	48.6	47.6	-	44.7	45.5	-0.8
03:50 AM - 03:55 AM	48.9	47.9	-	45.0	44.9	0.1
03:55 AM - 04:00 AM	48.2	47.2	-	44.3	44.5	-0.2
04:00 AM - 04:05 AM	48.4	47.4	-	44.5	44.5	0.0
04:05 AM - 04:10 AM	49.5	48.5	-	45.6	44.7	0.9
04:10 AM - 04:15 AM	48.2	47.2	-	44.3	44.5	-0.2
04:15 AM - 04:20 AM	49.1	48.1	-	45.2	45.3	-0.1
04:20 AM - 04:25 AM	52.2	51.2	-	48.3	45.1	3.2
04:25 AM - 04:30 AM	53.1	52.1	-	49.2	45.7	3.5
04:30 AM - 04:35 AM	52.4	51.4	-	48.5	45.4	3.1
04:35 AM - 04:40 AM	53.1	52.1	-	49.2	45.6	3.6
04:40 AM - 04:45 AM	52.4	51.4	-	48.5	45.5	3.0
04:45 AM - 04:50 AM	52.2	51.2	-	48.3	45.6	2.7
04:50 AM - 04:55 AM	50.5	49.5	-	46.6	45.8	0.8
04:55 AM - 05:00 AM	51.5	50.5	-	47.6	45.9	1.7
05:00 AM - 05:05 AM	52.3	51.3	-	48.4	46.7	1.7
05:05 AM - 05:10 AM	50.8	49.8	-	46.1	46.2	-0.1
05:10 AM - 05:15 AM	50.6	49.6	-	45.7	46.2	0.5
05:15 AM - 05:20 AM	53.2	51.2	-	48.3	46.5	1.8
05:20 AM - 05:25 AM	53.0	52.0	-	49.1	47.3	1.8
05:25 AM - 05:30 AM	54.5	53.5	-	50.6	48.7	1.9
05:30 AM - 05:35 AM	56.1	55.1	-	52.2	51.5	0.7
05:35 AM - 05:40 AM	55.7	54.7	-	51.8	51.2	0.6
05:40 AM - 05:45 AM	54.0	53.0	-	50.1	49.6	0.5
05:45 AM - 05:50 AM	54.0	53.0	-	50.1	49.6	0.5
05:50 AM - 05:55 AM	53.7	52.7	-	49.8	49.2	0.6
05:55 AM - 06:00 AM	54.5	53.5	-	50.6	47.9	2.7
06:00 AM - 07:00 AM	53.6	52.6	46.7	-	48.9	-2.2
07:00 AM - 08:00 AM	54.3	53.3	47.4	-	49.9	-2.5
08:00 AM - 09:00 AM	54.4	53.4	47.5	-	49.4	-1.9
09:00 AM - 10:00 AM	54.5	53.5	47.6	-	49.5	1.9
ค่าสูงสุด						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงจากการจราจร ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการผ่านของยานพาหนะรถไฟ พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากการจราจรและระดับเสียงที่เกิดจากการผ่านของยานพาหนะรถไฟในโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงวิทยาศาสตร์ฯ เรื่อง ค่ามาตรฐานระดับเสียงที่เกิดจากการจราจรบนทางหลวงที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1 ระดับเสียงจากแหล่งกำเนิด ทางการจราจร วันที่ 30-31 พฤษภาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการจราจร (Sample No.2450169-23 วันที่การจร 30-31 พฤษภาคม 2567)
3. คำนวณ ไม่สามารถคำนวณระดับเสียงขณะมีการจราจรบนเรือจากระดับเสียงจากแหล่งกำเนิดและการจราจรได้เนื่องจากระดับเสียงขณะไม่มีการจราจร

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Approved by
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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023549-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-24
Parameter เสียงนอกงาน
Location N4 : ที่พักอาศัยบริเวณหมู่ 5 บ้านสุรศักดิ์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chakhana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการจราจรบนทางหลวง	เสียงขณะมีการจราจรบนทางหลวง กลางวัน	เสียงขณะมีการจราจรบนทางหลวง กลางคืน	เสียงพื้นฐาน	ค่าระดับ การจราจร
10:00 AM - 11:00 AM	54.1	53.1	47.2	-	48.0	-0.8
11:00 AM - 12:00 PM	53.3	52.3	46.4	-	45.2	1.8
12:00 PM - 01:00 PM	52.9	51.9	46.0	-	46.2	-0.2
01:00 PM - 02:00 PM	53.9	52.9	47.0	-	46.9	0.3
02:00 PM - 03:00 PM	53.5	52.5	46.6	-	46.1	0.5
03:00 PM - 04:00 PM	53.0	52.0	46.1	-	46.2	-0.1
04:00 PM - 05:00 PM	52.5	51.5	45.6	-	45.9	-0.3
05:00 PM - 06:00 PM	54.3	53.3	47.4	-	48.3	-0.9
06:00 PM - 07:00 PM	55.4	54.4	48.5	-	49.8	-0.3
07:00 PM - 08:00 PM	52.6	52.6	46.7	-	49.3	2.6
08:00 PM - 09:00 PM	54.5	53.5	47.6	-	51.4	3.8
09:00 PM - 10:00 PM	56.9	55.9	53.0	-	53.7	3.7
10:00 PM - 10:05 PM	57.0	56.0	-	53.1	54.2	1.1
10:05 PM - 10:10 PM	57.2	56.2	-	53.3	53.8	-0.5
10:10 PM - 10:15 PM	57.0	56.0	-	53.1	54.3	1.2
10:15 PM - 10:20 PM	57.3	56.3	-	53.4	54.9	1.5
10:20 PM - 10:25 PM	57.2	56.2	-	53.3	54.0	-0.7
10:25 PM - 10:30 PM	57.0	56.0	-	53.1	54.5	1.4
10:30 PM - 10:35 PM	56.9	55.9	-	53.0	53.9	-0.9
10:35 PM - 10:40 PM	57.1	56.1	-	53.2	52.5	0.7
10:40 PM - 10:45 PM	56.2	55.2	-	52.3	52.0	0.3
10:45 PM - 10:50 PM	55.9	54.9	-	51.6	51.4	0.2
10:50 PM - 10:55 PM	55.7	54.7	-	51.4	52.0	-0.6
10:55 PM - 11:00 PM	56.8	55.8	-	52.9	51.4	0.5
11:00 PM - 11:05 PM	57.1	56.1	-	53.2	53.8	-0.6
11:05 PM - 11:10 PM	56.6	55.6	-	52.7	53.4	-0.7
11:10 PM - 11:15 PM	56.6	55.6	-	52.7	52.5	0.2
11:15 PM - 11:20 PM	59.3	58.3	-	55.4	53.6	1.8
11:20 PM - 11:25 PM	56.3	55.3	-	52.4	51.4	1.0
11:25 PM - 11:30 PM	57.0	56.0	-	53.1	54.3	-1.2
11:30 PM - 11:35 PM	57.7	56.7	-	53.8	55.2	-1.4
11:35 PM - 11:40 PM	51.8	50.8	-	47.9	46.9	1.0
11:40 PM - 11:45 PM	49.8	48.8	-	45.9	45.8	0.1
11:45 PM - 11:50 PM	51.8	50.8	-	47.9	45.7	2.2
11:50 PM - 11:55 PM	51.9	50.9	-	48.0	45.7	2.3
11:55 PM - 12:00 AM	50.6	49.6	-	46.7	46.4	0.3
12:00 AM - 12:05 AM	50.3	49.3	-	46.4	46.0	0.4
12:05 AM - 12:10 AM	54.9	53.9	-	50.1	48.3	1.8
12:10 AM - 12:15 AM	51.5	50.5	-	47.6	46.8	0.8
12:15 AM - 12:20 AM	54.5	53.5	-	50.6	48.1	2.5

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023550-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-24
Parameter เสียงนอกงาน
Location N4 : ที่พักอาศัยบริเวณหมู่ 5 บ้านสุรศักดิ์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chakhana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการจราจรบนทางหลวง	เสียงขณะมีการจราจรบนทางหลวง กลางวัน	เสียงขณะมีการจราจรบนทางหลวง กลางคืน	เสียงพื้นฐาน	ค่าระดับ การจราจร
12:20 AM - 12:25 AM	52.9	51.9	-	49.0	45.7	3.3
12:25 AM - 12:30 AM	50.9	49.9	-	47.0	45.5	1.5
12:30 AM - 12:35 AM	48.8	47.8	-	44.9	44.6	0.3
12:35 AM - 12:40 AM	49.1	48.1	-	45.2	45.4	-0.2
12:40 AM - 12:45 AM	49.6	48.6	-	45.7	44.6	1.1
12:45 AM - 12:50 AM	51.5	50.5	-	47.6	44.8	2.8
12:50 AM - 12:55 AM	57.3	56.3	-	53.4	46.5	6.9
12:55 AM - 01:00 AM	58.7	57.7	-	54.8	55.9	-1.1
01:00 AM - 01:05 AM	58.8	57.8	-	54.9	56.4	-1.5
01:05 AM - 01:10 AM	59.4	58.4	-	55.5	56.4	-0.9
01:10 AM - 01:15 AM	59.0	58.0	-	55.1	56.2	-1.1
01:15 AM - 01:20 AM	59.1	58.1	-	55.2	56.4	-1.2
01:20 AM - 01:25 AM	59.4	58.4	-	55.5	57.2	-1.7
01:25 AM - 01:30 AM	59.1	58.1	-	55.2	56.9	-1.7
01:30 AM - 01:35 AM	59.5	58.5	-	55.6	57.3	-1.7
01:35 AM - 01:40 AM	59.7	58.7	-	55.8	57.5	-1.7
01:40 AM - 01:45 AM	59.0	58.0	-	55.1	56.7	-1.6
01:45 AM - 01:50 AM	59.0	58.0	-	55.1	56.6	-1.5
01:50 AM - 01:55 AM	59.0	58.0	-	55.1	56.7	-1.6
01:55 AM - 02:00 AM	58.9	57.9	-	55.0	56.8	-1.8
02:00 AM - 02:05 AM	59.1	58.1	-	55.2	57.1	-1.9
02:05 AM - 02:10 AM	59.0	58.0	-	55.1	57.0	-1.9
02:10 AM - 02:15 AM	58.3	57.3	-	54.4	56.3	-1.9
02:15 AM - 02:20 AM	57.8	56.8	-	53.9	56.0	-2.1
02:20 AM - 02:25 AM	57.9	56.9	-	54.0	55.7	-1.7
02:25 AM - 02:30 AM	57.7	56.7	-	53.8	55.9	-2.1
02:30 AM - 02:35 AM	57.5	56.5	-	53.6	53.8	2.2
02:35 AM - 02:40 AM	57.7	56.7	-	53.8	56.0	2.2
02:40 AM - 02:45 AM	57.9	56.9	-	54.0	56.1	2.1
02:45 AM - 02:50 AM	58.0	57.0	-	54.1	55.6	1.5
02:50 AM - 02:55 AM	57.0	56.0	-	53.1	53.2	2.1
02:55 AM - 03:00 AM	56.1	55.1	-	52.2	52.5	2.4
03:00 AM - 03:05 AM	55.9	54.9	-	52.0	53.4	1.4
03:05 AM - 03:10 AM	54.5	53.5	-	50.6	52.4	1.8
03:10 AM - 03:15 AM	51.7	50.7	-	47.8	51.9	-2.1
03:15 AM - 03:20 AM	55.5	54.5	-	51.6	51.8	0.2
03:20 AM - 03:25 AM	53.1	52.1	-	49.2	51.0	1.8
03:25 AM - 03:30 AM	52.7	51.7	-	48.8	50.6	1.8
03:30 AM - 03:35 AM	53.6	52.6	-	49.7	50.3	0.6
03:35 AM - 03:40 AM	52.4	51.4	-	48.5	50.0	1.5

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023550-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-24
Parameter เสียงนอกงาน
Location N4 : ที่พักอาศัยบริเวณหมู่ 5 บ้านสุรศักดิ์
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chakhana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการจราจรบนทางหลวง	เสียงขณะมีการจราจรบนทางหลวง กลางวัน	เสียงขณะมีการจราจรบนทางหลวง กลางคืน	เสียงพื้นฐาน	ค่าระดับ การจราจร
03:40 AM - 03:45 AM	51.4	50.4	-	47.5	49.2	1.7
03:45 AM - 03:50 AM	51.2	50.2	-	47.3	48.4	1.1
03:50 AM - 03:55 AM	50.8	49.8	-	46.9	48.2	1.3
03:55 AM - 04:00 AM	50.0	49.0	-	46.1	47.9	1.8
04:00 AM - 04:05 AM	50.0	49.0	-	46.1	47.3	1.2
04:05 AM - 04:10 AM	49.8	48.8	-	45.9	47.2	1.3
04:10 AM - 04:15 AM	50.3	51.3	-	48.4	47.4	1.0
04:15 AM - 04:20 AM	49.7	48.7	-	45.8	47.2	1.4
04:20 AM - 04:25 AM	50.5	51.5	-	48.6	47.3	1.3
04:25 AM - 04:30 AM	51.2	52.2	-	49.1	47.5	1.8
04:30 AM - 04:35 AM	51.3	51.3	-	48.4	48.2	0.2
04:35 AM - 04:40 AM	52.5	51.5	-	48.6	48.2	0.4
04:40 AM - 04:45 AM	50.8	49.8	-	46.9	47.7	0.8
04:45 AM - 04:50 AM	52.1	51.1	-	48.2	47.9	0.3
04:50 AM - 04:55 AM	51.0	50.0	-	47.1	48.1	1.0
04:55 AM - 05:00 AM	51.5	50.5	-	47.6	47.9	-0.5
05:00 AM - 05:05 AM	49.6	48.6	-	45.7	47.4	-1.7
05:05 AM - 05:10 AM	50.8	49.8	-	46.9	47.9	1.0
05:10 AM - 05:15 AM	53.4	51.4	-	48.5	47.8	0.7
05:15 AM - 05:20 AM	53.2	52.2	-	49.3	48.5	0.8
05:20 AM - 05:25 AM	54.1	53.1	-	50.2	49.0	1.2
05:25 AM - 05:30 AM	52.5	51.5	-	48.6	48.8	-0.2
05:30 AM - 05:35 AM	54.9	53.9	-	51.0	51.0	0.0
05:35 AM - 05:40 AM	56.0	55.0	-	52.1	52.0	0.1
05:40 AM - 05:45 AM	55.4	54.4	-	51.5	50.1	1.4
05:45 AM - 05:50 AM	52.7	51.7	-	48.8	49.8	0.8
05:50 AM - 05:55 AM	55.5	54.5	-	51.6	49.7	1.9
05:55 AM - 06:00 AM	53.3	52.3	-	49.4	49.4	0.0
06:00 AM - 07:00 AM	54.7	53.7	47.8	-	50.6	3.1
07:00 AM - 08:00 AM	56.7	55.7	49.3	-	51.6	2.3
08:00 AM - 09:00 AM	56.4	55.4	49.5	-	50.5	1.0
09:00 AM - 10:00 AM	54.5	53.5	47.6	-	49.7	2.1
ค่าสูงสุด						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงจากการจราจร ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการผ่านของยานพาหนะรถไฟ พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานระดับเสียงจากการจราจรและระดับเสียงที่เกิดจากการผ่านของยานพาหนะรถไฟในโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงวิทยาศาสตร์ฯ เรื่อง ค่ามาตรฐานระดับเสียงที่เกิดจากการจราจรบนทางหลวงที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1 ระดับเสียงจากแหล่งกำเนิด ทางการจราจร วันที่ 31 พฤษภาคม-01 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการจราจร (Sample No.2450169-24 วันที่การจร 31 พฤษภาคม-01 มิถุนายน 2567)
3. คำนวณ ไม่สามารถคำนวณระดับเสียงขณะมีการจราจรบนเรือจากระดับเสียงจากแหล่งกำเนิดและการจราจรได้เนื่องจากระดับเสียงขณะไม่มีการจราจร

The above results are valid only for the grab/spot/batch sample(s) as indicated in this report. No part of the 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
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023551-1

Sample No. 2450168-25
Parameter เสียงนอกงาน
Location N4 : ที่ตั้งอาคารบ้านพักพนักงานหมู่ 5 ปานสกัดดี
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	53.8	52.8	46.9	-	49.0	-2.1
11:00 AM - 12:00 PM	53.8	52.8	46.9	-	48.2	-1.3
12:00 PM - 01:00 PM	54.2	53.2	47.3	-	48.6	-1.3
01:00 PM - 02:00 PM	54.6	53.6	47.7	-	49.5	-1.8
02:00 PM - 03:00 PM	54.9	53.9	48.0	-	48.5	-0.5
03:00 PM - 04:00 PM	51.9	51.3	43.0	-	46.5	-3.5
04:00 PM - 05:00 PM	51.4	51.0	40.8	-	46.4	-5.6
05:00 PM - 06:00 PM	53.9	53.5	43.3	-	49.7	-6.4
06:00 PM - 07:00 PM	54.3	53.7	43.5	-	50.8	-7.3
07:00 PM - 08:00 PM	54.6	54.2	44.0	-	51.5	-7.5
08:00 PM - 09:00 PM	56.0	55.6	45.4	-	51.7	-7.3
09:00 PM - 10:00 PM	56.2	55.8	45.6	-	52.6	-7.0
10:00 PM - 10:05 PM	51.8	51.4	-	44.2	48.7	-4.5
10:05 PM - 10:10 PM	52.1	51.7	-	44.5	48.2	-3.7
10:10 PM - 10:15 PM	53.2	52.8	-	45.6	48.6	-3.0
10:15 PM - 10:20 PM	52.1	51.7	-	44.5	48.0	-3.5
10:20 PM - 10:25 PM	51.2	50.8	-	43.6	47.6	-4.0
10:25 PM - 10:30 PM	52.7	52.1	-	45.1	47.6	-2.5
10:30 PM - 10:35 PM	51.6	51.2	-	44.0	48.8	-4.8
10:35 PM - 10:40 PM	50.5	50.1	-	42.9	47.7	-4.8
10:40 PM - 10:45 PM	52.5	52.1	-	44.9	48.8	-3.9
10:45 PM - 10:50 PM	53.8	53.4	-	46.2	48.1	-1.9
10:50 PM - 10:55 PM	52.7	52.3	-	45.1	48.2	-3.1
10:55 PM - 11:00 PM	53.5	53.1	-	45.9	48.6	-2.7
11:00 PM - 11:05 PM	50.8	50.4	-	43.2	48.1	-5.1
11:05 PM - 11:10 PM	51.7	51.3	-	44.1	48.5	-4.4
11:10 PM - 11:15 PM	51.3	50.9	-	43.7	49.0	-5.3
11:15 PM - 11:20 PM	50.6	50.2	-	43.0	48.1	-5.1
11:20 PM - 11:25 PM	51.4	51.0	-	43.8	48.1	-4.3
11:25 PM - 11:30 PM	51.7	51.3	-	44.1	48.9	-4.8
11:30 PM - 11:35 PM	51.3	50.9	-	43.7	48.8	-5.1
11:35 PM - 11:40 PM	51.2	50.8	-	43.6	48.1	-4.7
11:40 PM - 11:45 PM	53.2	52.8	-	45.6	48.8	-3.2
11:45 PM - 11:50 PM	52.5	52.1	-	44.9	48.4	-3.5
11:50 PM - 11:55 PM	53.4	53.0	-	45.8	49.2	-3.4
11:55 PM - 12:00 AM	51.6	51.2	-	44.0	48.1	-4.1
12:00 AM - 12:05 AM	57.8	57.4	-	50.2	53.7	-3.5
12:05 AM - 12:10 AM	57.8	57.4	-	50.2	55.4	-5.2
12:10 AM - 12:15 AM	57.7	57.3	-	50.1	53.6	-3.5
12:15 AM - 12:20 AM	57.8	57.4	-	50.2	53.5	-3.3

The above results are valid only for the grab-sample/tested sample(s) as indicated in this report. No part of the 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023551-1

Sample No. 2450168-25
Parameter เสียงนอกงาน
Location N4 : ที่ตั้งอาคารบ้านพักพนักงานหมู่ 5 ปานสกัดดี
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	56.5	56.1	-	48.9	51.8	-4.9
12:25 AM - 12:30 AM	56.8	56.4	-	49.2	54.8	-5.4
12:30 AM - 12:35 AM	56.5	56.1	-	48.9	53.8	-4.9
12:35 AM - 12:40 AM	57.5	57.1	-	49.9	55.4	-5.5
12:40 AM - 12:45 AM	57.7	57.3	-	50.1	55.3	-5.2
12:45 AM - 12:50 AM	56.7	56.3	-	49.1	54.0	-4.9
12:50 AM - 12:55 AM	55.8	55.4	-	48.2	52.7	-4.5
12:55 AM - 01:00 AM	55.4	55.0	-	47.8	52.2	-4.4
01:00 AM - 01:05 AM	55.9	55.5	-	48.3	52.4	-4.1
01:05 AM - 01:10 AM	56.2	55.8	-	48.6	53.6	-5.0
01:10 AM - 01:15 AM	56.5	56.1	-	48.9	53.3	-4.4
01:15 AM - 01:20 AM	53.9	53.5	-	48.3	51.9	-3.6
01:20 AM - 01:25 AM	54.7	54.3	-	47.1	50.3	-2.2
01:25 AM - 01:30 AM	54.9	54.5	-	47.3	51.2	-3.9
01:30 AM - 01:35 AM	55.6	55.2	-	48.0	51.9	-3.9
01:35 AM - 01:40 AM	54.9	54.5	-	47.3	50.7	-3.4
01:40 AM - 01:45 AM	54.7	54.3	-	47.1	51.1	-4.0
01:45 AM - 01:50 AM	55.6	55.2	-	48.0	51.7	-2.7
01:50 AM - 01:55 AM	55.5	55.1	-	47.9	50.0	-2.1
01:55 AM - 02:00 AM	55.4	55.0	-	47.8	50.0	-2.2
02:00 AM - 02:05 AM	53.7	53.3	-	46.1	48.4	-2.3
02:05 AM - 02:10 AM	53.6	53.2	-	46.0	48.7	-2.7
02:10 AM - 02:15 AM	52.4	52.0	-	44.8	48.3	-3.5
02:15 AM - 02:20 AM	52.6	53.2	-	46.0	49.5	-2.9
02:20 AM - 02:25 AM	53.0	52.6	-	45.4	47.9	-2.5
02:25 AM - 02:30 AM	53.1	52.7	-	45.5	47.7	-2.2
02:30 AM - 02:35 AM	52.5	53.1	-	45.9	48.2	-2.3
02:35 AM - 02:40 AM	51.7	51.3	-	44.1	47.2	-3.2
02:40 AM - 02:45 AM	52.9	52.5	-	45.1	48.4	-3.1
02:45 AM - 02:50 AM	52.5	52.1	-	44.9	48.2	-3.3
02:50 AM - 02:55 AM	52.4	52.0	-	44.8	48.0	-3.2
02:55 AM - 03:00 AM	53.1	52.7	-	45.5	48.3	-2.8
03:00 AM - 03:05 AM	51.2	52.8	-	45.6	48.1	-2.5
03:05 AM - 03:10 AM	52.4	52.0	-	44.8	47.8	-3.0
03:10 AM - 03:15 AM	50.8	50.4	-	43.2	47.7	-4.5
03:15 AM - 03:20 AM	51.8	51.4	-	44.2	48.1	-3.9
03:20 AM - 03:25 AM	51.5	51.1	-	43.9	47.9	-4.0
03:25 AM - 03:30 AM	51.0	50.6	-	43.4	47.8	-4.2
03:30 AM - 03:35 AM	50.8	50.4	-	43.2	47.5	-4.1
03:35 AM - 03:40 AM	51.5	51.1	-	43.9	47.7	-3.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023551-1

Sample No. 2450168-25
Parameter เสียงนอกงาน
Location N4 : ที่ตั้งอาคารบ้านพักพนักงานหมู่ 5 ปานสกัดดี
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	51.8	51.4	-	44.2	47.8	-3.6
03:45 AM - 03:50 AM	51.8	51.4	-	44.2	47.9	-3.7
03:50 AM - 03:55 AM	51.0	50.6	-	43.4	47.5	-4.1
03:55 AM - 04:00 AM	51.9	51.5	-	44.3	47.5	-3.2
04:00 AM - 04:05 AM	52.7	52.3	-	45.1	47.7	-2.6
04:05 AM - 04:10 AM	53.0	52.6	-	45.4	48.3	-2.9
04:10 AM - 04:15 AM	51.0	50.6	-	43.4	47.6	-4.2
04:15 AM - 04:20 AM	49.6	49.2	-	42.0	47.4	-5.4
04:20 AM - 04:25 AM	49.0	48.6	-	41.4	47.2	-5.8
04:25 AM - 04:30 AM	50.1	49.7	-	42.5	47.0	-4.5
04:30 AM - 04:35 AM	50.1	49.7	-	42.5	47.4	-4.9
04:35 AM - 04:40 AM	53.5	53.1	-	45.9	48.1	-2.2
04:40 AM - 04:45 AM	54.4	54.0	-	46.8	48.1	-1.3
04:45 AM - 04:50 AM	49.8	49.4	-	42.2	47.8	-5.6
04:50 AM - 04:55 AM	49.8	49.4	-	42.2	48.0	-5.8
04:55 AM - 05:00 AM	49.7	49.3	-	42.1	48.1	-6.0
05:00 AM - 05:05 AM	50.2	49.8	-	42.6	48.4	-5.8
05:05 AM - 05:10 AM	50.9	50.5	-	43.3	48.6	-5.3
05:10 AM - 05:15 AM	50.4	50.0	-	42.8	48.5	-5.7
05:15 AM - 05:20 AM	52.4	52.0	-	44.8	49.1	-4.3
05:20 AM - 05:25 AM	54.7	54.3	-	47.1	49.0	-1.9
05:25 AM - 05:30 AM	57.2	56.8	-	49.6	54.7	-5.1
05:30 AM - 05:35 AM	53.8	53.4	-	46.2	49.5	-3.3
05:35 AM - 05:40 AM	53.6	53.2	-	46.0	49.1	-3.1
05:40 AM - 05:45 AM	54.1	53.7	-	46.5	49.3	-2.8
05:45 AM - 05:50 AM	53.6	53.2	-	46.0	48.8	-2.8
05:50 AM - 05:55 AM	54.7	54.3	-	47.1	49.3	-2.2
05:55 AM - 06:00 AM	53.0	52.6	-	45.4	49.1	-3.7
06:00 AM - 07:00 AM	52.6	52.2	47.0	-	49.0	-2.0
07:00 AM - 08:00 AM	53.6	53.2	43.0	-	47.9	-4.9
08:00 AM - 09:00 AM	51.8	51.4	41.2	-	47.2	-6.0
09:00 AM - 10:00 AM	51.9	51.5	41.3	-	47.1	-5.8
ค่าสูงสุด						0.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดเพื่อพิจารณาการประกอบกิจการโรงงาน พ.ศ. 2549

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม (ฉบับ กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม) เรื่อง กำหนดค่ามาตรฐานเสียงรบกวนจากโรงงาน พ.ศ. 2549
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานเสียงรบกวนจากการประกอบกิจการที่มีเสียงรบกวนเกินมาตรฐาน พ.ศ. 2561

Remark:
1. ระดับเสียงรบกวนเฉลี่ย ทำการตรวจวัด วันที่ 01-02 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-25 วันที่ตรวจวัด 01-02 มิถุนายน 2567)
3. อ้าง: "ในกรณีผลการตรวจวัดเสียงขณะ/มีการรบกวนเนื่องจากระดับเสียงรบกวนของสถานีตรวจอากาศที่ใกล้เคียงมากกว่าค่ามีเสียงรบกวนให้มีการปรับแก้"

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023552-1

Sample No. 2450168-26
Parameter เสียงนอกงาน
Location N4 : ที่ตั้งอาคารบ้านพักพนักงานหมู่ 5 ปานสกัดดี
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	51.0	50.6	40.4	-	47.4	-7.0
11:00 AM - 12:00 PM	52.9	52.5	42.3	-	47.0	-4.7
12:00 PM - 01:00 PM	51.5	51.1	40.9	-	46.9	-6.0
01:00 PM - 02:00 PM	51.9	51.5	41.3	-	47.7	-6.4
02:00 PM - 03:00 PM	51.1	50.7	40.5	-	46.8	-6.3
03:00 PM - 04:00 PM	52.9	52.5	42.3	-	48.0	-5.7
04:00 PM - 05:00 PM	52.6	52.2	42.0	-	47.5	-5.5
05:00 PM - 06:00 PM	53.2	52.8	42.6	-	47.4	-4.8
06:00 PM - 07:00 PM	54.5	54.1	43.9	-	48.8	-4.9
07:00 PM - 08:00 PM	54.8	54.4	44.2	-	51.2	-7.0
08:00 PM - 09:00 PM	54.2	53.8	43.6	-	51.4	-7.8
09:00 PM - 10:00 PM	52.1	51.7	41.5	-	49.4	-7.9
10:00 PM - 10:05 PM	53.9	53.5	-	46.3	49.7	-3.4
10:05 PM - 10:10 PM	53.1	52.7	-	45.5	49.7	-4.2
10:10 PM - 10:15 PM	51.8	51.4	-	44.2	49.1	-4.9
10:15 PM - 10:20 PM	52.7	52.3	-	45.1	48.9	-3.8
10:20 PM - 10:25 PM	53.6	53.4	-	46.2	49.5	-3.3
10:25 PM - 10:30 PM	51.1	50.7	-	43.5	48.5	-5.0
10:30 PM - 10:35 PM	53.8	52.4	-	45.2	48.6	-3.4
10:35 PM - 10:40 PM	53.5	53.1	-	45.9	49.1	-3.2
10:40 PM - 10:45 PM	52.4	52.0	-	44.8	48.9	-4.1
10:45 PM - 10:50 PM	51.6	51.2	-	44.0	48.7	-4.7
10:50 PM - 10:55 PM	51.6	51.2	-	45.0	49.6	-4.6
10:55 PM - 11:00 PM	51.6	53.2	-	46.0	49.6	-3.6
11:00 PM - 11:05 PM	52.5	52.1	-	44.9	49.5	-4.6
11:05 PM - 11:10 PM	54.3	53.9	-	46.7	49.3	-2.6
11:10 PM - 11:15 PM	52.4	52.0	-	44.8	48.5	-3.7
11:15 PM - 11:20 PM	53.5	53.1	-	45.9	48.1	-2.2
11:20 PM - 11:25 PM	51.4	51.0	-	43.8	47.6	-3.8
11:25 PM - 11:30 PM	51.3	50.9	-	43.7	47.8	-4.1
11:30 PM - 11:35 PM	50.8	50.4	-	43.2	47.7	-4.7
11:35 PM - 11:40 PM	51.1	50.7	-	43.5	48.4	-4.9
11:40 PM - 11:45 PM	52.0	51.6	-	44.4	48.6	-4.7
11:45 PM - 11:50 PM	50.8	50.4	-	43.2	48.2	-5.0
11:50 PM - 11:55 PM	50.8	50.4	-	43.2	47.6	-4.4
11:55 PM - 12:00 AM	51.8	51.4	-	44.2	48.4	-4.2
12:00 AM - 12:05 AM	51.2	50.8	-	43.6	47.9	-4.4
12:05 AM - 12:10 AM	50.7	50.3	-	43.1	47.4	-4.3
12:10 AM - 12:15 AM	50.0	49.6	-	42.4	47.1	-4.7
12:15 AM - 12:20 AM	51.5	51.1	-	43.9	47.5	-3.6

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023552-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-26
Parameter เสียงรบกวน
Location N4 : ที่ดักฝนโรงงานหมู่ 5 บ้านสุรศักดิ์
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	51.5	51.1		43.9	47.4	-3.5
12:25 AM - 12:30 AM	50.6	50.2		43.0	47.3	-4.3
12:30 AM - 12:35 AM	49.4	49.0		41.8	47.3	-5.5
12:35 AM - 12:40 AM	48.8	48.4		41.2	46.9	-5.7
12:40 AM - 12:45 AM	53.1	53.7		51.5	46.9	6.6
12:45 AM - 12:50 AM	52.3	51.9		44.7	47.9	-3.2
12:50 AM - 12:55 AM	49.8	49.4		42.2	47.3	5.1
12:55 AM - 01:00 AM	50.2	49.8		42.6	46.2	3.6
01:00 AM - 01:05 AM	49.6	49.2		42.0	46.7	-4.7
01:05 AM - 01:10 AM	53.1	54.7		47.5	46.4	1.1
01:10 AM - 01:15 AM	48.5	48.1		40.9	46.6	5.7
01:15 AM - 01:20 AM	50.4	50.0		42.8	46.5	3.7
01:20 AM - 01:25 AM	48.2	47.8		40.6	46.4	5.8
01:25 AM - 01:30 AM	47.8	47.4		40.2	46.1	5.9
01:30 AM - 01:35 AM	49.1	48.7		41.5	46.3	4.8
01:35 AM - 01:40 AM	47.7	47.3		40.1	45.8	5.7
01:40 AM - 01:45 AM	48.2	47.8		40.6	45.5	4.9
01:45 AM - 01:50 AM	47.5	47.1		39.9	45.7	5.8
01:50 AM - 01:55 AM	49.6	49.2		42.0	46.1	4.1
01:55 AM - 02:00 AM	48.2	47.8		40.6	45.8	5.2
02:00 AM - 02:05 AM	47.9	47.5		40.3	45.8	5.5
02:05 AM - 02:10 AM	47.1	46.7		39.5	45.3	5.8
02:10 AM - 02:15 AM	47.4	47.0		39.8	45.4	5.6
02:15 AM - 02:20 AM	47.2	46.8		39.6	45.2	5.6
02:20 AM - 02:25 AM	46.8	46.4		39.2	45.3	6.1
02:25 AM - 02:30 AM	47.0	46.6		39.4	45.3	5.9
02:30 AM - 02:35 AM	50.4	50.0		42.8	45.3	2.5
02:35 AM - 02:40 AM	48.1	47.7		40.5	45.0	-4.5
02:40 AM - 02:45 AM	47.0	46.6		39.4	45.3	5.9
02:45 AM - 02:50 AM	50.6	50.2		43.0	45.7	2.7
02:50 AM - 02:55 AM	47.0	46.6		39.4	45.2	5.8
02:55 AM - 03:00 AM	47.3	46.9		39.7	45.3	5.6
03:00 AM - 03:05 AM	48.1	47.7		40.5	45.8	5.3
03:05 AM - 03:10 AM	49.1	48.7		41.5	46.0	-4.5
03:10 AM - 03:15 AM	48.0	47.6		40.4	45.2	4.8
03:15 AM - 03:20 AM	49.9	49.5	-	42.3	45.0	2.7
03:20 AM - 03:25 AM	51.0	50.6		43.4	45.3	1.9
03:25 AM - 03:30 AM	47.2	47.3		40.1	45.7	-5.1
03:30 AM - 03:35 AM	47.5	47.0		41.8	45.3	-3.5
03:35 AM - 03:40 AM	47.8	47.4		40.2	45.8	5.6

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023552-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-26
Parameter เสียงรบกวน
Location N4 : ที่ดักฝนโรงงานหมู่ 5 บ้านสุรศักดิ์
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	48.1	47.7	-	40.5	45.7	5.2
03:45 AM - 03:50 AM	47.2	46.8		39.6	45.4	5.8
03:50 AM - 03:55 AM	47.9	47.5	-	40.3	45.9	5.6
03:55 AM - 04:00 AM	47.0	46.6		39.4	45.5	5.7
04:00 AM - 04:05 AM	47.8	47.4		40.2	45.4	5.2
04:05 AM - 04:10 AM	47.5	47.1		39.9	45.3	5.4
04:10 AM - 04:15 AM	48.2	47.8		40.6	45.6	5.0
04:15 AM - 04:20 AM	49.6	49.2		42.0	45.6	3.6
04:20 AM - 04:25 AM	50.6	50.2	-	43.0	45.6	2.6
04:25 AM - 04:30 AM	48.4	48.0		40.8	45.4	4.6
04:30 AM - 04:35 AM	47.8	47.4		40.2	45.3	5.1
04:35 AM - 04:40 AM	47.7	47.3		40.1	45.8	5.5
04:40 AM - 04:45 AM	50.6	50.2		43.0	45.9	2.9
04:45 AM - 04:50 AM	50.8	50.4	-	43.2	46.7	3.5
04:50 AM - 04:55 AM	49.8	49.4		42.2	46.7	4.5
04:55 AM - 05:00 AM	49.2	48.8	-	41.6	47.1	5.5
05:00 AM - 05:05 AM	48.3	47.9		40.7	46.4	5.7
05:05 AM - 05:10 AM	50.6	50.2		43.0	46.6	3.6
05:10 AM - 05:15 AM	53.1	52.7	-	45.5	47.6	2.1
05:15 AM - 05:20 AM	51.9	51.5		44.3	47.8	3.2
05:20 AM - 05:25 AM	52.7	52.3		45.1	48.2	3.5
05:25 AM - 05:30 AM	53.3	52.9		45.7	49.7	4.0
05:30 AM - 05:35 AM	54.1	53.7		46.5	48.9	2.4
05:35 AM - 05:40 AM	51.6	51.2		44.0	47.9	3.9
05:40 AM - 05:45 AM	51.7	51.3		44.1	47.8	3.7
05:45 AM - 05:50 AM	50.3	49.9	-	42.7	47.8	5.1
05:50 AM - 05:55 AM	52.1	51.7		44.5	48.1	3.6
05:55 AM - 06:00 AM	51.5	51.1		43.9	48.2	4.3
06:00 AM - 07:00 AM	53.3	51.9	41.7		47.8	6.1
07:00 AM - 08:00 AM	52.4	53.0	41.8		47.3	5.5
08:00 AM - 09:00 AM	50.1	49.9	39.7		45.9	6.2
09:00 AM - 10:00 AM	50.2	49.8	39.6	-	45.5	5.9
ค่าเฉลี่ยรวม						5.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการและระยะเวลาในการตรวจวัดระดับเสียงจากโรงงาน ระดับเสียงของเสียงแต่ละชนิด 24 ชั่วโมง และระดับเสียงของเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2562
เกณฑ์มาตรฐาน
1. ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม เรื่อง ค่าระดับเสียงรบกวนของโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงรบกวนของโรงงาน พ.ศ. 2561
Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 02-03 มิถุนายน 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-26 วันที่ตรวจวัด 02-03 มิถุนายน 2567)
3. n/a: ไม่สามารถหาค่าระดับเสียงของกิจการรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดอยู่ในระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the sample(s) tested(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
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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023553-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-27
Parameter เสียงรบกวน
Location N4 : ที่ดักฝนโรงงานหมู่ 5 บ้านสุรศักดิ์
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	50.6	50.2	40.0		46.1	6.1
11:00 AM - 12:00 PM	51.5	51.5	41.3		45.5	-4.2
12:00 PM - 01:00 PM	50.0	49.6	39.4		44.9	5.5
01:00 PM - 02:00 PM	50.7	50.3	40.1		45.1	5.0
02:00 PM - 03:00 PM	50.3	49.9	39.7		45.5	5.8
03:00 PM - 04:00 PM	52.4	52.0	41.8		46.6	-4.8
04:00 PM - 05:00 PM	52.6	51.6	41.4		47.9	-6.5
05:00 PM - 06:00 PM	51.4	51.0	40.8		48.2	7.4
06:00 PM - 07:00 PM	52.9	52.5	42.3		48.7	6.4
07:00 PM - 08:00 PM	53.7	53.3	43.1		50.8	7.7
08:00 PM - 09:00 PM	53.4	53.0	42.8		58.3	7.5
09:00 PM - 10:00 PM	52.4	52.0	41.8		48.3	6.5
10:00 PM - 10:05 PM	49.5	49.1		41.9	47.3	5.6
10:05 PM - 10:10 PM	51.1	50.7		43.5	47.9	4.4
10:10 PM - 10:15 PM	50.5	50.1		42.9	46.3	5.4
10:15 PM - 10:20 PM	49.8	49.4		42.2	47.8	5.6
10:20 PM - 10:25 PM	49.8	49.4		42.2	47.0	5.3
10:25 PM - 10:30 PM	47.2	46.8		41.6	47.2	5.6
10:30 PM - 10:35 PM	50.3	49.9		42.7	47.3	4.6
10:35 PM - 10:40 PM	51.1	50.7		43.5	47.1	3.6
10:40 PM - 10:45 PM	49.5	49.1		41.9	47.2	5.3
10:45 PM - 10:50 PM	49.1	48.7		41.5	46.9	5.4
10:50 PM - 10:55 PM	50.0	49.6		42.4	47.3	4.9
10:55 PM - 11:00 PM	50.3	49.9		42.7	47.6	4.9
11:00 PM - 11:05 PM	50.5	50.1		42.9	47.8	4.9
11:05 PM - 11:10 PM	51.4	51.0		43.8	47.8	4.0
11:10 PM - 11:15 PM	49.4	49.0		41.8	47.2	5.4
11:15 PM - 11:20 PM	48.8	48.4		41.2	47.0	5.8
11:20 PM - 11:25 PM	50.2	49.8		42.6	47.4	4.8
11:25 PM - 11:30 PM	51.6	51.2		44.0	47.4	3.4
11:30 PM - 11:35 PM	49.0	48.6		41.4	46.7	5.1
11:35 PM - 11:40 PM	48.7	48.3		41.1	46.9	5.8
11:40 PM - 11:45 PM	49.0	48.6		41.4	46.9	5.5
11:45 PM - 11:50 PM	49.1	48.7		41.5	46.8	5.3
11:50 PM - 11:55 PM	49.3	48.9		41.7	46.9	5.2
11:55 PM - 12:00 AM	50.1	49.7		42.5	46.7	4.2
12:00 AM - 12:05 AM	48.5	48.1		40.9	46.7	5.8
12:05 AM - 12:10 AM	47.9	47.5		40.3	46.0	5.7
12:10 AM - 12:15 AM	50.8	50.4		43.2	46.5	3.3
12:15 AM - 12:20 AM	51.3	50.9		43.7	46.5	2.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023553-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-27
Parameter เสียงรบกวน
Location N4 : ที่ดักฝนโรงงานหมู่ 5 บ้านสุรศักดิ์
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	50.4	50.0		42.8	46.6	3.8
12:25 AM - 12:30 AM	47.9	47.5		40.3	46.1	-5.8
12:30 AM - 12:35 AM	49.5	49.1		41.9	46.8	4.9
12:35 AM - 12:40 AM	49.3	48.9		41.7	46.6	4.9
12:40 AM - 12:45 AM	47.8	47.4		40.2	46.0	3.8
12:45 AM - 12:50 AM	48.3	47.9		40.7	46.3	5.6
12:50 AM - 12:55 AM	47.5	47.5		40.3	46.1	5.8
12:55 AM - 01:00 AM	48.8	48.4		41.2	46.4	5.2
01:00 AM - 01:05 AM	48.8	48.4		41.2	46.5	5.3
01:05 AM - 01:10 AM	48.5	48.1		40.9	46.5	5.6
01:10 AM - 01:15 AM	48.8	48.4		41.2	46.6	5.4
01:15 AM - 01:20 AM	48.3	47.9		40.7	46.1	5.4
01:20 AM - 01:25 AM	47.8	47.4		40.2	45.4	5.2
01:25 AM - 01:30 AM	47.5	47.1		39.9	45.2	5.3
01:30 AM - 01:35 AM	46.9	46.5		39.3	45.2	5.9
01:35 AM - 01:40 AM	47.8	47.4		40.2	45.6	5.4
01:40 AM - 01:45 AM	47.3	46.9		39.7	45.1	5.4
01:45 AM - 01:50 AM	47.3	46.9		39.7	45.6	5.9
01:50 AM - 01:55 AM	47.3	46.9		39.7	45.7	6.0
01:55 AM - 02:00 AM	48.1	48.1		40.9	45.8	4.9
02:00 AM - 02:05 AM	48.9	48.5		41.3	45.7	4.4
02:05 AM - 02:10 AM	54.5	54.1		46.9	45.9	1.0
02:10 AM - 02:15 AM	47.3	46.9		39.7	45.6	5.9
02:15 AM - 02:20 AM	47.0	46.6		39.4	45.5	6.1
02:20 AM - 02:25 AM	48.8	48.4		41.2	45.8	4.6
02:25 AM - 02:30 AM	47.6	47.2		40.0	45.4	5.4
02:30 AM - 02:35 AM	49.3	49.3		42.1	45.3	3.3
02:35 AM - 02:40 AM	49.6	49.2		42.0	45.6	3.6
02:40 AM - 02:45 AM	47.3	46.8		39.6	45.4	5.8
02:45 AM - 02:50 AM	51.6	51.2		44.0	45.9	1.9
02:50 AM - 02:55 AM	47.8	47.4		40.2	45.6	5.4
02:55 AM - 03:00 AM	47.2	46.8		39.6	45.5	5.9
03:00 AM - 03:05 AM	47.3	47.1		39.9	45.5	5.6
03:05 AM - 03:10 AM	47.8	47.4		40.2	45.4	5.2
03:10 AM - 03:15 AM	48.0	47.6		40.4	45.0	4.6
03:15 AM - 03:20 AM	50.4	50.0		42.8	45.5	2.7
03:20 AM - 03:25 AM	49.2	47.8		40.6	45.1	4.7
03:25 AM - 03:30 AM	47.7	47.3		40.1	45.1	5.6
03:30 AM - 03:35 AM	48.9	48.5		41.3	44.8	3.5
03:35 AM - 03:40 AM	48.8	48.4		41.2	44.8	3.6

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023553-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-27
Parameter เสียงนกนาน
Location N4 : ที่ทำการโรงเรียนวัดเขาใหญ่ 5 บ้านสุเกศ์
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	48.1	47.7	-	40.5	44.9	-4.4
03:45 AM - 03:50 AM	47.8	47.4	-	40.2	44.6	-4.4
03:50 AM - 03:55 AM	48.2	47.8	-	40.6	44.9	-4.3
03:55 AM - 04:00 AM	47.5	47.1	-	39.9	44.6	-4.7
04:00 AM - 04:05 AM	49.0	48.6	-	41.4	44.8	-3.4
04:05 AM - 04:10 AM	48.6	48.2	-	41.0	45.1	-4.1
04:10 AM - 04:15 AM	48.3	47.9	-	40.7	44.5	-3.8
04:15 AM - 04:20 AM	48.8	48.4	-	41.2	45.2	-4.0
04:20 AM - 04:25 AM	52.8	52.4	-	45.2	45.8	-0.6
04:25 AM - 04:30 AM	51.0	50.6	-	43.4	45.5	-2.1
04:30 AM - 04:35 AM	50.2	49.8	-	42.6	45.5	-2.9
04:35 AM - 04:40 AM	50.9	50.5	-	43.3	45.7	-2.4
04:40 AM - 04:45 AM	50.4	50.0	-	42.8	45.5	-2.7
04:45 AM - 04:50 AM	49.6	49.2	-	42.0	45.8	-3.8
04:50 AM - 04:55 AM	51.6	51.2	-	44.0	45.3	-1.3
04:55 AM - 05:00 AM	48.1	47.7	-	40.5	44.2	-3.7
05:00 AM - 05:05 AM	48.2	47.8	-	40.6	44.0	-3.4
05:05 AM - 05:10 AM	49.2	48.8	-	41.6	44.8	-3.2
05:10 AM - 05:15 AM	53.7	53.3	-	46.1	45.6	0.5
05:15 AM - 05:20 AM	50.7	50.3	-	43.1	45.8	-2.7
05:20 AM - 05:25 AM	53.4	53.0	-	45.8	46.2	-0.4
05:25 AM - 05:30 AM	53.2	52.8	-	45.6	48.8	-3.2
05:30 AM - 05:35 AM	52.0	51.6	-	44.4	46.4	-2.0
05:35 AM - 05:40 AM	52.4	52.0	-	44.8	46.9	-2.1
05:40 AM - 05:45 AM	53.5	53.1	-	45.9	46.0	-0.1
05:45 AM - 05:50 AM	52.4	52.0	-	44.8	46.4	-1.6
05:50 AM - 05:55 AM	53.7	53.3	-	46.1	46.4	-0.3
05:55 AM - 06:00 AM	53.5	53.1	-	43.9	46.7	-2.8
06:00 AM - 07:00 AM	54.2	53.8	43.6	-	48.8	-5.2
07:00 AM - 08:00 AM	54.6	54.2	44.0	-	51.7	-7.7
08:00 AM - 09:00 AM	55.5	55.1	44.9	-	47.8	-2.9
09:00 AM - 10:00 AM	53.2	52.8	42.6	-	46.4	-3.8
ค่ามาตรฐาน						5.10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงการรบกวนและระดับเสียงที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับความสามารถในการรบกวนเพื่อป้องกันอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 มิถุนายน 2567
2. ระดับเสียงทั่วไปขณะระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-27 วันที่ตรวจวัด 03-04 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023554-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-28
Parameter เสียงนกนาน
Location N4 : ที่ทำการโรงเรียนวัดเขาใหญ่ 5 บ้านสุเกศ์
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	54.0	53.6	43.4	-	45.9	-2.5
11:00 AM - 12:00 PM	55.3	54.9	44.7	-	45.8	-1.1
12:00 PM - 01:00 PM	52.9	52.5	42.3	-	43.5	-1.2
01:00 PM - 02:00 PM	53.4	52.5	46.1	-	44.9	1.2
02:00 PM - 03:00 PM	54.7	53.8	47.4	-	46.4	1.0
03:00 PM - 04:00 PM	54.6	53.7	47.3	-	48.0	-0.7
04:00 PM - 05:00 PM	54.2	53.3	46.9	-	46.1	0.8
05:00 PM - 06:00 PM	52.9	52.0	45.6	-	46.3	-0.7
06:00 PM - 07:00 PM	53.0	52.1	45.7	-	47.2	-1.5
07:00 PM - 08:00 PM	54.6	53.7	47.3	-	48.9	-1.6
08:00 PM - 09:00 PM	52.7	51.8	45.4	-	48.2	-2.8
09:00 PM - 10:00 PM	51.8	50.9	44.5	-	47.1	-2.6
10:00 PM - 10:05 PM	50.0	49.1	-	45.7	46.3	-0.5
10:05 PM - 10:10 PM	49.5	48.6	-	45.2	46.0	-0.8
10:10 PM - 10:15 PM	51.3	50.4	-	47.0	47.4	-0.4
10:15 PM - 10:20 PM	50.8	49.9	-	46.5	47.0	-0.5
10:20 PM - 10:25 PM	50.0	49.1	-	45.7	46.9	-1.2
10:25 PM - 10:30 PM	51.3	50.4	-	47.0	47.4	-0.4
10:30 PM - 10:35 PM	50.5	49.6	-	46.2	47.1	-0.9
10:35 PM - 10:40 PM	50.4	49.5	-	46.1	47.5	-1.4
10:40 PM - 10:45 PM	51.1	50.2	-	46.8	46.7	0.1
10:45 PM - 10:50 PM	53.3	52.4	-	49.0	46.9	2.1
10:50 PM - 10:55 PM	52.0	51.1	-	47.7	46.8	0.9
10:55 PM - 11:00 PM	51.1	50.2	-	46.8	46.8	0.0
11:00 PM - 11:05 PM	51.9	51.0	-	47.6	46.6	1.0
11:05 PM - 11:10 PM	54.3	53.4	-	50.0	47.0	3.0
11:10 PM - 11:15 PM	51.5	50.6	-	47.2	47.3	-0.1
11:15 PM - 11:20 PM	52.4	51.5	-	48.1	47.2	0.9
11:20 PM - 11:25 PM	51.5	50.6	-	47.2	47.0	0.2
11:25 PM - 11:30 PM	51.1	50.2	-	46.8	46.3	0.5
11:30 PM - 11:35 PM	52.0	51.1	-	47.7	47.3	0.4
11:35 PM - 11:40 PM	53.8	52.9	-	49.5	46.8	2.7
11:40 PM - 11:45 PM	49.8	48.9	-	45.5	46.2	-0.8
11:45 PM - 11:50 PM	49.4	48.5	-	45.1	46.2	-1.1
11:50 PM - 11:55 PM	50.0	49.1	-	45.7	46.1	-0.4
11:55 PM - 12:00 AM	51.9	51.0	-	47.6	46.6	1.0
12:00 AM - 12:05 AM	49.7	48.8	-	45.4	46.7	-1.3
12:05 AM - 12:10 AM	50.6	49.7	-	46.3	46.8	-0.5
12:10 AM - 12:15 AM	50.1	49.2	-	45.8	46.6	-0.8
12:15 AM - 12:20 AM	51.7	50.8	-	47.4	46.7	0.7

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงการรบกวนและระดับเสียงที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับความสามารถในการรบกวนเพื่อป้องกันอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 มิถุนายน 2567
2. ระดับเสียงทั่วไปขณะระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-28 วันที่ตรวจวัด 04-05 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the unit and/or material sample(s) as indicated in this report. No part of the report or ce Eluate 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023554-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-28
Parameter เสียงนกนาน
Location N4 : ที่ทำการโรงเรียนวัดเขาใหญ่ 5 บ้านสุเกศ์
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	49.6	48.7	-	45.3	46.5	-1.2
12:25 AM - 12:30 AM	53.4	52.5	-	49.1	46.8	2.3
12:30 AM - 12:35 AM	49.4	48.5	-	45.1	46.7	-1.6
12:35 AM - 12:40 AM	50.6	49.7	-	46.3	47.1	-0.8
12:40 AM - 12:45 AM	49.7	48.8	-	45.4	46.8	-1.4
12:45 AM - 12:50 AM	50.1	49.2	-	45.8	46.8	-1.0
12:50 AM - 12:55 AM	50.2	49.3	-	45.9	46.9	-0.9
12:55 AM - 01:00 AM	49.5	48.6	-	45.2	46.7	-1.5
01:00 AM - 01:05 AM	50.1	49.2	-	45.8	47.2	-1.4
01:05 AM - 01:10 AM	50.8	49.9	-	46.5	47.1	-0.6
01:10 AM - 01:15 AM	49.4	48.5	-	45.1	46.7	-1.6
01:15 AM - 01:20 AM	49.7	48.8	-	45.4	47.1	-1.7
01:20 AM - 01:25 AM	49.8	48.7	-	45.3	47.1	-1.8
01:25 AM - 01:30 AM	50.4	49.5	-	46.1	47.1	-1.0
01:30 AM - 01:35 AM	50.3	49.4	-	46.0	46.9	-0.9
01:35 AM - 01:40 AM	50.0	49.1	-	45.7	46.4	-0.7
01:40 AM - 01:45 AM	49.8	48.9	-	45.5	46.8	-1.3
01:45 AM - 01:50 AM	50.2	49.3	-	46.1	47.1	-1.0
01:50 AM - 01:55 AM	50.4	49.5	-	46.1	46.9	-0.8
01:55 AM - 02:00 AM	51.8	50.9	-	47.5	46.7	0.8
02:00 AM - 02:05 AM	54.0	53.1	-	49.7	47.0	2.7
02:05 AM - 02:10 AM	50.2	49.3	-	45.9	46.6	-0.7
02:10 AM - 02:15 AM	49.2	48.3	-	44.9	46.8	-1.9
02:15 AM - 02:20 AM	51.0	50.1	-	46.7	47.2	-0.5
02:20 AM - 02:25 AM	49.9	49.0	-	45.6	46.8	-1.2
02:25 AM - 02:30 AM	50.6	49.7	-	46.3	47.3	-1.0
02:30 AM - 02:35 AM	51.7	50.8	-	47.4	47.1	0.3
02:35 AM - 02:40 AM	49.9	49.0	-	45.6	46.9	-1.3
02:40 AM - 02:45 AM	52.7	51.8	-	48.4	47.4	1.0
02:45 AM - 02:50 AM	51.2	50.3	-	46.9	47.5	-0.6
02:50 AM - 02:55 AM	49.5	48.6	-	45.2	46.8	-1.6
02:55 AM - 03:00 AM	51.8	50.9	-	47.5	47.6	-0.1
03:00 AM - 03:05 AM	54.2	53.3	-	49.9	47.4	2.5
03:05 AM - 03:10 AM	50.2	49.3	-	45.9	47.0	-1.1
03:10 AM - 03:15 AM	49.8	48.9	-	45.5	46.7	-1.2
03:15 AM - 03:20 AM	50.7	49.8	-	46.4	47.7	-1.3
03:20 AM - 03:25 AM	51.2	50.3	-	46.9	47.9	-1.0
03:25 AM - 03:30 AM	53.4	52.5	-	49.1	47.7	1.4
03:30 AM - 03:35 AM	51.4	50.5	-	47.1	47.5	-0.4
03:35 AM - 03:40 AM	50.7	49.8	-	46.4	47.1	-0.7

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงการรบกวนและระดับเสียงที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับความสามารถในการรบกวนเพื่อป้องกันอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 03-04 มิถุนายน 2567
2. ระดับเสียงทั่วไปขณะระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-27 วันที่ตรวจวัด 03-04 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the unit and/or material sample(s) as indicated in this report. No part of the report or ce Eluate 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450168
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report Number : 3023554-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450168-28
Parameter เสียงนกนาน
Location N4 : ที่ทำการโรงเรียนวัดเขาใหญ่ 5 บ้านสุเกศ์
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00376364

ระดับเสียง (dB(A))						
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	50.3	49.4	-	46.0	47.0	-1.0
03:45 AM - 03:50 AM	49.5	48.6	-	45.2	47.1	-1.9
03:50 AM - 03:55 AM	51.1	50.2	-	46.8	47.2	-0.4
03:55 AM - 04:00 AM	56.1	55.2	-	51.8	47.3	4.5
04:00 AM - 04:05 AM	49.5	48.6	-	45.2	47.0	-1.8
04:05 AM - 04:10 AM	55.8	54.9	-	51.5	47.7	3.8
04:10 AM - 04:15 AM	50.1	49.2	-	45.8	47.2	-1.4
04:15 AM - 04:20 AM	57.6	56.9	-	53.5	46.8	6.7
04:20 AM - 04:25 AM	51.7	50.8	-	47.4	47.1	0.3
04:25 AM - 04:30 AM	52.5	51.6	-	48.2	47.3	0.9
04:30 AM - 04:35 AM	52.5	51.6	-	48.2	47.7	0.5
04:35 AM - 04:40 AM	51.6	50.7	-	47.3	47.1	0.2
04:40 AM - 04:45 AM	51.5	50.6	-	47.2	47.0	0.2
04:45 AM - 04:50 AM	52.1	51.2	-	47.8	47.3	0.5
04:50 AM - 04:55 AM	50.4	49.5	-	46.1	46.6	-0.5
04:55 AM - 05:00 AM	60.0	59.1	-	55.7	47.5	8.2
05:00 AM - 05:05 AM	53.5	52.6	-	49.2	46.9	2.3
05:05 AM - 05:10 AM	52.9	52.0	-	48.6	46.9	1.7
05:10 AM - 05:15 AM	50.9	50.0	-	46.6	47.6	-1.0
05:15 AM - 05:20 AM	52.7	51.3	-	47.9	48.0	-0.1
05:20 AM - 05:25 AM	52.5	51.6	-	48.2	48.0	0.2
05:25 AM - 05:30 AM	57.0	56.1	-	52.7	49.1	3.6
05:30 AM - 05:35 AM	55.8	54.9	-	51.5	49.8	1.7
05:35 AM - 05:40 AM	54.0	53.1	-	49.7	49.4	0.3
05:40 AM - 05:45 AM	54.5	53.6	-	50.2	48.7	1.5
05:45 AM - 05:50 AM	52.8	51.9	-	48.5	47.9	0.6
05:50 AM - 05:55 AM	53.4	52.5	-	49.1	48.0	1.1
05:55 AM - 06:00 AM	51.2	50.3	-	46.9	47.7	-0.8
06:00 AM - 07:00 AM	54.8	53.9	47.5	-	50.2	-2.7
07:00 AM - 08:00 AM	54.6	53.7	47.3	-	50.3	-3.0
08:00 AM - 09:00 AM	54.3	53.4	47.0	-	48.2	-1.2
09:00 AM - 10:00 AM	53.1	52.2	45.8	-	45.8	0.0
ค่ามาตรฐาน						≤ 10

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2567

มาตรฐาน
1. ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าระดับเสียงการรบกวนและระดับเสียงที่เครื่องการหน่วงคอนดิการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าระดับความสามารถในการรบกวนเพื่อป้องกันอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 มิถุนายน 2567
2. ระดับเสียงทั่วไปขณะระดับเสียงขณะไม่มีการรบกวน (Sample No.2450169-28 วันที่ตรวจวัด 04-05 มิถุนายน 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

The above results are valid only for the unit and/or material sample(s) as indicated in this report. No part of the report or ce Eluate 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
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023557-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-1
Parameter Noise
Location N1 : หมู่บ้านบูรพา (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.6	80.8	48.6
12:00 PM - 01:00 PM	52.0	72.3	47.8
01:00 PM - 02:00 PM	49.7	71.0	47.4
02:00 PM - 03:00 PM	49.8	73.3	47.9
03:00 PM - 04:00 PM	51.9	75.2	47.5
04:00 PM - 05:00 PM	51.9	65.9	49.7
05:00 PM - 06:00 PM	52.1	73.8	49.1
06:00 PM - 07:00 PM	50.3	69.2	48.5
07:00 PM - 08:00 PM	50.1	62.7	49.9
08:00 PM - 09:00 PM	48.9	68.1	48.1
09:00 PM - 10:00 PM	48.3	63.9	47.3
10:00 PM - 10:05 PM	48.5	54.3	47.3
10:05 PM - 10:10 PM	48.2	56.0	47.3
10:10 PM - 10:15 PM	47.6	51.4	46.9
10:15 PM - 10:20 PM	48.0	58.1	47.0
10:20 PM - 10:25 PM	47.9	59.3	46.7
10:25 PM - 10:30 PM	48.0	60.6	47.1
10:30 PM - 10:35 PM	47.6	49.7	47.0
10:35 PM - 10:40 PM	47.6	57.1	46.9
10:40 PM - 10:45 PM	47.8	54.0	46.9
10:45 PM - 10:50 PM	48.2	58.5	47.1
10:50 PM - 10:55 PM	48.2	54.9	47.3
10:55 PM - 11:00 PM	48.0	52.4	47.3
11:00 PM - 11:05 PM	47.9	55.0	47.1
11:05 PM - 11:10 PM	47.8	52.4	46.9
11:10 PM - 11:15 PM	48.0	55.6	47.0
11:15 PM - 11:20 PM	47.9	55.0	47.1
11:20 PM - 11:25 PM	47.8	56.4	47.0
11:25 PM - 11:30 PM	47.7	50.6	47.3
11:30 PM - 11:35 PM	47.7	57.2	47.1
11:35 PM - 11:40 PM	47.7	50.4	47.2
11:40 PM - 11:45 PM	47.7	51.0	47.2
11:45 PM - 11:50 PM	47.8	50.9	47.2
11:50 PM - 11:55 PM	47.9	51.4	47.4
11:55 PM - 12:00 AM	48.3	56.7	47.6
12:00 AM - 12:05 AM	47.9	50.6	47.5
12:05 AM - 12:10 AM	47.8	50.7	47.3
12:10 AM - 12:15 AM	47.8	49.9	47.3
12:15 AM - 12:20 AM	47.7	50.2	47.2
12:20 AM - 12:25 AM	47.9	52.8	47.1

The above results are valid only for the analyzed tested sample(s) as indicated in this report. No part of this report can be duplicated 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
Wilawan Borirak
Manager

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023557-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-1
Parameter Noise
Location N1 : หมู่บ้านบูรพา (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	47.5	52.3	47.1
12:30 AM - 12:35 AM	47.7	56.6	47.0
12:35 AM - 12:40 AM	47.6	51.6	47.1
12:40 AM - 12:45 AM	47.6	54.9	46.9
12:45 AM - 12:50 AM	47.5	50.7	46.8
12:50 AM - 12:55 AM	47.4	51.3	46.7
12:55 AM - 01:00 AM	48.1	61.4	46.4
01:00 AM - 01:05 AM	47.3	57.1	46.2
01:05 AM - 01:10 AM	46.4	49.2	45.9
01:10 AM - 01:15 AM	46.6	52.0	45.8
01:15 AM - 01:20 AM	46.4	53.6	45.8
01:20 AM - 01:25 AM	46.3	49.1	45.8
01:25 AM - 01:30 AM	46.4	49.2	45.8
01:30 AM - 01:35 AM	46.9	51.8	45.9
01:35 AM - 01:40 AM	47.0	56.8	45.9
01:40 AM - 01:45 AM	46.6	49.6	46.0
01:45 AM - 01:50 AM	46.8	51.6	46.0
01:50 AM - 01:55 AM	46.7	50.9	46.0
01:55 AM - 02:00 AM	47.3	56.0	46.1
02:00 AM - 02:05 AM	46.3	48.8	45.8
02:05 AM - 02:10 AM	46.4	49.1	45.8
02:10 AM - 02:15 AM	46.4	53.9	45.7
02:15 AM - 02:20 AM	46.7	53.6	46.0
02:20 AM - 02:25 AM	46.9	53.1	46.0
02:25 AM - 02:30 AM	46.5	49.4	45.9
02:30 AM - 02:35 AM	46.4	51.0	45.8
02:35 AM - 02:40 AM	46.9	57.3	46.1
02:40 AM - 02:45 AM	46.9	55.2	46.1
02:45 AM - 02:50 AM	47.6	59.0	46.2
02:50 AM - 02:55 AM	47.2	57.9	46.2
02:55 AM - 03:00 AM	46.8	51.4	46.0
03:00 AM - 03:05 AM	47.1	59.2	46.0
03:05 AM - 03:10 AM	47.6	62.5	46.1
03:10 AM - 03:15 AM	48.4	62.9	46.2
03:15 AM - 03:20 AM	47.3	51.6	46.6
03:20 AM - 03:25 AM	47.7	55.1	46.6
03:25 AM - 03:30 AM	48.6	57.0	46.9
03:30 AM - 03:35 AM	49.4	56.8	47.6
03:35 AM - 03:40 AM	50.5	63.0	47.8
03:40 AM - 03:45 AM	49.2	56.9	47.6

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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023557-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-1
Parameter Noise
Location N1 : หมู่บ้านบูรพา (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	48.4	56.9	47.3
03:50 AM - 03:55 AM	47.2	57.8	46.9
03:55 AM - 04:00 AM	48.9	63.5	47.2
04:00 AM - 04:05 AM	49.8	63.3	47.3
04:05 AM - 04:10 AM	49.1	63.2	47.3
04:10 AM - 04:15 AM	49.4	63.0	47.4
04:15 AM - 04:20 AM	49.0	62.7	47.2
04:20 AM - 04:25 AM	47.8	56.9	47.0
04:25 AM - 04:30 AM	49.9	63.6	47.1
04:30 AM - 04:35 AM	48.9	62.9	47.1
04:35 AM - 04:40 AM	48.6	62.9	47.1
04:40 AM - 04:45 AM	48.9	63.4	47.3
04:45 AM - 04:50 AM	50.4	63.0	47.5
04:50 AM - 04:55 AM	52.0	71.7	47.6
04:55 AM - 05:00 AM	53.0	75.1	47.6
05:00 AM - 05:05 AM	54.8	73.6	47.8
05:05 AM - 05:10 AM	57.4	77.9	47.4
05:10 AM - 05:15 AM	56.0	76.1	47.6
05:15 AM - 05:20 AM	53.3	74.6	47.4
05:20 AM - 05:25 AM	54.9	71.7	47.6
05:25 AM - 05:30 AM	56.6	75.7	47.9
05:30 AM - 05:35 AM	49.7	66.0	47.4
05:35 AM - 05:40 AM	50.1	64.7	47.2
05:40 AM - 05:45 AM	52.7	69.4	48.1
05:45 AM - 05:50 AM	52.6	72.4	48.5
05:50 AM - 05:55 AM	51.0	67.5	48.6
05:55 AM - 06:00 AM	52.3	66.9	48.9
06:00 AM - 07:00 AM	53.2	73.3	49.3
07:00 AM - 08:00 AM	53.3	73.6	49.7
08:00 AM - 09:00 AM	53.1	74.5	51.8
09:00 AM - 10:00 AM	53.8	72.5	49.2
10:00 AM - 11:00 AM	50.5	66.7	48.0

Reference Method
1. ISO 1996-1
2. ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงสม่ำเสมอใน 24 ชั่วโมง และระดับเสียงดังเป็นช่วงระยะเวลาสั้น ๆ ตามประกาศ ณ วันที่ 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023558-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-2
Parameter Noise
Location N1 : หมู่บ้านบูรพา (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	48.9	66.6	46.7
12:00 PM - 01:00 PM	51.2	75.7	47.3
01:00 PM - 02:00 PM	50.4	63.9	47.2
02:00 PM - 03:00 PM	54.0	80.6	49.1
03:00 PM - 04:00 PM	49.6	65.8	47.6
04:00 PM - 05:00 PM	51.6	66.0	48.7
05:00 PM - 06:00 PM	52.0	73.2	48.5
06:00 PM - 07:00 PM	48.8	62.2	47.8
07:00 PM - 08:00 PM	50.0	63.5	48.5
08:00 PM - 09:00 PM	49.5	74.0	47.8
09:00 PM - 10:00 PM	49.7	69.2	47.5
10:00 PM - 10:05 PM	47.8	55.5	46.8
10:05 PM - 10:10 PM	47.5	57.4	46.7
10:10 PM - 10:15 PM	47.8	51.9	47.0
10:15 PM - 10:20 PM	48.6	56.8	47.4
10:20 PM - 10:25 PM	48.8	57.5	47.6
10:25 PM - 10:30 PM	48.1	54.0	47.5
10:30 PM - 10:35 PM	48.0	59.1	47.4
10:35 PM - 10:40 PM	47.8	53.2	47.3
10:40 PM - 10:45 PM	48.0	57.3	47.4
10:45 PM - 10:50 PM	48.8	56.8	47.4
10:50 PM - 10:55 PM	48.1	55.9	47.3
10:55 PM - 11:00 PM	48.1	52.2	47.4
11:00 PM - 11:05 PM	48.1	54.1	47.3
11:05 PM - 11:10 PM	47.9	52.2	47.3
11:10 PM - 11:15 PM	48.4	53.1	47.4
11:15 PM - 11:20 PM	48.4	57.1	47.4
11:20 PM - 11:25 PM	48.1	51.9	47.2
11:25 PM - 11:30 PM	48.2	58.6	47.0
11:30 PM - 11:35 PM	48.3	54.6	47.2
11:35 PM - 11:40 PM	49.8	66.6	46.9
11:40 PM - 11:45 PM	47.6	51.7	46.7
11:45 PM - 11:50 PM	47.6	50.5	46.8
11:50 PM - 11:55 PM	47.7	53.1	46.8
11:55 PM - 12:00 AM	47.7	53.7	46.8
12:00 AM - 12:05 AM	47.6	54.9	46.7
12:05 AM - 12:10 AM	48.6	63.2	47.0
12:10 AM - 12:15 AM	47.8	53.8	46.9
12:15 AM - 12:20 AM	47.4	51.8	46.7
12:20 AM - 12:25 AM	48.1	60.5	46.7

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023558-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-2
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	49.1	64.6	46.7
12:30 AM - 12:35 AM	47.2	56.1	46.5
12:35 AM - 12:40 AM	47.0	52.4	46.5
12:40 AM - 12:45 AM	47.6	55.7	46.6
12:45 AM - 12:50 AM	47.3	56.0	46.5
12:50 AM - 12:55 AM	47.3	52.5	46.8
12:55 AM - 01:00 AM	47.1	50.7	46.5
01:00 AM - 01:05 AM	47.3	55.0	46.6
01:05 AM - 01:10 AM	47.2	53.2	46.8
01:10 AM - 01:15 AM	47.5	54.3	46.9
01:15 AM - 01:20 AM	47.9	67.4	47.1
01:20 AM - 01:25 AM	47.7	55.3	47.1
01:25 AM - 01:30 AM	47.2	50.1	46.9
01:30 AM - 01:35 AM	47.5	54.7	46.7
01:35 AM - 01:40 AM	46.9	50.5	46.4
01:40 AM - 01:45 AM	47.2	54.8	46.4
01:45 AM - 01:50 AM	47.6	54.0	46.6
01:50 AM - 01:55 AM	47.7	52.6	47.1
01:55 AM - 02:00 AM	47.7	55.6	47.0
02:00 AM - 02:05 AM	47.7	52.4	47.2
02:05 AM - 02:10 AM	47.8	50.0	47.1
02:10 AM - 02:15 AM	47.7	51.2	47.1
02:15 AM - 02:20 AM	47.9	55.8	47.3
02:20 AM - 02:25 AM	47.6	52.1	46.9
02:25 AM - 02:30 AM	47.3	49.2	46.8
02:30 AM - 02:35 AM	47.4	50.1	46.8
02:35 AM - 02:40 AM	48.7	60.2	46.7
02:40 AM - 02:45 AM	47.7	68.7	46.9
02:45 AM - 02:50 AM	47.4	50.5	46.9
02:50 AM - 02:55 AM	47.5	49.7	47.0
02:55 AM - 03:00 AM	47.8	52.7	47.0
03:00 AM - 03:05 AM	47.8	51.5	47.0
03:05 AM - 03:10 AM	48.0	50.4	47.5
03:10 AM - 03:15 AM	48.1	57.3	47.0
03:15 AM - 03:20 AM	48.5	54.1	48.0
03:20 AM - 03:25 AM	48.2	56.6	47.7
03:25 AM - 03:30 AM	48.0	49.0	47.4
03:30 AM - 03:35 AM	48.3	50.8	47.7
03:35 AM - 03:40 AM	47.9	51.3	47.0
03:40 AM - 03:45 AM	47.7	51.5	46.8

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023558-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-2
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	50.2	62.0	47.1
03:50 AM - 03:55 AM	49.4	61.9	46.7
03:55 AM - 04:00 AM	48.2	62.1	46.8
04:00 AM - 04:05 AM	47.8	53.8	47.1
04:05 AM - 04:10 AM	48.8	61.5	47.1
04:10 AM - 04:15 AM	49.9	62.3	47.3
04:15 AM - 04:20 AM	48.6	62.1	47.7
04:20 AM - 04:25 AM	50.0	62.2	47.8
04:25 AM - 04:30 AM	48.7	61.5	47.6
04:30 AM - 04:35 AM	50.4	61.9	47.6
04:35 AM - 04:40 AM	49.3	60.0	47.7
04:40 AM - 04:45 AM	49.4	62.3	47.7
04:45 AM - 04:50 AM	49.0	57.6	48.1
04:50 AM - 04:55 AM	57.1	74.6	48.6
04:55 AM - 05:00 AM	55.2	72.7	49.1
05:00 AM - 05:05 AM	55.7	69.1	49.1
05:05 AM - 05:10 AM	53.9	69.1	48.8
05:10 AM - 05:15 AM	57.2	75.9	48.7
05:15 AM - 05:20 AM	53.5	65.9	48.5
05:20 AM - 05:25 AM	53.1	67.8	48.4
05:25 AM - 05:30 AM	52.9	67.9	48.3
05:30 AM - 05:35 AM	52.7	70.9	47.9
05:35 AM - 05:40 AM	55.5	72.3	48.4
05:40 AM - 05:45 AM	52.7	69.9	48.3
05:45 AM - 05:50 AM	53.8	72.7	48.8
05:50 AM - 05:55 AM	52.2	66.7	48.5
05:55 AM - 06:00 AM	54.4	72.5	49.1
06:00 AM - 07:00 AM	52.9	73.2	48.7
07:00 AM - 08:00 AM	52.1	73.2	47.7
08:00 AM - 09:00 AM	52.1	72.0	47.7
09:00 AM - 10:00 AM	52.1	72.0	47.5
10:00 AM - 11:00 AM	50.5	68.0	47.5

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากแหล่งกำเนิดเสียงอุตสาหกรรม ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องวัดปริมาณเสียงอุตสาหกรรมโรงงาน พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023559-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-3
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	54.2	73.0	48.1
12:00 PM - 01:00 PM	51.8	72.9	48.1
01:00 PM - 02:00 PM	51.4	71.5	48.8
02:00 PM - 03:00 PM	51.4	73.3	48.7
03:00 PM - 04:00 PM	49.3	67.7	47.4
04:00 PM - 05:00 PM	51.3	71.3	48.0
05:00 PM - 06:00 PM	50.9	76.2	47.7
06:00 PM - 07:00 PM	51.8	69.2	49.1
07:00 PM - 08:00 PM	55.7	71.3	53.8
08:00 PM - 09:00 PM	51.1	72.3	49.1
09:00 PM - 10:00 PM	48.9	65.7	47.9
10:00 PM - 10:05 PM	48.7	56.8	47.5
10:05 PM - 10:10 PM	48.3	54.5	47.4
10:10 PM - 10:15 PM	48.5	51.6	47.5
10:15 PM - 10:20 PM	48.3	55.2	47.4
10:20 PM - 10:25 PM	48.5	55.6	47.4
10:25 PM - 10:30 PM	48.9	60.0	47.3
10:30 PM - 10:35 PM	48.9	49.8	47.5
10:35 PM - 10:40 PM	48.3	51.9	47.6
10:40 PM - 10:45 PM	48.7	57.9	48.1
10:45 PM - 10:50 PM	49.7	56.4	49.0
10:50 PM - 10:55 PM	51.4	62.1	50.2
10:55 PM - 11:00 PM	53.1	63.0	51.8
11:00 PM - 11:05 PM	53.2	61.8	51.4
11:05 PM - 11:10 PM	54.8	63.2	52.2
11:10 PM - 11:15 PM	50.7	59.7	49.1
11:15 PM - 11:20 PM	51.3	59.6	49.5
11:20 PM - 11:25 PM	51.9	61.8	50.2
11:25 PM - 11:30 PM	51.8	60.6	50.2
11:30 PM - 11:35 PM	51.7	60.9	50.0
11:35 PM - 11:40 PM	51.8	59.7	50.2
11:40 PM - 11:45 PM	53.7	60.4	51.2
11:45 PM - 11:50 PM	53.0	63.2	51.4
11:50 PM - 11:55 PM	52.8	62.4	51.2
11:55 PM - 12:00 AM	52.7	60.6	51.2
12:00 AM - 12:05 AM	52.4	64.0	50.8
12:05 AM - 12:10 AM	53.7	62.1	50.6
12:10 AM - 12:15 AM	53.1	62.1	50.2
12:15 AM - 12:20 AM	51.2	62.5	49.2
12:20 AM - 12:25 AM	50.3	61.7	48.4

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023559-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-3
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	50.1	64.0	48.1
12:30 AM - 12:35 AM	50.1	59.6	48.2
12:35 AM - 12:40 AM	50.5	59.8	48.4
12:40 AM - 12:45 AM	50.9	61.7	49.1
12:45 AM - 12:50 AM	52.0	62.2	50.2
12:50 AM - 12:55 AM	51.8	60.9	50.1
12:55 AM - 01:00 AM	52.0	63.1	50.2
01:00 AM - 01:05 AM	52.2	62.2	50.6
01:05 AM - 01:10 AM	52.7	64.3	50.9
01:10 AM - 01:15 AM	52.6	63.6	51.1
01:15 AM - 01:20 AM	52.9	65.9	51.3
01:20 AM - 01:25 AM	52.6	64.5	51.0
01:25 AM - 01:30 AM	52.7	61.2	51.2
01:30 AM - 01:35 AM	52.8	63.3	51.2
01:35 AM - 01:40 AM	52.3	60.7	50.7
01:40 AM - 01:45 AM	52.1	62.0	50.6
01:45 AM - 01:50 AM	52.6	61.3	51.0
01:50 AM - 01:55 AM	52.6	61.3	51.1
01:55 AM - 02:00 AM	52.7	60.7	51.2
02:00 AM - 02:05 AM	53.0	62.1	51.4
02:05 AM - 02:10 AM	52.3	60.1	50.7
02:10 AM - 02:15 AM	51.5	59.8	50.0
02:15 AM - 02:20 AM	51.3	61.1	49.5
02:20 AM - 02:25 AM	50.7	61.6	48.8
02:25 AM - 02:30 AM	49.8	62.2	47.8
02:30 AM - 02:35 AM	49.2	61.9	47.2
02:35 AM - 02:40 AM	48.9	61.7	46.9
02:40 AM - 02:45 AM	48.5	62.8	46.5
02:45 AM - 02:50 AM	52.6	63.6	50.8
02:50 AM - 02:55 AM	52.4	66.2	50.4
02:55 AM - 03:00 AM	51.7	66.3	49.8
03:00 AM - 03:05 AM	51.4	63.3	49.5
03:05 AM - 03:10 AM	51.3	67.4	49.5
03:10 AM - 03:15 AM	51.1	64.6	49.2
03:15 AM - 03:20 AM	50.9	66.4	49.0
03:20 AM - 03:25 AM	50.3	63.1	48.6
03:25 AM - 03:30 AM	50.2	63.0	48.5
03:30 AM - 03:35 AM	50.3	69.2	48.3
03:35 AM - 03:40 AM	50.0	61.9	48.3
03:40 AM - 03:45 AM	49.9	66.1	48.3

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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023559-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-3
Parameter Noise
Location N1 : หมู่บ้านบุษราคา (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	50.9	67.1	48.2
03:50 AM - 03:55 AM	49.6	64.6	47.9
03:55 AM - 04:00 AM	49.3	62.2	47.9
04:00 AM - 04:05 AM	49.8	67.9	48.0
04:05 AM - 04:10 AM	49.9	66.6	48.1
04:10 AM - 04:15 AM	49.9	62.3	48.1
04:15 AM - 04:20 AM	50.3	64.3	48.2
04:20 AM - 04:25 AM	52.7	64.4	48.5
04:25 AM - 04:30 AM	51.9	63.4	48.4
04:30 AM - 04:35 AM	50.9	63.7	48.3
04:35 AM - 04:40 AM	51.9	63.9	48.4
04:40 AM - 04:45 AM	50.9	66.4	48.5
04:45 AM - 04:50 AM	50.6	63.7	48.7
04:50 AM - 04:55 AM	51.7	65.0	48.7
04:55 AM - 05:00 AM	52.3	68.3	48.7
05:00 AM - 05:05 AM	56.6	74.4	49.6
05:05 AM - 05:10 AM	52.1	64.3	49.8
05:10 AM - 05:15 AM	52.0	70.5	49.3
05:15 AM - 05:20 AM	51.8	63.4	48.9
05:20 AM - 05:25 AM	52.9	65.8	48.6
05:25 AM - 05:30 AM	52.5	65.1	48.4
05:30 AM - 05:35 AM	52.3	64.7	47.8
05:35 AM - 05:40 AM	51.6	66.4	47.4
05:40 AM - 05:45 AM	50.1	68.5	47.3
05:45 AM - 05:50 AM	49.4	63.3	47.1
05:50 AM - 05:55 AM	50.4	63.3	47.1
05:55 AM - 06:00 AM	50.6	63.5	47.0
06:00 AM - 07:00 AM	51.2	73.2	46.7
07:00 AM - 08:00 AM	52.1	71.7	48.5
08:00 AM - 09:00 AM	53.9	72.6	48.9
09:00 AM - 10:00 AM	52.3	73.8	48.4
10:00 AM - 11:00 AM	55.0	87.2	48.1

Reference Method
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากโรงงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2562

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023560-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-4
Parameter Noise
Location N1 : หมู่บ้านบุษราคา (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:40 AM - 12:00 PM	52.2	71.7	48.3
12:00 PM - 01:00 PM	57.9	84.3	49.4
01:00 PM - 02:00 PM	53.9	79.9	49.0
02:00 PM - 03:00 PM	53.0	72.9	48.5
03:00 PM - 04:00 PM	50.7	76.7	47.3
04:00 PM - 05:00 PM	49.8	79.5	47.0
05:00 PM - 06:00 PM	50.3	70.9	47.4
06:00 PM - 07:00 PM	49.9	70.4	47.9
07:00 PM - 08:00 PM	49.7	64.7	48.8
08:00 PM - 09:00 PM	49.4	67.7	48.5
09:00 PM - 10:00 PM	48.7	57.7	48.0
10:00 PM - 10:05 PM	49.0	53.0	48.2
10:05 PM - 10:10 PM	49.0	51.9	48.2
10:10 PM - 10:15 PM	48.8	51.9	48.2
10:15 PM - 10:20 PM	49.7	53.8	48.5
10:20 PM - 10:25 PM	49.2	53.6	48.2
10:25 PM - 10:30 PM	49.0	56.3	48.0
10:30 PM - 10:35 PM	49.1	56.2	47.8
10:35 PM - 10:40 PM	48.8	55.4	47.8
10:40 PM - 10:45 PM	49.3	55.2	48.2
10:45 PM - 10:50 PM	49.1	55.7	48.1
10:50 PM - 10:55 PM	49.0	52.8	48.2
10:55 PM - 11:00 PM	49.9	58.0	48.4
11:00 PM - 11:05 PM	49.1	54.1	48.2
11:05 PM - 11:10 PM	49.1	55.5	48.0
11:10 PM - 11:15 PM	49.0	52.4	48.0
11:15 PM - 11:20 PM	49.2	54.4	48.1
11:20 PM - 11:25 PM	50.5	57.0	49.2
11:25 PM - 11:30 PM	50.0	53.2	49.0
11:30 PM - 11:35 PM	49.1	57.8	48.5
11:35 PM - 11:40 PM	49.1	51.9	48.6
11:40 PM - 11:45 PM	49.4	53.3	48.7
11:45 PM - 11:50 PM	49.6	58.9	48.6
11:50 PM - 11:55 PM	49.3	52.7	48.7
11:55 PM - 12:00 AM	50.0	61.2	49.2
12:00 AM - 12:05 AM	50.0	66.0	49.1
12:05 AM - 12:10 AM	49.9	58.4	49.1
12:10 AM - 12:15 AM	50.6	61.2	49.6
12:15 AM - 12:20 AM	50.5	61.0	49.7
12:20 AM - 12:25 AM	50.3	57.6	49.4

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Manager

Analysis / Test Report

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168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023559-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-4
Parameter Noise
Location N1 : หมู่บ้านบุษราคา (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	50.5	60.7	49.4
12:30 AM - 12:35 AM	50.5	58.5	49.5
12:35 AM - 12:40 AM	50.0	68.4	48.7
12:40 AM - 12:45 AM	49.2	63.6	48.0
12:45 AM - 12:50 AM	48.7	61.4	47.6
12:50 AM - 12:55 AM	48.1	62.8	47.3
12:55 AM - 01:00 AM	48.1	55.8	47.4
01:00 AM - 01:05 AM	48.1	57.9	47.3
01:05 AM - 01:10 AM	48.2	55.9	47.2
01:10 AM - 01:15 AM	48.0	55.9	47.0
01:15 AM - 01:20 AM	47.6	53.8	47.0
01:20 AM - 01:25 AM	47.7	53.8	47.1
01:25 AM - 01:30 AM	47.5	56.8	47.1
01:30 AM - 01:35 AM	47.5	58.5	47.1
01:35 AM - 01:40 AM	47.6	58.8	47.1
01:40 AM - 01:45 AM	47.7	53.1	47.3
01:45 AM - 01:50 AM	47.8	52.2	47.3
01:50 AM - 01:55 AM	48.0	51.6	47.6
01:55 AM - 02:00 AM	48.0	51.7	47.4
02:00 AM - 02:05 AM	47.7	50.4	47.1
02:05 AM - 02:10 AM	47.4	52.7	46.9
02:10 AM - 02:15 AM	47.6	55.0	47.0
02:15 AM - 02:20 AM	47.3	56.9	46.8
02:20 AM - 02:25 AM	47.8	53.3	47.1
02:25 AM - 02:30 AM	47.8	50.4	47.3
02:30 AM - 02:35 AM	52.0	64.9	47.3
02:35 AM - 02:40 AM	51.2	66.1	47.3
02:40 AM - 02:45 AM	50.0	65.6	47.3
02:45 AM - 02:50 AM	48.7	65.3	47.0
02:50 AM - 02:55 AM	47.6	54.3	46.8
02:55 AM - 03:00 AM	47.2	51.2	46.9
03:00 AM - 03:05 AM	47.3	50.4	46.7
03:05 AM - 03:10 AM	47.6	50.3	46.3
03:10 AM - 03:15 AM	46.9	48.9	46.4
03:15 AM - 03:20 AM	47.3	53.5	46.5
03:20 AM - 03:25 AM	46.8	49.9	46.2
03:25 AM - 03:30 AM	47.1	53.9	46.4
03:30 AM - 03:35 AM	47.3	55.0	46.4
03:35 AM - 03:40 AM	47.5	55.7	46.2
03:40 AM - 03:45 AM	47.2	54.4	46.4

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Analysis / Test Report

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Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023560-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-4
Parameter Noise
Location N1 : หมู่บ้านบุษราคา (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	47.2	50.2	46.3
03:50 AM - 03:55 AM	47.6	53.8	46.5
03:55 AM - 04:00 AM	47.2	49.5	46.4
04:00 AM - 04:05 AM	46.9	49.4	46.1
04:05 AM - 04:10 AM	47.4	52.0	46.2
04:10 AM - 04:15 AM	47.0	50.1	46.2
04:15 AM - 04:20 AM	47.8	55.9	46.3
04:20 AM - 04:25 AM	48.0	54.5	46.6
04:25 AM - 04:30 AM	47.7	55.7	46.6
04:30 AM - 04:35 AM	47.7	49.9	46.7
04:35 AM - 04:40 AM	47.8	51.8	46.8
04:40 AM - 04:45 AM	47.9	52.2	46.9
04:45 AM - 04:50 AM	47.9	50.4	46.9
04:50 AM - 04:55 AM	48.6	62.3	47.0
04:55 AM - 05:00 AM	50.2	64.7	47.2
05:00 AM - 05:05 AM	59.1	64.3	47.9
05:05 AM - 05:10 AM	50.9	63.8	47.4
05:10 AM - 05:15 AM	49.0	59.6	47.8
05:15 AM - 05:20 AM	48.9	51.0	48.1
05:20 AM - 05:25 AM	51.0	63.6	48.5
05:25 AM - 05:30 AM	57.4	85.4	48.9
05:30 AM - 05:35 AM	51.0	68.2	48.2
05:35 AM - 05:40 AM	50.0	61.9	48.4
05:40 AM - 05:45 AM	50.1	61.9	49.0
05:45 AM - 05:50 AM	54.0	70.7	48.9
05:50 AM - 05:55 AM	51.4	61.8	49.0
05:55 AM - 06:00 AM	58.4	57.4	48.5
06:00 AM - 07:00 AM	51.4	72.6	48.3
07:00 AM - 08:00 AM	59.9	74.9	47.5
08:00 AM - 09:00 AM	52.7	76.0	47.8
09:00 AM - 10:00 AM	53.4	79.6	48.2
10:00 AM - 11:00 AM	52.5	71.4	47.9

Reference Method
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากโรงงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2562

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023561-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-5
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaikhana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.6	73.5	48.4
12:00 PM - 01:00 PM	52.9	70.6	48.2
01:00 PM - 02:00 PM	52.9	71.1	48.6
02:00 PM - 03:00 PM	54.3	73.0	48.7
03:00 PM - 04:00 PM	54.5	78.2	50.0
04:00 PM - 05:00 PM	53.4	74.0	48.3
05:00 PM - 06:00 PM	50.5	70.3	47.3
06:00 PM - 07:00 PM	51.2	73.4	47.7
07:00 PM - 08:00 PM	50.3	66.2	48.6
08:00 PM - 09:00 PM	51.0	68.6	48.7
09:00 PM - 10:00 PM	48.8	61.9	47.2
10:00 PM - 10:05 PM	47.9	66.6	46.7
10:05 PM - 10:10 PM	47.4	62.3	46.5
10:10 PM - 10:15 PM	49.1	63.1	46.5
10:15 PM - 10:20 PM	49.8	77.9	46.4
10:20 PM - 10:25 PM	47.1	54.0	46.4
10:25 PM - 10:30 PM	46.9	51.9	46.3
10:30 PM - 10:35 PM	47.5	51.6	46.4
10:35 PM - 10:40 PM	47.6	54.7	46.5
10:40 PM - 10:45 PM	47.1	55.0	46.3
10:45 PM - 10:50 PM	46.9	49.8	46.4
10:50 PM - 10:55 PM	46.8	51.7	46.3
10:55 PM - 11:00 PM	47.5	58.4	46.0
11:00 PM - 11:05 PM	47.6	57.9	46.0
11:05 PM - 11:10 PM	46.5	50.1	45.9
11:10 PM - 11:15 PM	46.4	48.2	46.0
11:15 PM - 11:20 PM	46.4	51.6	46.0
11:20 PM - 11:25 PM	46.5	49.2	46.0
11:25 PM - 11:30 PM	47.2	52.3	46.4
11:30 PM - 11:35 PM	47.5	55.1	46.4
11:35 PM - 11:40 PM	47.5	55.8	46.1
11:40 PM - 11:45 PM	48.3	61.8	46.1
11:45 PM - 11:50 PM	47.3	54.1	46.3
11:50 PM - 11:55 PM	46.6	51.8	45.9
11:55 PM - 12:00 AM	46.5	50.5	45.8
12:00 AM - 12:05 AM	46.7	51.6	45.8
12:05 AM - 12:10 AM	46.2	50.3	45.7
12:10 AM - 12:15 AM	46.4	55.2	45.6
12:15 AM - 12:20 AM	47.4	57.2	46.0
12:20 AM - 12:25 AM	47.2	51.5	46.0

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023561-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-5
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaikhana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	46.9	53.4	45.9
12:30 AM - 12:35 AM	47.1	57.2	45.8
12:35 AM - 12:40 AM	46.6	53.3	45.8
12:40 AM - 12:45 AM	46.4	50.9	45.6
12:45 AM - 12:50 AM	46.2	53.7	45.1
12:50 AM - 12:55 AM	46.2	55.9	45.3
12:55 AM - 01:00 AM	45.8	49.9	45.0
01:00 AM - 01:05 AM	46.0	50.4	45.2
01:05 AM - 01:10 AM	46.5	51.3	45.5
01:10 AM - 01:15 AM	46.4	53.6	45.5
01:15 AM - 01:20 AM	46.4	50.2	45.5
01:20 AM - 01:25 AM	46.1	51.1	45.1
01:25 AM - 01:30 AM	46.0	49.3	45.1
01:30 AM - 01:35 AM	46.0	52.2	45.3
01:35 AM - 01:40 AM	45.8	50.1	45.1
01:40 AM - 01:45 AM	45.9	49.3	45.1
01:45 AM - 01:50 AM	46.6	57.9	45.2
01:50 AM - 01:55 AM	48.7	66.4	45.2
01:55 AM - 02:00 AM	46.0	53.1	45.1
02:00 AM - 02:05 AM	46.3	57.4	44.9
02:05 AM - 02:10 AM	45.6	50.9	44.8
02:10 AM - 02:15 AM	45.4	49.2	44.5
02:15 AM - 02:20 AM	45.6	49.9	45.0
02:20 AM - 02:25 AM	45.5	47.9	45.0
02:25 AM - 02:30 AM	45.5	48.2	45.0
02:30 AM - 02:35 AM	46.1	50.7	45.4
02:35 AM - 02:40 AM	46.1	54.3	45.5
02:40 AM - 02:45 AM	47.7	61.9	45.8
02:45 AM - 02:50 AM	46.0	48.6	45.5
02:50 AM - 02:55 AM	46.6	57.1	45.9
02:55 AM - 03:00 AM	46.2	50.5	45.7
03:00 AM - 03:05 AM	47.6	67.9	45.7
03:05 AM - 03:10 AM	46.4	48.8	45.7
03:10 AM - 03:15 AM	47.2	58.6	45.7
03:15 AM - 03:20 AM	46.4	49.0	45.8
03:20 AM - 03:25 AM	46.6	49.0	45.9
03:25 AM - 03:30 AM	46.8	48.7	46.1
03:30 AM - 03:35 AM	46.9	48.8	45.7
03:35 AM - 03:40 AM	46.4	50.1	45.5
03:40 AM - 03:45 AM	46.5	49.6	45.6

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023561-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-5
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaikhana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	46.4	50.1	45.8
03:50 AM - 03:55 AM	46.3	53.8	45.4
03:55 AM - 04:00 AM	45.8	49.7	45.0
04:00 AM - 04:05 AM	46.3	49.6	45.4
04:05 AM - 04:10 AM	46.6	54.6	45.6
04:10 AM - 04:15 AM	46.6	54.1	45.6
04:15 AM - 04:20 AM	46.7	53.4	45.6
04:20 AM - 04:25 AM	46.7	54.3	45.7
04:25 AM - 04:30 AM	47.3	54.6	45.9
04:30 AM - 04:35 AM	47.0	50.8	45.8
04:35 AM - 04:40 AM	47.7	57.8	46.2
04:40 AM - 04:45 AM	48.4	69.1	45.9
04:45 AM - 04:50 AM	47.2	51.3	45.9
04:50 AM - 04:55 AM	48.0	55.6	46.7
04:55 AM - 05:00 AM	48.6	55.8	47.6
05:00 AM - 05:05 AM	48.7	55.9	47.5
05:05 AM - 05:10 AM	49.3	63.6	47.7
05:10 AM - 05:15 AM	50.3	63.0	48.3
05:15 AM - 05:20 AM	49.6	60.9	47.7
05:20 AM - 05:25 AM	56.4	74.6	48.0
05:25 AM - 05:30 AM	49.8	61.4	47.8
05:30 AM - 05:35 AM	51.4	66.1	48.3
05:35 AM - 05:40 AM	52.5	73.0	48.1
05:40 AM - 05:45 AM	50.2	67.6	48.0
05:45 AM - 05:50 AM	51.5	67.8	47.8
05:50 AM - 05:55 AM	52.4	70.3	47.8
05:55 AM - 06:00 AM	52.1	66.4	48.3
06:00 AM - 07:00 AM	51.0	73.1	47.6
07:00 AM - 08:00 AM	54.3	73.8	46.7
08:00 AM - 09:00 AM	51.4	76.2	47.2
09:00 AM - 10:00 AM	52.8	74.6	47.7
10:00 AM - 11:00 AM	52.6	79.8	47.5

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวนและระดับเสียงสม่ำเสมอตลอดเวลาในเวลา 24 ชั่วโมง และวิธีการคำนวณค่าระดับเสียงสม่ำเสมอตลอดเวลาในเวลา 24 ชั่วโมง พ.ศ. 2557

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Approved by
Wilawan Borkrak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023562-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-6
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaikhana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 AM - 12:00 PM	51.6	78.2	47.1
12:00 PM - 01:00 PM	49.5	73.6	46.8
01:00 PM - 02:00 PM	52.0	78.6	47.3
02:00 PM - 03:00 PM	51.6	74.8	47.7
03:00 PM - 04:00 PM	51.0	66.4	48.5
04:00 PM - 05:00 PM	51.6	75.4	49.0
05:00 PM - 06:00 PM	52.2	73.9	49.1
06:00 PM - 07:00 PM	50.7	74.5	48.2
07:00 PM - 08:00 PM	52.8	63.5	51.2
08:00 PM - 09:00 PM	50.8	66.1	49.1
09:00 PM - 10:00 PM	48.8	71.8	47.4
10:00 PM - 10:05 PM	47.5	51.7	46.5
10:05 PM - 10:10 PM	48.2	56.6	46.9
10:10 PM - 10:15 PM	47.4	50.1	46.8
10:15 PM - 10:20 PM	47.8	51.1	47.1
10:20 PM - 10:25 PM	48.1	63.3	47.0
10:25 PM - 10:30 PM	47.2	50.9	47.0
10:30 PM - 10:35 PM	47.5	52.2	46.7
10:35 PM - 10:40 PM	47.8	53.2	46.9
10:40 PM - 10:45 PM	47.4	49.6	46.7
10:45 PM - 10:50 PM	47.5	51.8	46.8
10:50 PM - 10:55 PM	48.0	55.5	46.9
10:55 PM - 11:00 PM	47.7	56.9	46.7
11:00 PM - 11:05 PM	47.7	52.3	46.9
11:05 PM - 11:10 PM	47.9	50.9	47.1
11:10 PM - 11:15 PM	47.7	54.4	46.8
11:15 PM - 11:20 PM	47.5	51.2	46.5
11:20 PM - 11:25 PM	47.8	53.1	46.7
11:25 PM - 11:30 PM	47.7	51.1	46.9
11:30 PM - 11:35 PM	47.4	49.2	46.7
11:35 PM - 11:40 PM	48.2	49.7	46.5
11:40 PM - 11:45 PM	48.3	52.9	46.9
11:45 PM - 11:50 PM	47.4	50.4	46.6
11:50 PM - 11:55 PM	47.8	52.1	46.8
11:55 PM - 12:00 AM	47.8	53.3	46.8
12:00 AM - 12:05 AM	47.6	51.3	46.8
12:05 AM - 12:10 AM	47.3	52.3	46.7
12:10 AM - 12:15 AM	47.9	52.2	47.2
12:15 AM - 12:20 AM	48.3	50.6	47.8
12:20 AM - 12:25 AM	47.8	58.2	47.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023562-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-6
Parameter Noise
Location N1 : หน้าโรงงาน (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	48.1	49.6	47.6
12:30 AM - 12:35 AM	47.7	52.6	47.1
12:35 AM - 12:40 AM	48.4	60.3	46.7
12:40 AM - 12:45 AM	47.6	51.4	47.1
12:45 AM - 12:50 AM	47.5	52.4	46.8
12:50 AM - 12:55 AM	47.6	51.9	46.8
12:55 AM - 01:00 AM	47.7	52.5	46.9
01:00 AM - 01:05 AM	47.8	50.4	46.9
01:05 AM - 01:10 AM	48.2	55.9	47.1
01:10 AM - 01:15 AM	47.9	55.3	46.8
01:15 AM - 01:20 AM	47.8	53.5	47.1
01:20 AM - 01:25 AM	48.1	58.9	47.4
01:25 AM - 01:30 AM	47.9	50.5	47.2
01:30 AM - 01:35 AM	47.6	49.8	46.9
01:35 AM - 01:40 AM	47.7	51.5	46.9
01:40 AM - 01:45 AM	47.8	52.0	46.9
01:45 AM - 01:50 AM	46.6	49.3	45.9
01:50 AM - 01:55 AM	47.4	56.3	46.4
01:55 AM - 02:00 AM	47.1	54.4	46.5
02:00 AM - 02:05 AM	47.0	51.6	46.4
02:05 AM - 02:10 AM	47.7	51.6	47.1
02:10 AM - 02:15 AM	47.5	50.5	47.0
02:15 AM - 02:20 AM	47.8	51.5	47.2
02:20 AM - 02:25 AM	47.5	49.3	47.0
02:25 AM - 02:30 AM	47.8	51.2	47.2
02:30 AM - 02:35 AM	47.4	51.9	46.9
02:35 AM - 02:40 AM	46.9	50.5	46.3
02:40 AM - 02:45 AM	47.0	51.5	46.4
02:45 AM - 02:50 AM	46.9	52.6	46.2
02:50 AM - 02:55 AM	47.0	49.3	46.4
02:55 AM - 03:00 AM	47.2	49.2	46.6
03:00 AM - 03:05 AM	47.4	53.4	46.5
03:05 AM - 03:10 AM	47.3	56.8	46.3
03:10 AM - 03:15 AM	46.9	49.8	46.2
03:15 AM - 03:20 AM	47.4	49.3	46.7
03:20 AM - 03:25 AM	47.2	49.2	46.5
03:25 AM - 03:30 AM	47.0	48.5	46.5
03:30 AM - 03:35 AM	47.1	49.1	46.5
03:35 AM - 03:40 AM	47.7	50.4	47.1
03:40 AM - 03:45 AM	47.8	49.2	47.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023562-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-6
Parameter Noise
Location N1 : หน้าโรงงาน (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	47.7	50.9	47.3
03:50 AM - 03:55 AM	47.9	54.0	47.4
03:55 AM - 04:00 AM	48.3	53.4	47.6
04:00 AM - 04:05 AM	48.5	54.0	47.9
04:05 AM - 04:10 AM	48.5	50.7	47.9
04:10 AM - 04:15 AM	47.8	51.5	47.2
04:15 AM - 04:20 AM	48.6	61.1	47.1
04:20 AM - 04:25 AM	47.7	58.2	46.9
04:25 AM - 04:30 AM	48.4	50.2	47.8
04:30 AM - 04:35 AM	48.7	52.7	48.2
04:35 AM - 04:40 AM	48.8	54.1	47.9
04:40 AM - 04:45 AM	48.8	59.8	47.7
04:45 AM - 04:50 AM	48.4	54.3	47.7
04:50 AM - 04:55 AM	48.1	50.6	47.4
04:55 AM - 05:00 AM	48.1	57.2	47.5
05:00 AM - 05:05 AM	48.1	51.5	47.5
05:05 AM - 05:10 AM	48.5	52.6	47.8
05:10 AM - 05:15 AM	48.6	54.2	47.9
05:15 AM - 05:20 AM	48.6	54.2	48.0
05:20 AM - 05:25 AM	51.0	67.9	49.2
05:25 AM - 05:30 AM	48.9	57.2	47.7
05:30 AM - 05:35 AM	55.2	72.9	48.1
05:35 AM - 05:40 AM	54.7	71.8	47.9
05:40 AM - 05:45 AM	52.9	70.1	48.3
05:45 AM - 05:50 AM	55.8	72.1	48.6
05:50 AM - 05:55 AM	54.1	76.5	48.5
05:55 AM - 06:00 AM	50.2	72.6	48.0
06:00 AM - 07:00 AM	52.0	73.1	48.2
07:00 AM - 08:00 AM	57.8	70.1	51.8
08:00 AM - 09:00 AM	51.8	76.7	47.6
09:00 AM - 10:00 AM	52.4	78.2	48.3
10:00 AM - 11:00 AM	53.2	80.4	48.1

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดเพื่อวัตถุประสงค์ในการประเมินผลกระทบด้านเสียง พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023563-1

P/O : RJN-BW009/66
Project Name Chonburi Bowin
Project Location

Sample No. 2450169-7
Parameter Noise
Location N1 : หน้าโรงงาน (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	52.2	78.8	47.2
12:00 PM - 01:00 PM	50.1	74.2	47.4
01:00 PM - 02:00 PM	52.6	79.2	47.9
02:00 PM - 03:00 PM	52.2	75.4	48.3
03:00 PM - 04:00 PM	51.6	67.0	49.1
04:00 PM - 05:00 PM	52.2	78.0	49.6
05:00 PM - 06:00 PM	52.8	74.5	49.7
06:00 PM - 07:00 PM	51.3	75.1	48.8
07:00 PM - 08:00 PM	53.4	64.1	51.8
08:00 PM - 09:00 PM	51.4	66.7	49.7
09:00 PM - 10:00 PM	49.9	72.4	48.0
10:00 PM - 10:05 PM	48.1	52.3	47.1
10:05 PM - 10:10 PM	48.8	57.2	47.5
10:10 PM - 10:15 PM	49.0	59.7	47.4
10:15 PM - 10:20 PM	48.4	51.7	47.7
10:20 PM - 10:25 PM	48.7	55.9	47.6
10:25 PM - 10:30 PM	48.3	51.5	47.6
10:30 PM - 10:35 PM	48.2	52.8	47.3
10:35 PM - 10:40 PM	48.4	53.8	47.5
10:40 PM - 10:45 PM	48.0	50.7	47.3
10:45 PM - 10:50 PM	48.1	52.4	47.4
10:50 PM - 10:55 PM	48.6	54.1	47.5
10:55 PM - 11:00 PM	48.3	57.5	47.5
11:00 PM - 11:05 PM	48.3	52.9	47.5
11:05 PM - 11:10 PM	48.5	51.5	47.7
11:10 PM - 11:15 PM	48.3	55.0	47.4
11:15 PM - 11:20 PM	48.1	53.8	47.3
11:20 PM - 11:25 PM	48.4	53.7	47.3
11:25 PM - 11:30 PM	48.3	51.7	47.5
11:30 PM - 11:35 PM	48.0	49.8	47.3
11:35 PM - 11:40 PM	47.8	50.1	47.1
11:40 PM - 11:45 PM	48.3	52.6	47.5
11:45 PM - 11:50 PM	48.0	51.8	47.2
11:50 PM - 11:55 PM	48.4	51.7	47.2
11:55 PM - 12:00 AM	48.2	53.9	47.4
12:00 AM - 12:05 AM	48.2	51.6	47.4
12:05 AM - 12:10 AM	47.9	52.7	47.1
12:10 AM - 12:15 AM	48.5	57.0	47.6
12:15 AM - 12:20 AM	48.9	51.7	48.4
12:20 AM - 12:25 AM	48.4	58.8	47.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023563-1

P/O : RJN-BW009/66
Project Name Chonburi Bowin
Project Location

Sample No. 2450169-7
Parameter Noise
Location N1 : หน้าโรงงาน (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	48.7	50.2	48.2
12:30 AM - 12:35 AM	48.3	53.2	47.7
12:35 AM - 12:40 AM	49.0	60.9	47.3
12:40 AM - 12:45 AM	48.2	52.0	47.7
12:45 AM - 12:50 AM	48.1	53.0	47.4
12:50 AM - 12:55 AM	48.2	52.5	47.4
12:55 AM - 01:00 AM	48.3	53.1	47.5
01:00 AM - 01:05 AM	48.4	51.0	47.5
01:05 AM - 01:10 AM	48.6	56.5	47.7
01:10 AM - 01:15 AM	48.5	55.9	47.4
01:15 AM - 01:20 AM	48.4	54.1	47.7
01:20 AM - 01:25 AM	48.7	59.5	48.0
01:25 AM - 01:30 AM	48.5	51.1	47.8
01:30 AM - 01:35 AM	48.2	50.4	47.5
01:35 AM - 01:40 AM	48.3	52.3	47.5
01:40 AM - 01:45 AM	48.4	52.6	47.5
01:45 AM - 01:50 AM	47.2	49.9	46.5
01:50 AM - 01:55 AM	48.0	56.9	47.0
01:55 AM - 02:00 AM	47.7	53.0	47.1
02:00 AM - 02:05 AM	47.6	52.7	47.0
02:05 AM - 02:10 AM	48.3	52.2	47.7
02:10 AM - 02:15 AM	48.1	51.1	47.6
02:15 AM - 02:20 AM	48.4	52.1	47.8
02:20 AM - 02:25 AM	48.1	50.9	47.6
02:25 AM - 02:30 AM	48.4	51.8	47.8
02:30 AM - 02:35 AM	48.8	52.5	47.5
02:35 AM - 02:40 AM	47.5	51.1	46.9
02:40 AM - 02:45 AM	47.6	52.1	47.0
02:45 AM - 02:50 AM	47.5	53.2	46.8
02:50 AM - 02:55 AM	47.6	49.9	47.0
02:55 AM - 03:00 AM	47.8	49.8	47.2
03:00 AM - 03:05 AM	48.0	54.0	47.1
03:05 AM - 03:10 AM	47.9	57.4	46.9
03:10 AM - 03:15 AM	47.5	50.4	46.8
03:15 AM - 03:20 AM	48.0	49.9	47.1
03:20 AM - 03:25 AM	47.8	49.8	47.1
03:25 AM - 03:30 AM	47.6	49.1	47.1
03:30 AM - 03:35 AM	47.7	49.7	47.1
03:35 AM - 03:40 AM	48.3	51.0	47.7
03:40 AM - 03:45 AM	48.4	49.8	47.9

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
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Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023563-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-7
Parameter Noise
Location N1 : หน้าหมู่บ้าน (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	48.3	55.5	47.9
03:50 AM - 03:55 AM	48.5	54.6	48.0
03:55 AM - 04:00 AM	48.9	54.0	48.2
04:00 AM - 04:05 AM	49.1	54.6	48.5
04:05 AM - 04:10 AM	49.1	53.3	48.5
04:10 AM - 04:15 AM	48.4	52.1	47.8
04:15 AM - 04:20 AM	48.6	61.7	47.7
04:20 AM - 04:25 AM	48.3	58.8	47.5
04:25 AM - 04:30 AM	49.0	50.8	48.4
04:30 AM - 04:35 AM	49.3	53.3	48.8
04:35 AM - 04:40 AM	49.4	54.7	48.5
04:40 AM - 04:45 AM	49.4	56.4	48.3
04:45 AM - 04:50 AM	49.0	54.9	48.3
04:50 AM - 04:55 AM	48.7	51.2	48.0
04:55 AM - 05:00 AM	48.7	57.8	48.1
05:00 AM - 05:05 AM	48.7	52.1	48.1
05:05 AM - 05:10 AM	49.1	53.2	48.4
05:10 AM - 05:15 AM	49.2	54.8	48.5
05:15 AM - 05:20 AM	49.2	54.8	48.6
05:20 AM - 05:25 AM	51.6	68.5	48.8
05:25 AM - 05:30 AM	49.5	57.8	48.3
05:30 AM - 05:35 AM	51.8	73.5	48.7
05:35 AM - 05:40 AM	51.3	72.4	48.5
05:40 AM - 05:45 AM	53.5	70.7	48.9
05:45 AM - 05:50 AM	56.4	77.7	49.2
05:50 AM - 05:55 AM	54.2	77.1	49.1
05:55 AM - 06:00 AM	50.8	73.2	48.6
06:00 AM - 07:00 AM	52.6	73.7	48.8
07:00 AM - 08:00 AM	54.4	70.7	52.4
08:00 AM - 09:00 AM	52.4	77.3	48.2
09:00 AM - 10:00 AM	54.0	80.2	48.8
10:00 AM - 11:00 AM	53.1	72.0	48.5

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2567

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023564-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-8
Parameter Noise
Location N2 : สถียนรุ่งอัสดานม (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	56.3	76.8	46.0
01:00 PM - 02:00 PM	56.8	81.4	42.7
02:00 PM - 03:00 PM	53.1	89.5	42.8
03:00 PM - 04:00 PM	57.4	78.7	38.6
04:00 PM - 05:00 PM	54.5	72.7	43.2
05:00 PM - 06:00 PM	53.6	76.3	44.4
06:00 PM - 07:00 PM	60.1	82.5	46.4
07:00 PM - 08:00 PM	59.2	83.0	53.3
08:00 PM - 09:00 PM	53.9	86.1	39.5
09:00 PM - 10:00 PM	57.9	73.9	37.7
10:00 PM - 10:05 PM	56.7	78.9	36.4
10:05 PM - 10:10 PM	52.1	71.0	37.5
10:10 PM - 10:15 PM	41.7	57.3	37.2
10:15 PM - 10:20 PM	45.7	59.4	36.7
10:20 PM - 10:25 PM	49.6	71.4	37.2
10:25 PM - 10:30 PM	41.3	59.6	36.5
10:30 PM - 10:35 PM	41.9	59.3	37.5
10:35 PM - 10:40 PM	45.1	58.8	38.5
10:40 PM - 10:45 PM	45.1	59.2	38.6
10:45 PM - 10:50 PM	49.6	64.6	38.7
10:50 PM - 10:55 PM	48.2	66.4	39.7
10:55 PM - 11:00 PM	47.8	64.6	39.3
11:00 PM - 11:05 PM	56.7	74.9	42.7
11:05 PM - 11:10 PM	48.6	60.1	44.7
11:10 PM - 11:15 PM	54.8	73.3	44.6
11:15 PM - 11:20 PM	45.5	58.2	42.9
11:20 PM - 11:25 PM	48.4	60.1	44.6
11:25 PM - 11:30 PM	48.3	58.2	43.5
11:30 PM - 11:35 PM	48.9	61.3	46.1
11:35 PM - 11:40 PM	52.4	62.3	48.7
11:40 PM - 11:45 PM	51.4	60.5	47.6
11:45 PM - 11:50 PM	47.8	57.7	43.9
11:50 PM - 11:55 PM	52.2	71.2	42.6
11:55 PM - 12:00 AM	44.7	56.5	41.5
12:00 AM - 12:05 AM	48.9	64.6	44.0
12:05 AM - 12:10 AM	51.8	60.4	48.5
12:10 AM - 12:15 AM	53.7	65.9	50.7
12:15 AM - 12:20 AM	54.4	69.3	50.1
12:20 AM - 12:25 AM	54.3	58.1	52.2
12:25 AM - 12:30 AM	52.8	55.1	49.0

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023564-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-8
Parameter Noise
Location N2 : สถียนรุ่งอัสดานม (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	50.3	63.1	47.1
12:35 AM - 12:40 AM	49.5	62.7	44.5
12:40 AM - 12:45 AM	50.7	62.4	43.3
12:45 AM - 12:50 AM	49.6	64.8	42.9
12:50 AM - 12:55 AM	46.8	55.7	42.8
12:55 AM - 01:00 AM	45.1	57.0	40.6
01:00 AM - 01:05 AM	45.8	58.4	40.3
01:05 AM - 01:10 AM	41.9	57.7	39.9
01:10 AM - 01:15 AM	41.3	57.2	39.0
01:15 AM - 01:20 AM	42.5	55.8	37.8
01:20 AM - 01:25 AM	41.1	54.9	34.8
01:25 AM - 01:30 AM	38.1	53.3	34.1
01:30 AM - 01:35 AM	39.6	64.1	34.4
01:35 AM - 01:40 AM	39.5	52.9	35.0
01:40 AM - 01:45 AM	39.2	52.9	35.4
01:45 AM - 01:50 AM	39.1	53.4	34.6
01:50 AM - 01:55 AM	42.4	60.8	34.8
01:55 AM - 02:00 AM	40.3	52.9	37.5
02:00 AM - 02:05 AM	42.0	57.7	36.8
02:05 AM - 02:10 AM	42.2	59.7	36.6
02:10 AM - 02:15 AM	40.4	56.4	35.6
02:15 AM - 02:20 AM	42.2	60.8	35.9
02:20 AM - 02:25 AM	38.6	57.5	33.2
02:25 AM - 02:30 AM	37.4	47.1	34.8
02:30 AM - 02:35 AM	39.2	80.6	37.8
02:35 AM - 02:40 AM	41.1	56.5	35.3
02:40 AM - 02:45 AM	41.0	58.5	34.9
02:45 AM - 02:50 AM	40.7	57.2	34.2
02:50 AM - 02:55 AM	37.4	52.6	34.6
02:55 AM - 03:00 AM	41.2	57.3	35.1
03:00 AM - 03:05 AM	37.7	51.9	34.8
03:05 AM - 03:10 AM	38.2	54.4	34.8
03:10 AM - 03:15 AM	39.4	55.3	34.9
03:15 AM - 03:20 AM	47.8	64.3	35.3
03:20 AM - 03:25 AM	41.3	59.5	35.0
03:25 AM - 03:30 AM	40.8	59.5	34.8
03:30 AM - 03:35 AM	43.0	66.2	35.2
03:35 AM - 03:40 AM	37.2	52.3	34.4
03:40 AM - 03:45 AM	38.4	52.7	34.5
03:45 AM - 03:50 AM	37.3	47.4	34.5

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023564-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-8
Parameter Noise
Location N2 : สถียนรุ่งอัสดานม (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	39.8	57.8	34.1
03:55 AM - 04:00 AM	38.9	53.9	33.1
04:00 AM - 04:05 AM	38.5	55.4	34.5
04:05 AM - 04:10 AM	38.0	53.1	33.7
04:10 AM - 04:15 AM	42.8	60.4	34.7
04:15 AM - 04:20 AM	40.2	70.1	34.1
04:20 AM - 04:25 AM	40.7	57.6	34.5
04:25 AM - 04:30 AM	46.3	63.9	34.5
04:30 AM - 04:35 AM	38.4	54.6	33.9
04:35 AM - 04:40 AM	48.5	67.2	33.6
04:40 AM - 04:45 AM	63.1	76.7	36.9
04:45 AM - 04:50 AM	43.2	61.5	36.8
04:50 AM - 04:55 AM	49.2	64.2	37.3
04:55 AM - 05:00 AM	48.8	71.2	37.2
05:00 AM - 05:05 AM	40.8	59.9	36.1
05:05 AM - 05:10 AM	41.8	56.2	36.4
05:10 AM - 05:15 AM	43.8	66.8	35.9
05:15 AM - 05:20 AM	63.0	90.3	35.3
05:20 AM - 05:25 AM	43.4	60.2	35.5
05:25 AM - 05:30 AM	52.3	68.4	37.0
05:30 AM - 05:35 AM	46.8	61.7	36.5
05:35 AM - 05:40 AM	52.6	70.6	38.2
05:40 AM - 05:45 AM	51.0	66.6	38.5
05:45 AM - 05:50 AM	48.6	61.3	38.1
05:50 AM - 05:55 AM	52.7	69.8	39.4
05:55 AM - 06:00 AM	53.4	66.7	39.6
06:00 AM - 07:00 AM	55.1	71.3	41.9
07:00 AM - 08:00 AM	54.7	78.1	41.0
08:00 AM - 09:00 AM	52.4	71.4	40.2
09:00 AM - 10:00 AM	57.2	83.6	44.0
10:00 AM - 11:00 AM	59.0	78.6	47.3
11:00 AM - 12:00 PM	61.9	86.9	49.4

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงจากการประกอบกิจการโรงงาน พ.ศ. 2567

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received Jun 12, 2024
Date Reported Jun 17, 2024
Report No. : 3023565-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-9
Parameter Noise
Location N2 : มหัศจรรย์สัตหีบ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	55.7	75.2	44.4
01:00 PM - 02:00 PM	51.3	76.6	38.1
02:00 PM - 03:00 PM	52.0	72.0	38.1
03:00 PM - 04:00 PM	55.8	77.2	39.4
04:00 PM - 05:00 PM	54.8	78.7	39.6
05:00 PM - 06:00 PM	54.1	80.1	41.9
06:00 PM - 07:00 PM	57.0	82.2	45.0
07:00 PM - 08:00 PM	54.7	75.5	43.6
08:00 PM - 09:00 PM	53.8	76.1	40.2
09:00 PM - 10:00 PM	48.6	69.7	38.6
10:00 PM - 10:05 PM	43.6	55.9	37.5
10:05 PM - 10:10 PM	50.0	68.1	37.5
10:10 PM - 10:15 PM	51.5	70.3	38.8
10:15 PM - 10:20 PM	46.7	62.2	37.9
10:20 PM - 10:25 PM	43.1	54.1	37.2
10:25 PM - 10:30 PM	44.3	56.7	37.1
10:30 PM - 10:35 PM	45.4	59.4	38.6
10:35 PM - 10:40 PM	46.1	62.7	37.9
10:40 PM - 10:45 PM	48.4	64.2	37.6
10:45 PM - 10:50 PM	54.6	71.7	37.5
10:50 PM - 10:55 PM	46.1	60.5	37.5
10:55 PM - 11:00 PM	49.1	63.4	36.8
11:00 PM - 11:05 PM	55.4	73.5	36.1
11:05 PM - 11:10 PM	41.2	52.6	37.0
11:10 PM - 11:15 PM	41.4	56.2	36.5
11:15 PM - 11:20 PM	43.6	56.6	37.8
11:20 PM - 11:25 PM	42.9	53.9	38.1
11:25 PM - 11:30 PM	42.3	53.7	38.4
11:30 PM - 11:35 PM	41.8	54.6	37.2
11:35 PM - 11:40 PM	41.5	53.1	37.3
11:40 PM - 11:45 PM	51.3	69.1	37.6
11:45 PM - 11:50 PM	43.8	57.7	37.7
11:50 PM - 11:55 PM	46.7	62.4	37.9
11:55 PM - 12:00 AM	45.6	60.9	37.2
12:00 AM - 12:05 AM	47.0	61.3	36.9
12:05 AM - 12:10 AM	41.6	58.2	35.3
12:10 AM - 12:15 AM	42.7	57.5	35.5
12:15 AM - 12:20 AM	43.1	60.0	35.9
12:20 AM - 12:25 AM	42.9	58.1	36.8
12:25 AM - 12:30 AM	48.2	63.7	35.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received Jun 12, 2024
Date Reported Jun 17, 2024
Report No. : 3023565-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-9
Parameter Noise
Location N2 : มหัศจรรย์สัตหีบ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	43.0	58.5	35.9
12:35 AM - 12:40 AM	48.1	64.1	36.7
12:40 AM - 12:45 AM	43.4	57.8	35.7
12:45 AM - 12:50 AM	41.9	54.8	34.6
12:50 AM - 12:55 AM	46.1	61.3	34.8
12:55 AM - 01:00 AM	40.6	54.1	34.9
01:00 AM - 01:05 AM	45.8	63.8	35.4
01:05 AM - 01:10 AM	39.3	54.1	35.1
01:10 AM - 01:15 AM	38.1	48.4	35.3
01:15 AM - 01:20 AM	55.4	75.0	34.9
01:20 AM - 01:25 AM	41.2	59.0	34.2
01:25 AM - 01:30 AM	42.3	59.5	35.3
01:30 AM - 01:35 AM	44.5	64.2	34.5
01:35 AM - 01:40 AM	46.1	68.6	34.0
01:40 AM - 01:45 AM	40.1	55.1	34.6
01:45 AM - 01:50 AM	39.8	45.5	33.9
01:50 AM - 01:55 AM	41.9	57.0	34.3
01:55 AM - 02:00 AM	42.8	60.4	33.9
02:00 AM - 02:05 AM	39.8	55.2	33.7
02:05 AM - 02:10 AM	37.9	51.1	33.7
02:10 AM - 02:15 AM	38.1	53.1	33.5
02:15 AM - 02:20 AM	43.5	58.7	33.9
02:20 AM - 02:25 AM	36.5	45.6	33.8
02:25 AM - 02:30 AM	46.1	66.3	33.7
02:30 AM - 02:35 AM	38.3	48.3	34.6
02:35 AM - 02:40 AM	45.0	76.2	33.7
02:40 AM - 02:45 AM	37.0	50.5	33.7
02:45 AM - 02:50 AM	35.9	48.4	33.8
02:50 AM - 02:55 AM	38.6	55.2	33.2
02:55 AM - 03:00 AM	40.7	56.4	33.7
03:00 AM - 03:05 AM	37.1	51.9	33.7
03:05 AM - 03:10 AM	41.2	57.4	33.9
03:10 AM - 03:15 AM	40.9	59.2	33.9
03:15 AM - 03:20 AM	43.7	63.2	33.6
03:20 AM - 03:25 AM	36.7	46.5	34.2
03:25 AM - 03:30 AM	36.3	49.7	33.6
03:30 AM - 03:35 AM	37.6	54.1	33.7
03:35 AM - 03:40 AM	36.2	54.2	33.0
03:40 AM - 03:45 AM	48.2	67.4	34.5
03:45 AM - 03:50 AM	37.0	48.0	34.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received Jun 12, 2024
Date Reported Jun 17, 2024
Report No. : 3023565-1

P/O : RJN-BW009/66
Project Name Chonburi Bowin
Project Location :

Sample No. 2450169-9
Parameter Noise
Location N2 : มหัศจรรย์สัตหีบ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	37.7	49.4	34.9
03:55 AM - 04:00 AM	40.9	59.7	33.2
04:00 AM - 04:05 AM	39.2	56.7	32.9
04:05 AM - 04:10 AM	34.9	46.9	31.5
04:10 AM - 04:15 AM	34.7	46.8	32.1
04:15 AM - 04:20 AM	36.9	44.7	32.4
04:20 AM - 04:25 AM	41.2	55.8	32.2
04:25 AM - 04:30 AM	48.8	65.6	37.9
04:30 AM - 04:35 AM	62.6	74.8	38.3
04:35 AM - 04:40 AM	42.4	54.9	35.8
04:40 AM - 04:45 AM	38.5	51.0	34.7
04:45 AM - 04:50 AM	39.0	47.6	35.7
04:50 AM - 04:55 AM	40.4	54.9	34.9
04:55 AM - 05:00 AM	42.7	66.5	34.9
05:00 AM - 05:05 AM	40.1	54.0	35.4
05:05 AM - 05:10 AM	43.5	60.6	35.2
05:10 AM - 05:15 AM	52.7	80.6	34.6
05:15 AM - 05:20 AM	43.6	61.2	33.9
05:20 AM - 05:25 AM	41.7	57.0	33.6
05:25 AM - 05:30 AM	42.9	56.8	34.5
05:30 AM - 05:35 AM	48.7	63.2	35.0
05:35 AM - 05:40 AM	48.3	60.7	35.8
05:40 AM - 05:45 AM	55.8	73.4	40.7
05:45 AM - 05:50 AM	55.5	66.1	39.5
05:50 AM - 05:55 AM	51.1	63.3	40.0
05:55 AM - 06:00 AM	53.6	70.8	37.7
06:00 AM - 07:00 AM	55.0	82.3	41.2
07:00 AM - 08:00 AM	61.2	82.6	41.7
08:00 AM - 09:00 AM	57.2	81.3	42.6
09:00 AM - 10:00 AM	54.5	74.4	41.0
10:00 AM - 11:00 AM	55.0	72.8	43.3
11:00 AM - 12:00 PM	54.9	72.7	41.8

Reference Method :
1 ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากแหล่งกำเนิดเสียงที่ 21 ที่ก่อให้เกิดเสียงดังเป็นเหตุรำคาญ ลงวันที่ 15 กันยายน พ.ศ. 2557

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Approved by
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received Jun 12, 2024
Date Reported Jun 17, 2024
Report No. : 3023566-1

P/O : RJN-BW009/66
Project Name Chonburi Bowin
Project Location :

Sample No. 2450169-10
Parameter Noise
Location N2 : มหัศจรรย์สัตหีบ (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	57.0	77.7	47.4
01:00 PM - 02:00 PM	54.4	77.0	42.7
02:00 PM - 03:00 PM	53.8	75.9	39.6
03:00 PM - 04:00 PM	53.4	77.6	41.6
04:00 PM - 05:00 PM	59.1	87.5	47.9
05:00 PM - 06:00 PM	63.2	90.6	45.2
06:00 PM - 07:00 PM	57.3	83.2	48.0
07:00 PM - 08:00 PM	56.1	77.0	48.1
08:00 PM - 09:00 PM	57.8	78.0	47.7
09:00 PM - 10:00 PM	58.6	75.4	37.5
10:00 PM - 10:05 PM	44.7	56.4	38.3
10:05 PM - 10:10 PM	48.6	64.2	38.8
10:10 PM - 10:15 PM	45.0	56.1	38.5
10:15 PM - 10:20 PM	45.4	57.8	38.2
10:20 PM - 10:25 PM	48.8	72.0	35.9
10:25 PM - 10:30 PM	46.6	62.7	38.9
10:30 PM - 10:35 PM	44.0	54.9	39.0
10:35 PM - 10:40 PM	54.7	71.0	38.8
10:40 PM - 10:45 PM	49.4	68.8	35.9
10:45 PM - 10:50 PM	43.5	62.2	34.9
10:50 PM - 10:55 PM	49.9	70.7	35.7
10:55 PM - 11:00 PM	57.4	80.0	36.7
11:00 PM - 11:05 PM	45.9	61.7	36.9
11:05 PM - 11:10 PM	42.7	59.7	35.9
11:10 PM - 11:15 PM	53.7	75.4	36.8
11:15 PM - 11:20 PM	41.5	52.0	36.4
11:20 PM - 11:25 PM	49.2	69.0	36.2
11:25 PM - 11:30 PM	42.5	59.1	35.6
11:30 PM - 11:35 PM	51.3	72.2	36.4
11:35 PM - 11:40 PM	48.1	64.4	35.7
11:40 PM - 11:45 PM	44.2	59.6	35.2
11:45 PM - 11:50 PM	46.9	62.4	35.5
11:50 PM - 11:55 PM	43.2	59.4	35.8
11:55 PM - 12:00 AM	48.9	58.3	38.5
12:00 AM - 12:05 AM	41.5	54.7	35.3
12:05 AM - 12:10 AM	43.7	55.0	36.4
12:10 AM - 12:15 AM	42.1	54.6	36.1
12:15 AM - 12:20 AM	52.6	71.1	35.7
12:20 AM - 12:25 AM	40.7	55.0	35.4
12:25 AM - 12:30 AM	47.8	57.9	36.8

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023566-1

Sample No. 2450169-10
Parameter Noise
Location N2 : สถิตยุวัฒนา (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	41.0	56.3	33.5
12:35 AM - 12:40 AM	39.3	44.5	36.8
12:40 AM - 12:45 AM	43.5	57.0	34.7
12:45 AM - 12:50 AM	39.8	57.0	33.8
12:50 AM - 12:55 AM	43.4	63.1	34.2
12:55 AM - 01:00 AM	42.9	58.6	34.3
01:00 AM - 01:05 AM	39.2	54.9	33.8
01:05 AM - 01:10 AM	37.0	42.9	34.3
01:10 AM - 01:15 AM	38.7	52.8	34.7
01:15 AM - 01:20 AM	37.3	51.6	34.4
01:20 AM - 01:25 AM	40.0	56.4	34.2
01:25 AM - 01:30 AM	55.1	74.1	33.7
01:30 AM - 01:35 AM	40.9	56.4	33.3
01:35 AM - 01:40 AM	39.6	55.6	33.5
01:40 AM - 01:45 AM	46.4	65.1	33.2
01:45 AM - 01:50 AM	37.4	54.0	32.7
01:50 AM - 01:55 AM	35.5	47.9	32.3
01:55 AM - 02:00 AM	35.7	46.3	33.3
02:00 AM - 02:05 AM	36.2	45.3	33.3
02:05 AM - 02:10 AM	37.6	54.8	33.0
02:10 AM - 02:15 AM	36.4	55.0	32.2
02:15 AM - 02:20 AM	37.5	47.6	33.8
02:20 AM - 02:25 AM	37.3	46.7	32.9
02:25 AM - 02:30 AM	41.9	65.4	34.6
02:30 AM - 02:35 AM	36.9	43.4	34.0
02:35 AM - 02:40 AM	60.5	84.6	35.0
02:40 AM - 02:45 AM	39.3	58.3	34.5
02:45 AM - 02:50 AM	38.1	52.0	33.9
02:50 AM - 02:55 AM	40.6	58.8	33.9
02:55 AM - 03:00 AM	40.8	55.0	33.9
03:00 AM - 03:05 AM	36.3	48.2	33.5
03:05 AM - 03:10 AM	35.9	42.2	33.6
03:10 AM - 03:15 AM	38.2	50.5	34.8
03:15 AM - 03:20 AM	39.8	59.9	34.8
03:20 AM - 03:25 AM	38.8	47.7	34.2
03:25 AM - 03:30 AM	37.9	50.6	33.8
03:30 AM - 03:35 AM	42.4	60.4	34.3
03:35 AM - 03:40 AM	38.9	53.8	34.4
03:40 AM - 03:45 AM	36.2	43.1	33.9
03:45 AM - 03:50 AM	39.1	56.7	33.5

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023566-1

Sample No. 2450169-10
Parameter Noise
Location N2 : สถิตยุวัฒนา (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	39.2	56.9	33.7
03:55 AM - 04:00 AM	36.0	41.7	34.0
04:00 AM - 04:05 AM	47.8	65.7	34.3
04:05 AM - 04:10 AM	43.8	63.7	33.6
04:10 AM - 04:15 AM	48.7	72.8	36.1
04:15 AM - 04:20 AM	50.3	69.3	45.6
04:20 AM - 04:25 AM	51.3	74.3	49.2
04:25 AM - 04:30 AM	57.5	72.7	41.6
04:30 AM - 04:35 AM	49.6	61.3	42.3
04:35 AM - 04:40 AM	50.4	74.0	41.4
04:40 AM - 04:45 AM	43.5	58.0	40.9
04:45 AM - 04:50 AM	43.8	51.5	40.4
04:50 AM - 04:55 AM	43.4	55.4	40.0
04:55 AM - 05:00 AM	45.2	59.6	40.3
05:00 AM - 05:05 AM	47.2	58.4	41.5
05:05 AM - 05:10 AM	45.8	52.7	40.8
05:10 AM - 05:15 AM	49.5	71.3	41.3
05:15 AM - 05:20 AM	46.2	52.4	40.8
05:20 AM - 05:25 AM	49.8	62.1	41.8
05:25 AM - 05:30 AM	58.2	78.7	42.2
05:30 AM - 05:35 AM	49.1	65.6	41.4
05:35 AM - 05:40 AM	48.8	64.5	39.1
05:40 AM - 05:45 AM	51.1	64.4	40.3
05:45 AM - 05:50 AM	56.4	67.5	44.5
05:50 AM - 05:55 AM	51.5	66.9	40.3
05:55 AM - 06:00 AM	58.0	74.2	41.4
06:00 AM - 07:00 AM	57.3	86.8	41.7
07:00 AM - 08:00 AM	63.1	92.9	58.0
08:00 AM - 09:00 AM	57.3	73.1	47.2
09:00 AM - 10:00 AM	57.6	63.1	44.2
10:00 AM - 11:00 AM	55.4	76.6	45.0
11:00 AM - 12:00 PM	53.8	72.0	42.6

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกระดาน ระดับเสียงต่อเนื่อง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการปะทะของลูกตุ้มเหล็กในการรื้อถอนอาคาร พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023567-1

Sample No. 2450169-11
Parameter Noise
Location N2 : สถิตยุวัฒนา (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	59.6	79.5	34.6
01:00 PM - 02:00 PM	57.9	83.6	44.1
02:00 PM - 03:00 PM	56.3	82.7	43.0
03:00 PM - 04:00 PM	58.6	80.9	40.8
04:00 PM - 05:00 PM	55.7	74.9	43.4
05:00 PM - 06:00 PM	56.8	78.5	46.6
06:00 PM - 07:00 PM	57.8	80.1	48.5
07:00 PM - 08:00 PM	60.4	85.2	57.5
08:00 PM - 09:00 PM	55.1	88.3	41.7
09:00 PM - 10:00 PM	54.1	76.1	39.9
10:00 PM - 10:05 PM	57.9	81.1	38.5
10:05 PM - 10:10 PM	53.1	72.2	39.7
10:10 PM - 10:15 PM	44.9	59.5	39.4
10:15 PM - 10:20 PM	46.9	61.6	38.9
10:20 PM - 10:25 PM	50.8	73.6	39.4
10:25 PM - 10:30 PM	44.5	61.8	38.7
10:30 PM - 10:35 PM	45.1	61.6	39.7
10:35 PM - 10:40 PM	46.3	61.0	40.7
10:40 PM - 10:45 PM	46.3	61.4	40.8
10:45 PM - 10:50 PM	50.8	66.8	40.9
10:50 PM - 10:55 PM	49.4	68.6	41.5
10:55 PM - 11:00 PM	49.0	66.8	41.5
11:00 PM - 11:05 PM	57.9	77.1	44.9
11:05 PM - 11:10 PM	49.8	62.3	46.9
11:10 PM - 11:15 PM	56.0	73.5	46.8
11:15 PM - 11:20 PM	46.7	60.4	45.1
11:20 PM - 11:25 PM	49.8	62.3	46.6
11:25 PM - 11:30 PM	49.5	58.4	47.7
11:30 PM - 11:35 PM	50.1	61.5	48.3
11:35 PM - 11:40 PM	53.8	64.5	50.9
11:40 PM - 11:45 PM	52.6	63.7	49.8
11:45 PM - 11:50 PM	49.0	59.9	46.1
11:50 PM - 11:55 PM	51.4	71.4	44.6
11:55 PM - 12:00 AM	45.9	52.7	43.7
12:00 AM - 12:05 AM	50.1	64.8	46.2
12:05 AM - 12:10 AM	51.0	62.6	50.7
12:10 AM - 12:15 AM	54.0	66.1	52.9
12:15 AM - 12:20 AM	55.6	71.5	52.3
12:20 AM - 12:25 AM	53.7	60.7	51.4
12:25 AM - 12:30 AM	54.0	58.3	51.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023567-1

Sample No. 2450169-11
Parameter Noise
Location N2 : สถิตยุวัฒนา (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	51.5	65.3	49.3
12:35 AM - 12:40 AM	50.7	64.9	46.7
12:40 AM - 12:45 AM	51.9	64.6	45.5
12:45 AM - 12:50 AM	50.8	67.0	45.1
12:50 AM - 12:55 AM	48.0	57.9	45.0
12:55 AM - 01:00 AM	46.3	59.2	42.8
01:00 AM - 01:05 AM	47.0	60.6	42.5
01:05 AM - 01:10 AM	45.1	59.9	42.1
01:10 AM - 01:15 AM	44.5	59.4	41.2
01:15 AM - 01:20 AM	43.7	58.0	40.0
01:20 AM - 01:25 AM	42.3	57.1	37.0
01:25 AM - 01:30 AM	39.3	55.5	36.3
01:30 AM - 01:35 AM	40.8	56.3	36.6
01:35 AM - 01:40 AM	40.7	55.1	37.2
01:40 AM - 01:45 AM	40.4	55.1	37.6
01:45 AM - 01:50 AM	40.3	55.6	36.8
01:50 AM - 01:55 AM	41.6	63.0	37.0
01:55 AM - 02:00 AM	41.3	55.1	39.7
02:00 AM - 02:05 AM	43.2	59.9	39.0
02:05 AM - 02:10 AM	43.4	61.9	38.8
02:10 AM - 02:15 AM	41.6	58.6	37.8
02:15 AM - 02:20 AM	43.4	62.0	38.1
02:20 AM - 02:25 AM	39.8	54.7	37.4
02:25 AM - 02:30 AM	38.6	49.3	37.0
02:30 AM - 02:35 AM	60.4	82.8	40.8
02:35 AM - 02:40 AM	42.5	58.7	37.5
02:40 AM - 02:45 AM	42.2	60.7	37.1
02:45 AM - 02:50 AM	41.9	59.4	36.5
02:50 AM - 02:55 AM	38.6	54.8	36.8
02:55 AM - 03:00 AM	42.4	59.5	37.3
03:00 AM - 03:05 AM	38.9	54.1	37.0
03:05 AM - 03:10 AM	39.5	56.6	37.0
03:10 AM - 03:15 AM	40.6	57.5	37.1
03:15 AM - 03:20 AM	49.0	66.5	37.5
03:20 AM - 03:25 AM	42.5	61.7	37.2
03:25 AM - 03:30 AM	42.0	61.7	37.0
03:30 AM - 03:35 AM	40.2	58.4	37.4
03:35 AM - 03:40 AM	38.4	54.5	36.6
03:40 AM - 03:45 AM	39.6	54.9	36.7
03:45 AM - 03:50 AM	38.5	49.6	36.7

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023567-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-11
Parameter Noise
Location N2 : ฝั่งตึกบุคลิกลาน (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	41.0	69.0	36.5
03:55 AM - 04:00 AM	40.1	55.2	37.3
04:00 AM - 04:05 AM	39.7	57.6	36.7
04:05 AM - 04:10 AM	39.2	55.3	35.9
04:10 AM - 04:15 AM	44.0	62.6	36.9
04:15 AM - 04:20 AM	49.4	72.3	36.3
04:20 AM - 04:25 AM	41.9	59.8	35.7
04:25 AM - 04:30 AM	47.5	66.1	36.7
04:30 AM - 04:35 AM	39.6	56.8	36.1
04:35 AM - 04:40 AM	49.7	69.4	35.8
04:40 AM - 04:45 AM	64.3	78.9	39.1
04:45 AM - 04:50 AM	44.9	63.7	39.0
04:50 AM - 04:55 AM	50.4	66.5	39.5
04:55 AM - 05:00 AM	50.0	73.4	39.4
05:00 AM - 05:05 AM	42.0	62.1	39.3
05:05 AM - 05:10 AM	43.0	58.4	39.6
05:10 AM - 05:15 AM	47.0	69.0	38.1
05:15 AM - 05:20 AM	66.2	92.5	37.5
05:20 AM - 05:25 AM	44.6	62.4	37.7
05:25 AM - 05:30 AM	53.5	70.6	39.2
05:30 AM - 05:35 AM	48.0	63.9	38.8
05:35 AM - 05:40 AM	53.8	72.8	40.4
05:40 AM - 05:45 AM	52.2	68.8	40.7
05:45 AM - 05:50 AM	49.8	63.5	40.3
05:50 AM - 05:55 AM	53.9	72.0	41.6
05:55 AM - 06:00 AM	54.6	68.9	41.8
06:00 AM - 07:00 AM	56.3	73.5	44.1
07:00 AM - 08:00 AM	55.9	69.3	43.2
08:00 AM - 09:00 AM	53.6	73.6	42.4
09:00 AM - 10:00 AM	58.4	87.8	46.2
10:00 AM - 11:00 AM	60.2	80.8	49.5
11:00 AM - 12:00 PM	61.3	89.1	47.4

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ฉบับที่ ๒ ลงวันที่ 24 มีนาคม พ.ศ. 2557

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Wilawan Borirak
Manager

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

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023568-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-12
Parameter Noise
Location N2 : ฝั่งตึกบุคลิกลาน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	56.9	77.4	46.5
01:00 PM - 02:00 PM	52.5	78.3	40.3
02:00 PM - 03:00 PM	53.2	74.2	40.3
03:00 PM - 04:00 PM	57.0	79.4	41.6
04:00 PM - 05:00 PM	56.0	89.5	41.8
05:00 PM - 06:00 PM	55.3	82.3	44.1
06:00 PM - 07:00 PM	58.3	84.4	47.2
07:00 PM - 08:00 PM	55.9	77.7	45.8
08:00 PM - 09:00 PM	55.8	78.3	42.4
09:00 PM - 10:00 PM	49.8	71.9	40.8
10:00 PM - 10:05 PM	44.8	58.1	39.7
10:05 PM - 10:10 PM	51.2	70.3	39.7
10:10 PM - 10:15 PM	52.7	72.5	40.2
10:15 PM - 10:20 PM	47.8	64.4	39.2
10:20 PM - 10:25 PM	44.3	56.3	39.4
10:25 PM - 10:30 PM	45.5	58.9	39.3
10:30 PM - 10:35 PM	46.8	57.6	40.8
10:35 PM - 10:40 PM	47.3	64.9	39.5
10:40 PM - 10:45 PM	49.6	66.4	39.8
10:45 PM - 10:50 PM	55.8	71.9	39.6
10:50 PM - 10:55 PM	47.3	62.7	39.7
10:55 PM - 11:00 PM	50.3	65.6	39.0
11:00 PM - 11:05 PM	56.6	77.7	38.3
11:05 PM - 11:10 PM	42.5	54.8	39.2
11:10 PM - 11:15 PM	42.9	58.4	38.7
11:15 PM - 11:20 PM	44.8	58.0	40.0
11:20 PM - 11:25 PM	44.1	60.1	40.3
11:25 PM - 11:30 PM	44.5	61.9	40.6
11:30 PM - 11:35 PM	42.8	56.8	39.4
11:35 PM - 11:40 PM	42.7	55.2	39.5
11:40 PM - 11:45 PM	52.5	71.3	39.8
11:45 PM - 11:50 PM	45.0	59.9	39.9
11:50 PM - 11:55 PM	47.9	64.6	40.1
11:55 PM - 12:00 AM	46.8	63.1	39.4
12:00 AM - 12:05 AM	48.2	63.3	38.2
12:05 AM - 12:10 AM	42.8	60.4	37.5
12:10 AM - 12:15 AM	43.4	59.7	37.7
12:15 AM - 12:20 AM	44.3	62.2	38.1
12:20 AM - 12:25 AM	44.1	60.3	39.0
12:25 AM - 12:30 AM	41.4	55.9	38.0

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023568-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-12
Parameter Noise
Location N2 : ฝั่งตึกบุคลิกลาน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	44.2	60.7	38.2
12:35 AM - 12:40 AM	49.3	66.3	38.9
12:40 AM - 12:45 AM	44.6	60.6	37.9
12:45 AM - 12:50 AM	43.1	57.6	36.8
12:50 AM - 12:55 AM	47.3	62.5	37.0
12:55 AM - 01:00 AM	41.8	56.3	37.1
01:00 AM - 01:05 AM	47.0	66.0	37.8
01:05 AM - 01:10 AM	40.5	56.3	37.3
01:10 AM - 01:15 AM	39.3	56.6	37.5
01:15 AM - 01:20 AM	56.6	77.2	37.1
01:20 AM - 01:25 AM	42.4	61.2	36.4
01:25 AM - 01:30 AM	43.5	61.7	37.5
01:30 AM - 01:35 AM	45.7	66.4	36.7
01:35 AM - 01:40 AM	47.3	70.8	36.2
01:40 AM - 01:45 AM	41.3	57.3	36.8
01:45 AM - 01:50 AM	38.0	47.7	36.1
01:50 AM - 01:55 AM	43.1	59.2	36.5
01:55 AM - 02:00 AM	44.0	62.6	36.1
02:00 AM - 02:05 AM	41.0	57.4	35.9
02:05 AM - 02:10 AM	39.1	53.3	35.9
02:10 AM - 02:15 AM	39.3	55.3	35.7
02:15 AM - 02:20 AM	43.7	60.9	36.1
02:20 AM - 02:25 AM	37.7	47.8	36.0
02:25 AM - 02:30 AM	42.2	68.5	35.9
02:30 AM - 02:35 AM	39.3	50.7	36.8
02:35 AM - 02:40 AM	47.2	78.4	35.9
02:40 AM - 02:45 AM	38.2	52.7	35.9
02:45 AM - 02:50 AM	37.1	50.6	35.2
02:50 AM - 02:55 AM	39.8	57.5	35.4
02:55 AM - 03:00 AM	41.9	58.6	35.9
03:00 AM - 03:05 AM	38.3	54.1	35.9
03:05 AM - 03:10 AM	42.4	59.6	36.1
03:10 AM - 03:15 AM	42.1	61.4	36.1
03:15 AM - 03:20 AM	44.9	63.4	35.8
03:20 AM - 03:25 AM	37.9	49.7	35.4
03:25 AM - 03:30 AM	37.5	51.9	35.8
03:30 AM - 03:35 AM	38.8	56.3	34.9
03:35 AM - 03:40 AM	37.4	50.4	35.2
03:40 AM - 03:45 AM	43.4	63.6	36.7
03:45 AM - 03:50 AM	38.2	50.2	35.4

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023568-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-12
Parameter Noise
Location N2 : ฝั่งตึกบุคลิกลาน (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	38.9	46.6	37.1
03:55 AM - 04:00 AM	42.1	61.9	35.4
04:00 AM - 04:05 AM	40.4	58.9	34.2
04:05 AM - 04:10 AM	36.1	49.1	33.7
04:10 AM - 04:15 AM	35.9	49.0	34.3
04:15 AM - 04:20 AM	38.1	46.9	34.6
04:20 AM - 04:25 AM	42.4	58.0	39.4
04:25 AM - 04:30 AM	50.0	67.8	40.1
04:30 AM - 04:35 AM	63.8	77.0	40.5
04:35 AM - 04:40 AM	43.6	57.1	38.9
04:40 AM - 04:45 AM	39.7	53.2	36.9
04:45 AM - 04:50 AM	40.2	49.8	37.5
04:50 AM - 04:55 AM	41.6	57.1	37.1
04:55 AM - 05:00 AM	43.9	66.7	37.1
05:00 AM - 05:05 AM	41.2	56.2	37.6
05:05 AM - 05:10 AM	44.7	62.9	37.4
05:10 AM - 05:15 AM	53.4	82.6	36.8
05:15 AM - 05:20 AM	44.8	63.4	36.9
05:20 AM - 05:25 AM	42.9	59.2	35.8
05:25 AM - 05:30 AM	44.1	59.8	36.7
05:30 AM - 05:35 AM	49.6	65.4	37.2
05:35 AM - 05:40 AM	49.5	68.9	38.0
05:40 AM - 05:45 AM	57.0	77.6	42.9
05:45 AM - 05:50 AM	56.7	68.3	41.7
05:50 AM - 05:55 AM	52.3	65.5	42.3
05:55 AM - 06:00 AM	54.8	72.2	39.4
06:00 AM - 07:00 AM	56.2	84.5	43.4
07:00 AM - 08:00 AM	63.4	84.8	43.9
08:00 AM - 09:00 AM	58.4	85.5	45.8
09:00 AM - 10:00 AM	53.7	76.6	43.2
10:00 AM - 11:00 AM	56.2	76.0	43.5
11:00 AM - 12:00 PM	55.7	79.9	46.0

Reference Method
1 ISO 1996-1
2 ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ฉบับที่ ๒ ลงวันที่ 24 มีนาคม พ.ศ. 2557

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023569-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-13
Parameter Noise
Location N2 : มหิดลบูรพาสงเคราะห์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	58.2	75.9	45.6
01:00 PM - 02:00 PM	55.6	79.2	44.4
02:00 PM - 03:00 PM	55.0	78.1	41.8
03:00 PM - 04:00 PM	56.6	79.8	43.8
04:00 PM - 05:00 PM	59.0	89.7	49.6
05:00 PM - 06:00 PM	61.3	87.0	47.6
06:00 PM - 07:00 PM	58.5	85.4	50.2
07:00 PM - 08:00 PM	57.3	79.2	50.3
08:00 PM - 09:00 PM	59.0	80.2	49.9
09:00 PM - 10:00 PM	51.8	77.6	39.7
10:00 PM - 10:05 PM	45.9	58.6	40.5
10:05 PM - 10:10 PM	49.8	66.4	41.0
10:10 PM - 10:15 PM	46.2	58.3	40.7
10:15 PM - 10:20 PM	46.6	60.0	40.4
10:20 PM - 10:25 PM	50.0	74.2	38.1
10:25 PM - 10:30 PM	47.8	64.9	41.1
10:30 PM - 10:35 PM	45.2	57.1	41.2
10:35 PM - 10:40 PM	55.9	73.2	41.0
10:40 PM - 10:45 PM	50.6	69.0	38.1
10:45 PM - 10:50 PM	44.7	64.4	37.1
10:50 PM - 10:55 PM	51.1	72.9	37.9
10:55 PM - 11:00 PM	58.6	82.2	38.9
11:00 PM - 11:05 PM	47.1	63.9	39.1
11:05 PM - 11:10 PM	43.4	61.9	38.1
11:10 PM - 11:15 PM	54.9	77.6	39.0
11:15 PM - 11:20 PM	42.7	55.1	38.6
11:20 PM - 11:25 PM	50.5	71.2	38.5
11:25 PM - 11:30 PM	43.7	61.3	37.8
11:30 PM - 11:35 PM	52.5	74.4	38.6
11:35 PM - 11:40 PM	45.2	56.6	37.9
11:40 PM - 11:45 PM	45.4	62.1	37.4
11:45 PM - 11:50 PM	48.1	65.2	37.7
11:50 PM - 11:55 PM	44.4	61.6	38.0
11:55 PM - 12:00 AM	46.1	61.1	38.7
12:00 AM - 12:05 AM	42.5	56.9	37.5
12:05 AM - 12:10 AM	44.9	58.2	38.6
12:10 AM - 12:15 AM	43.3	56.8	38.3
12:15 AM - 12:20 AM	53.8	73.3	37.9
12:20 AM - 12:25 AM	41.9	57.2	37.6
12:25 AM - 12:30 AM	44.0	60.1	39.0

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023569-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-13
Parameter Noise
Location N2 : มหิดลบูรพาสงเคราะห์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	47.2	58.5	37.7
12:35 AM - 12:40 AM	40.5	46.7	39.0
12:40 AM - 12:45 AM	44.7	59.2	36.9
12:45 AM - 12:50 AM	41.0	59.2	36.0
12:50 AM - 12:55 AM	44.6	63.2	36.4
12:55 AM - 01:00 AM	44.1	60.8	36.5
01:00 AM - 01:05 AM	40.4	57.1	36.0
01:05 AM - 01:10 AM	38.2	45.1	36.5
01:10 AM - 01:15 AM	39.9	55.0	36.9
01:15 AM - 01:20 AM	38.5	53.5	36.6
01:20 AM - 01:25 AM	41.2	58.6	36.4
01:25 AM - 01:30 AM	36.3	76.3	35.9
01:30 AM - 01:35 AM	42.1	58.6	35.8
01:35 AM - 01:40 AM	40.8	57.8	35.7
01:40 AM - 01:45 AM	47.6	67.1	35.5
01:45 AM - 01:50 AM	38.6	56.2	34.9
01:50 AM - 01:55 AM	36.7	50.1	34.5
01:55 AM - 02:00 AM	36.9	48.5	35.5
02:00 AM - 02:05 AM	37.4	47.5	35.5
02:05 AM - 02:10 AM	38.8	57.0	35.2
02:10 AM - 02:15 AM	37.6	57.2	34.4
02:15 AM - 02:20 AM	38.7	49.8	36.0
02:20 AM - 02:25 AM	38.5	48.9	36.1
02:25 AM - 02:30 AM	43.1	67.6	36.8
02:30 AM - 02:35 AM	38.1	45.6	36.2
02:35 AM - 02:40 AM	41.7	65.8	37.2
02:40 AM - 02:45 AM	40.5	60.5	36.7
02:45 AM - 02:50 AM	39.3	54.2	36.1
02:50 AM - 02:55 AM	41.8	65.0	36.1
02:55 AM - 03:00 AM	42.0	57.2	36.1
03:00 AM - 03:05 AM	37.5	50.4	35.7
03:05 AM - 03:10 AM	37.1	44.4	35.8
03:10 AM - 03:15 AM	39.4	52.7	37.0
03:15 AM - 03:20 AM	41.0	59.1	37.0
03:20 AM - 03:25 AM	40.0	49.5	36.4
03:25 AM - 03:30 AM	39.1	51.8	36.0
03:30 AM - 03:35 AM	44.6	62.6	36.5
03:35 AM - 03:40 AM	40.1	56.0	36.6
03:40 AM - 03:45 AM	37.4	45.3	36.1
03:45 AM - 03:50 AM	40.3	58.9	35.7

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023569-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-13
Parameter Noise
Location N2 : มหิดลบูรพาสงเคราะห์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	40.4	59.1	35.9
03:55 AM - 04:00 AM	37.2	43.9	36.2
04:00 AM - 04:05 AM	49.0	64.9	36.7
04:05 AM - 04:10 AM	45.0	63.9	37.8
04:10 AM - 04:15 AM	49.9	75.0	38.3
04:15 AM - 04:20 AM	51.3	71.5	47.8
04:20 AM - 04:25 AM	62.5	76.5	51.4
04:25 AM - 04:30 AM	58.7	74.9	43.8
04:30 AM - 04:35 AM	50.8	63.5	44.5
04:35 AM - 04:40 AM	51.6	78.2	43.6
04:40 AM - 04:45 AM	44.7	60.2	43.1
04:45 AM - 04:50 AM	45.0	53.7	42.6
04:50 AM - 04:55 AM	44.6	57.6	42.2
04:55 AM - 05:00 AM	46.4	61.8	42.5
05:00 AM - 05:05 AM	48.4	59.6	42.7
05:05 AM - 05:10 AM	47.0	54.9	43.0
05:10 AM - 05:15 AM	50.7	71.3	43.5
05:15 AM - 05:20 AM	47.4	54.6	43.0
05:20 AM - 05:25 AM	51.0	69.1	44.0
05:25 AM - 05:30 AM	59.4	80.9	44.4
05:30 AM - 05:35 AM	50.5	67.8	43.6
05:35 AM - 05:40 AM	50.0	66.7	43.3
05:40 AM - 05:45 AM	52.3	68.6	42.5
05:45 AM - 05:50 AM	57.6	69.7	46.7
05:50 AM - 05:55 AM	52.7	68.7	42.5
05:55 AM - 06:00 AM	57.2	76.4	43.6
06:00 AM - 07:00 AM	58.5	89.0	45.9
07:00 AM - 08:00 AM	64.1	95.1	60.2
08:00 AM - 09:00 AM	58.5	75.3	49.5
09:00 AM - 10:00 AM	58.8	83.3	46.4
10:00 AM - 11:00 AM	56.8	78.8	47.2
11:00 AM - 12:00 PM	53.0	74.2	44.8

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากแหล่งกำเนิดประเภทโรงงาน ระยะเวลาเฉลี่ย 24 ชั่วโมง และระดับเสียงของเสียงที่ตรวจวัดจากที่ประกอบกิจการโรงงาน พ.ศ. 2562

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023570-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-14
Parameter Noise
Location N2 : มหิดลบูรพาสงเคราะห์ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	60.9	81.7	56.8
01:00 PM - 02:00 PM	56.1	78.5	41.7
02:00 PM - 03:00 PM	53.3	78.9	45.2
03:00 PM - 04:00 PM	53.4	80.4	45.7
04:00 PM - 05:00 PM	59.6	82.5	49.1
05:00 PM - 06:00 PM	63.2	91.3	49.8
06:00 PM - 07:00 PM	57.4	76.4	45.6
07:00 PM - 08:00 PM	57.5	79.3	50.4
08:00 PM - 09:00 PM	56.9	84.0	42.2
09:00 PM - 10:00 PM	55.5	72.4	38.4
10:00 PM - 10:05 PM	47.2	62.3	37.7
10:05 PM - 10:10 PM	49.8	66.4	37.5
10:10 PM - 10:15 PM	51.3	69.1	37.1
10:15 PM - 10:20 PM	48.5	66.9	37.2
10:20 PM - 10:25 PM	42.6	59.8	36.3
10:25 PM - 10:30 PM	55.7	73.6	36.7
10:30 PM - 10:35 PM	56.6	77.3	35.9
10:35 PM - 10:40 PM	49.7	69.3	36.3
10:40 PM - 10:45 PM	42.8	62.2	35.7
10:45 PM - 10:50 PM	47.5	68.3	35.3
10:50 PM - 10:55 PM	48.7	67.6	35.4
10:55 PM - 11:00 PM	41.1	57.3	35.0
11:00 PM - 11:05 PM	47.0	66.9	35.8
11:05 PM - 11:10 PM	38.6	56.9	35.2
11:10 PM - 11:15 PM	37.2	49.9	35.3
11:15 PM - 11:20 PM	44.4	62.6	35.5
11:20 PM - 11:25 PM	42.3	61.1	35.3
11:25 PM - 11:30 PM	39.9	50.5	35.4
11:30 PM - 11:35 PM	45.6	62.9	35.5
11:35 PM - 11:40 PM	51.0	68.7	35.7
11:40 PM - 11:45 PM	40.3	62.2	34.4
11:45 PM - 11:50 PM	52.8	68.0	34.3
11:50 PM - 11:55 PM	48.7	71.8	33.4
11:55 PM - 12:00 AM	43.5	61.1	32.1
12:00 AM - 12:05 AM	42.9	62.5	33.5
12:05 AM - 12:10 AM	48.8	67.0	34.2
12:10 AM - 12:15 AM	40.5	59.3	33.6
12:15 AM - 12:20 AM	46.6	64.3	34.4
12:20 AM - 12:25 AM	50.5	67.2	33.3
12:25 AM - 12:30 AM	43.6	60.5	34.0

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023570-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-14
Parameter Noise
Location N2 : หมู่บ้านรุ่งอรุณ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:30 AM - 12:35 AM	39.8	55.3	34.3
12:35 AM - 12:40 AM	40.8	65.7	35.3
12:40 AM - 12:45 AM	42.4	65.4	34.9
12:45 AM - 12:50 AM	40.2	58.4	34.5
12:50 AM - 12:55 AM	42.8	61.8	34.8
12:55 AM - 01:00 AM	38.3	54.3	34.7
01:00 AM - 01:05 AM	39.0	58.9	35.1
01:05 AM - 01:10 AM	40.2	66.0	34.9
01:10 AM - 01:15 AM	39.4	57.4	35.2
01:15 AM - 01:20 AM	40.4	68.4	34.8
01:20 AM - 01:25 AM	42.9	63.9	34.4
01:25 AM - 01:30 AM	36.6	43.8	34.3
01:30 AM - 01:35 AM	39.1	56.8	34.4
01:35 AM - 01:40 AM	48.0	65.0	33.9
01:40 AM - 01:45 AM	42.3	62.7	33.8
01:45 AM - 01:50 AM	47.3	65.3	33.3
01:50 AM - 01:55 AM	38.7	59.4	33.0
01:55 AM - 02:00 AM	34.8	48.1	32.8
02:00 AM - 02:05 AM	35.7	51.8	32.9
02:05 AM - 02:10 AM	34.9	44.1	32.3
02:10 AM - 02:15 AM	41.3	60.0	32.6
02:15 AM - 02:20 AM	40.3	62.5	33.5
02:20 AM - 02:25 AM	37.0	49.6	33.9
02:25 AM - 02:30 AM	35.8	77.0	34.6
02:30 AM - 02:35 AM	37.3	47.8	34.7
02:35 AM - 02:40 AM	38.5	57.3	34.9
02:40 AM - 02:45 AM	37.3	44.1	35.4
02:45 AM - 02:50 AM	37.4	43.3	35.8
02:50 AM - 02:55 AM	42.9	63.1	35.3
02:55 AM - 03:00 AM	37.3	43.7	35.9
03:00 AM - 03:05 AM	39.3	57.5	35.9
03:05 AM - 03:10 AM	37.9	48.5	35.7
03:10 AM - 03:15 AM	43.7	58.9	37.7
03:15 AM - 03:20 AM	39.7	54.1	36.4
03:20 AM - 03:25 AM	38.2	50.0	36.1
03:25 AM - 03:30 AM	40.8	57.6	36.2
03:30 AM - 03:35 AM	39.5	55.6	36.2
03:35 AM - 03:40 AM	39.2	53.4	36.8
03:40 AM - 03:45 AM	40.7	56.6	36.4
03:45 AM - 03:50 AM	45.2	60.9	36.5

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023570-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-14
Parameter Noise
Location N2 : หมู่บ้านรุ่งอรุณ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:50 AM - 03:55 AM	37.6	45.9	35.9
03:55 AM - 04:00 AM	40.9	59.3	36.0
04:00 AM - 04:05 AM	57.0	74.0	36.4
04:05 AM - 04:10 AM	49.9	64.4	46.3
04:10 AM - 04:15 AM	52.2	65.2	48.2
04:15 AM - 04:20 AM	43.1	61.6	36.4
04:20 AM - 04:25 AM	62.0	81.2	35.7
04:25 AM - 04:30 AM	64.7	81.1	44.3
04:30 AM - 04:35 AM	47.6	63.6	44.6
04:35 AM - 04:40 AM	48.1	68.1	44.5
04:40 AM - 04:45 AM	51.2	65.7	44.0
04:45 AM - 04:50 AM	47.9	59.1	43.8
04:50 AM - 04:55 AM	46.0	56.0	44.1
04:55 AM - 05:00 AM	51.9	74.0	43.7
05:00 AM - 05:05 AM	57.9	76.6	44.5
05:05 AM - 05:10 AM	51.7	76.5	42.2
05:10 AM - 05:15 AM	46.5	64.3	39.0
05:15 AM - 05:20 AM	43.6	57.0	38.4
05:20 AM - 05:25 AM	53.1	70.9	40.0
05:25 AM - 05:30 AM	46.8	65.8	39.2
05:30 AM - 05:35 AM	45.0	58.6	38.7
05:35 AM - 05:40 AM	46.4	63.1	39.8
05:40 AM - 05:45 AM	50.9	66.8	41.0
05:45 AM - 05:50 AM	55.4	69.7	44.5
05:50 AM - 05:55 AM	55.1	69.0	43.1
05:55 AM - 06:00 AM	59.0	71.5	49.1
06:00 AM - 07:00 AM	59.2	87.0	50.3
07:00 AM - 08:00 AM	58.5	83.1	46.0
08:00 AM - 09:00 AM	55.5	77.8	44.9
09:00 AM - 10:00 AM	57.5	81.3	44.4
10:00 AM - 11:00 AM	57.1	76.9	47.9
11:00 AM - 12:00 PM	55.3	75.3	45.7

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากโรงงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ก่อความรำคาญในชุมชนจากโรงงาน พ.ศ. 2567

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023571-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-15
Parameter Noise
Location N3 : หมู่บ้านวินัน 5 (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	45.5	74.4	40.0
11:00 AM - 12:00 PM	47.1	69.4	41.0
12:00 PM - 01:00 PM	47.3	73.2	41.0
01:00 PM - 02:00 PM	47.4	73.4	40.2
02:00 PM - 03:00 PM	45.5	63.9	38.3
03:00 PM - 04:00 PM	44.3	69.3	37.2
04:00 PM - 05:00 PM	45.0	67.9	40.2
05:00 PM - 06:00 PM	46.2	71.8	42.3
06:00 PM - 07:00 PM	45.2	65.1	41.9
07:00 PM - 08:00 PM	48.7	69.7	42.0
08:00 PM - 09:00 PM	47.9	65.9	46.1
09:00 PM - 10:00 PM	46.0	58.0	44.8
10:00 PM - 10:05 PM	44.5	53.2	43.2
10:05 PM - 10:10 PM	45.0	51.6	44.1
10:10 PM - 10:15 PM	43.5	52.9	44.7
10:15 PM - 10:20 PM	45.6	49.9	44.8
10:20 PM - 10:25 PM	44.9	51.7	44.2
10:25 PM - 10:30 PM	48.2	54.2	44.4
10:30 PM - 10:35 PM	46.7	54.5	45.0
10:35 PM - 10:40 PM	46.3	52.5	45.2
10:40 PM - 10:45 PM	46.2	51.2	45.6
10:45 PM - 10:50 PM	48.5	64.6	46.0
10:50 PM - 10:55 PM	46.7	53.3	45.8
10:55 PM - 11:00 PM	46.8	50.4	46.0
11:00 PM - 11:05 PM	48.4	55.6	46.4
11:05 PM - 11:10 PM	48.2	57.4	46.1
11:10 PM - 11:15 PM	47.6	63.8	46.7
11:15 PM - 11:20 PM	46.8	51.3	45.8
11:20 PM - 11:25 PM	46.7	51.3	46.0
11:25 PM - 11:30 PM	47.4	55.7	46.3
11:30 PM - 11:35 PM	48.2	56.0	46.8
11:35 PM - 11:40 PM	47.2	50.7	46.4
11:40 PM - 11:45 PM	46.1	49.4	45.3
11:45 PM - 11:50 PM	46.4	50.3	45.4
11:50 PM - 11:55 PM	48.1	58.2	45.2
11:55 PM - 12:00 AM	47.3	57.4	45.7
12:00 AM - 12:05 AM	45.8	49.7	44.8
12:05 AM - 12:10 AM	47.9	66.9	45.7
12:10 AM - 12:15 AM	46.0	58.1	44.6
12:15 AM - 12:20 AM	46.0	54.3	45.1

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023571-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-15
Parameter Noise
Location N3 : หมู่บ้านวินัน 5 (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	46.3	54.6	45.1
12:25 AM - 12:30 AM	45.6	48.7	44.7
12:30 AM - 12:35 AM	45.3	49.9	44.6
12:35 AM - 12:40 AM	45.2	48.8	44.2
12:40 AM - 12:45 AM	45.4	47.4	44.7
12:45 AM - 12:50 AM	44.5	47.1	43.5
12:50 AM - 12:55 AM	44.7	53.1	43.8
12:55 AM - 01:00 AM	44.3	47.2	43.5
01:00 AM - 01:05 AM	48.7	68.1	44.1
01:05 AM - 01:10 AM	44.9	48.4	43.9
01:10 AM - 01:15 AM	44.4	46.2	43.7
01:15 AM - 01:20 AM	44.2	50.2	43.1
01:20 AM - 01:25 AM	43.3	46.2	42.6
01:25 AM - 01:30 AM	43.1	46.6	42.1
01:30 AM - 01:35 AM	43.4	48.2	42.6
01:35 AM - 01:40 AM	44.3	48.6	43.3
01:40 AM - 01:45 AM	44.4	48.5	43.5
01:45 AM - 01:50 AM	44.2	48.4	43.4
01:50 AM - 01:55 AM	43.6	47.2	42.6
01:55 AM - 02:00 AM	43.4	49.6	42.5
02:00 AM - 02:05 AM	43.2	48.8	42.2
02:05 AM - 02:10 AM	43.5	48.3	42.4
02:10 AM - 02:15 AM	43.4	52.4	42.6
02:15 AM - 02:20 AM	43.2	52.8	41.6
02:20 AM - 02:25 AM	43.4	51.4	41.8
02:25 AM - 02:30 AM	46.9	65.0	41.9
02:30 AM - 02:35 AM	43.8	54.6	42.2
02:35 AM - 02:40 AM	51.4	69.9	46.5
02:40 AM - 02:45 AM	55.3	73.6	44.6
02:45 AM - 02:50 AM	43.5	51.2	42.7
02:50 AM - 02:55 AM	43.9	49.0	43.1
02:55 AM - 03:00 AM	44.0	54.4	42.6
03:00 AM - 03:05 AM	43.9	51.8	42.1
03:05 AM - 03:10 AM	43.2	51.1	41.9
03:10 AM - 03:15 AM	41.7	45.8	40.4
03:15 AM - 03:20 AM	41.5	49.8	40.1
03:20 AM - 03:25 AM	41.8	48.3	40.7
03:25 AM - 03:30 AM	41.4	46.0	40.6
03:30 AM - 03:35 AM	41.9	48.0	40.9
03:35 AM - 03:40 AM	43.2	50.6	41.2

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023571-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-15
Parameter Noise
Location N3 : หมู่บ้านไร่นา 5 (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	45.6	67.0	38.1
03:45 AM - 03:50 AM	47.3	58.7	39.2
03:50 AM - 03:55 AM	43.7	58.4	39.9
03:55 AM - 04:00 AM	42.3	49.0	40.4
04:00 AM - 04:05 AM	42.7	46.5	41.5
04:05 AM - 04:10 AM	43.1	48.4	42.1
04:10 AM - 04:15 AM	43.2	49.5	42.3
04:15 AM - 04:20 AM	42.9	53.6	41.9
04:20 AM - 04:25 AM	43.6	58.8	40.9
04:25 AM - 04:30 AM	44.7	59.2	39.9
04:30 AM - 04:35 AM	40.3	45.7	39.3
04:35 AM - 04:40 AM	40.4	45.8	39.1
04:40 AM - 04:45 AM	41.1	48.1	39.7
04:45 AM - 04:50 AM	40.4	44.2	39.0
04:50 AM - 04:55 AM	44.2	58.3	39.2
04:55 AM - 05:00 AM	44.4	59.3	39.1
05:00 AM - 05:05 AM	43.0	57.8	39.7
05:05 AM - 05:10 AM	46.4	59.7	40.2
05:10 AM - 05:15 AM	46.8	60.9	41.6
05:15 AM - 05:20 AM	47.6	61.1	42.2
05:20 AM - 05:25 AM	47.8	61.9	42.1
05:25 AM - 05:30 AM	47.6	61.5	42.2
05:30 AM - 05:35 AM	49.4	62.5	42.3
05:35 AM - 05:40 AM	48.7	63.4	42.7
05:40 AM - 05:45 AM	48.3	63.1	43.4
05:45 AM - 05:50 AM	49.4	65.3	44.2
05:50 AM - 05:55 AM	48.3	58.3	42.9
05:55 AM - 06:00 AM	47.4	62.8	42.9
06:00 AM - 07:00 AM	54.2	76.8	43.5
07:00 AM - 08:00 AM	49.7	73.7	42.9
08:00 AM - 09:00 AM	47.0	70.6	42.1
09:00 AM - 10:00 AM	46.7	70.6	41.5

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง หลักเกณฑ์การตรวจวัดระดับเสียงจากการทำงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากหน่วยกำเนิดการโรงงาน พ.ศ. 2567

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023572-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-16
Parameter Noise
Location N3 : หมู่บ้านไร่นา 5 (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 10:05 AM	45.9	65.9	40.4
11:00 AM - 12:00 PM	45.5	69.4	39.2
12:00 PM - 01:00 PM	45.3	69.1	38.5
01:00 PM - 02:00 PM	44.8	63.2	40.3
02:00 PM - 03:00 PM	44.6	66.5	39.7
03:00 PM - 04:00 PM	48.1	78.2	40.4
04:00 PM - 05:00 PM	47.2	81.9	40.0
05:00 PM - 06:00 PM	46.9	91.0	40.2
06:00 PM - 07:00 PM	47.5	67.6	42.4
07:00 PM - 08:00 PM	49.6	67.3	47.9
08:00 PM - 09:00 PM	47.5	64.2	45.7
09:00 PM - 10:00 PM	47.3	71.6	43.6
10:00 PM - 10:05 PM	45.1	54.9	43.0
10:05 PM - 10:10 PM	43.9	54.0	41.6
10:10 PM - 10:15 PM	43.7	60.9	41.8
10:15 PM - 10:20 PM	44.8	51.4	44.0
10:20 PM - 10:25 PM	46.4	60.7	44.7
10:25 PM - 10:30 PM	47.2	50.2	46.6
10:30 PM - 10:35 PM	48.6	61.1	46.4
10:35 PM - 10:40 PM	45.3	58.1	43.5
10:40 PM - 10:45 PM	44.0	49.5	43.0
10:45 PM - 10:50 PM	44.1	49.0	43.0
10:50 PM - 10:55 PM	41.9	52.8	42.4
10:55 PM - 11:00 PM	47.0	52.3	44.9
11:00 PM - 11:05 PM	48.3	54.9	45.7
11:05 PM - 11:10 PM	46.9	51.0	45.5
11:10 PM - 11:15 PM	46.4	50.6	44.9
11:15 PM - 11:20 PM	47.0	62.4	43.2
11:20 PM - 11:25 PM	46.3	62.3	44.7
11:25 PM - 11:30 PM	46.3	57.3	43.0
11:30 PM - 11:35 PM	46.3	54.4	43.8
11:35 PM - 11:40 PM	45.5	51.5	43.6
11:40 PM - 11:45 PM	46.2	56.1	44.5
11:45 PM - 11:50 PM	46.8	51.8	44.8
11:50 PM - 11:55 PM	46.1	53.3	44.7
11:55 PM - 12:00 AM	44.4	48.4	43.5
12:00 AM - 12:05 AM	43.5	53.3	44.1
12:05 AM - 12:10 AM	48.0	65.9	41.9
12:10 AM - 12:15 AM	43.5	53.7	43.7
12:15 AM - 12:20 AM	48.8	64.0	42.6

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023572-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-16
Parameter Noise
Location N3 : หมู่บ้านไร่นา 5 (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	44.1	47.1	43.2
12:25 AM - 12:30 AM	43.5	54.0	43.2
12:30 AM - 12:35 AM	42.4	54.6	41.2
12:35 AM - 12:40 AM	43.3	53.2	40.8
12:40 AM - 12:45 AM	41.0	49.1	40.0
12:45 AM - 12:50 AM	48.6	67.9	40.3
12:50 AM - 12:55 AM	45.9	69.1	40.8
12:55 AM - 01:00 AM	43.1	58.5	41.4
01:00 AM - 01:05 AM	44.0	52.6	43.1
01:05 AM - 01:10 AM	45.9	67.8	43.5
01:10 AM - 01:15 AM	44.1	47.7	43.6
01:15 AM - 01:20 AM	44.7	54.3	43.1
01:20 AM - 01:25 AM	43.2	51.0	41.2
01:25 AM - 01:30 AM	45.3	47.7	44.2
01:30 AM - 01:35 AM	45.1	48.4	44.0
01:35 AM - 01:40 AM	44.2	47.8	43.1
01:40 AM - 01:45 AM	43.6	47.5	42.4
01:45 AM - 01:50 AM	44.0	51.3	42.4
01:50 AM - 01:55 AM	44.4	46.5	43.7
01:55 AM - 02:00 AM	44.4	50.6	43.7
02:00 AM - 02:05 AM	44.8	55.1	42.2
02:05 AM - 02:10 AM	43.7	47.6	41.2
02:10 AM - 02:15 AM	44.2	48.1	43.1
02:15 AM - 02:20 AM	44.0	46.3	42.7
02:20 AM - 02:25 AM	44.1	46.8	42.7
02:25 AM - 02:30 AM	47.2	56.7	44.9
02:30 AM - 02:35 AM	47.3	57.2	44.2
02:35 AM - 02:40 AM	49.8	71.5	44.1
02:40 AM - 02:45 AM	50.2	76.3	45.3
02:45 AM - 02:50 AM	45.7	48.0	45.0
02:50 AM - 02:55 AM	44.1	48.4	43.0
02:55 AM - 03:00 AM	43.5	47.7	42.0
03:00 AM - 03:05 AM	42.9	47.2	40.6
03:05 AM - 03:10 AM	45.9	53.4	43.9
03:10 AM - 03:15 AM	47.2	53.6	45.3
03:15 AM - 03:20 AM	46.0	50.4	45.4
03:20 AM - 03:25 AM	44.7	48.9	41.5
03:25 AM - 03:30 AM	43.5	49.0	39.8
03:30 AM - 03:35 AM	39.6	44.9	38.5
03:35 AM - 03:40 AM	39.9	43.6	37.7

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023572-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-16
Parameter Noise
Location N3 : หมู่บ้านไร่นา 5 (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	41.2	50.9	38.3
03:45 AM - 03:50 AM	40.4	49.2	38.2
03:50 AM - 03:55 AM	39.4	42.3	38.1
03:55 AM - 04:00 AM	40.7	51.6	38.4
04:00 AM - 04:05 AM	48.9	66.3	39.3
04:05 AM - 04:10 AM	51.0	66.9	41.2
04:10 AM - 04:15 AM	48.2	67.1	40.5
04:15 AM - 04:20 AM	47.1	66.5	39.9
04:20 AM - 04:25 AM	43.8	65.9	40.0
04:25 AM - 04:30 AM	41.7	48.9	40.3
04:30 AM - 04:35 AM	43.3	61.6	41.3
04:35 AM - 04:40 AM	49.0	66.4	40.1
04:40 AM - 04:45 AM	51.1	67.0	38.7
04:45 AM - 04:50 AM	50.9	68.0	36.3
04:50 AM - 04:55 AM	48.7	67.1	36.1
04:55 AM - 05:00 AM	50.3	68.0	36.7
05:00 AM - 05:05 AM	42.6	58.4	38.2
05:05 AM - 05:10 AM	47.9	67.3	38.2
05:10 AM - 05:15 AM	44.2	60.2	37.4
05:15 AM - 05:20 AM	43.4	59.4	38.0
05:20 AM - 05:25 AM	45.1	59.8	38.4
05:25 AM - 05:30 AM	42.2	58.9	39.6
05:30 AM - 05:35 AM	47.0	60.8	39.8
05:35 AM - 05:40 AM	48.0	61.5	40.1
05:40 AM - 05:45 AM	47.4	63.7	39.9
05:45 AM - 05:50 AM	50.2	66.9	39.9
05:50 AM - 05:55 AM	53.3	72.5	40.6
05:55 AM - 06:00 AM	51.4	68.6	39.2
06:00 AM - 07:00 AM	51.7	74.0	41.4
07:00 AM - 08:00 AM	55.4	72.8	42.3
08:00 AM - 09:00 AM	48.9	76.6	41.4
09:00 AM - 10:00 AM	46.4	68.5	40.2

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง หลักเกณฑ์การตรวจวัดระดับเสียงจากการทำงาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากหน่วยกำเนิดการโรงงาน พ.ศ. 2567

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023573-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-17
Parameter Noise
Location N3 : หม่านน้ำโซนุก 5 (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	47.3	70.7	40.3
11:00 AM - 12:00 PM	47.4	71.2	39.2
12:00 PM - 01:00 PM	47.9	66.5	38.2
01:00 PM - 02:00 PM	46.9	73.4	40.6
02:00 PM - 03:00 PM	46.1	69.5	40.6
03:00 PM - 04:00 PM	46.3	74.7	40.3
04:00 PM - 05:00 PM	45.6	65.9	40.7
05:00 PM - 06:00 PM	48.0	69.9	42.2
06:00 PM - 07:00 PM	48.7	68.9	43.1
07:00 PM - 08:00 PM	49.2	75.5	47.0
08:00 PM - 09:00 PM	49.3	72.0	44.6
09:00 PM - 10:00 PM	45.4	56.9	44.5
10:00 PM - 10:05 PM	45.1	51.2	44.4
10:05 PM - 10:10 PM	44.4	48.5	42.4
10:10 PM - 10:15 PM	45.6	57.5	43.1
10:15 PM - 10:20 PM	45.4	68.1	42.7
10:20 PM - 10:25 PM	45.4	49.0	44.6
10:25 PM - 10:30 PM	45.8	48.0	45.1
10:30 PM - 10:35 PM	45.5	48.2	44.7
10:35 PM - 10:40 PM	45.7	57.7	44.7
10:40 PM - 10:45 PM	45.2	48.2	43.9
10:45 PM - 10:50 PM	43.4	53.5	40.9
10:50 PM - 10:55 PM	43.1	47.2	40.8
10:55 PM - 11:00 PM	43.2	48.5	40.8
11:00 PM - 11:05 PM	46.2	48.9	44.8
11:05 PM - 11:10 PM	46.2	49.2	45.4
11:10 PM - 11:15 PM	45.3	48.3	42.6
11:15 PM - 11:20 PM	42.2	47.5	39.1
11:20 PM - 11:25 PM	41.9	52.0	40.2
11:25 PM - 11:30 PM	42.7	47.5	42.0
11:30 PM - 11:35 PM	43.5	54.3	42.2
11:35 PM - 11:40 PM	44.5	51.1	43.3
11:40 PM - 11:45 PM	45.9	55.8	44.8
11:45 PM - 11:50 PM	46.5	53.4	45.7
11:50 PM - 11:55 PM	47.2	56.9	46.3
11:55 PM - 12:00 AM	47.8	56.3	46.9
12:00 AM - 12:05 AM	48.0	55.2	46.7
12:05 AM - 12:10 AM	47.1	53.7	46.2
12:10 AM - 12:15 AM	47.8	55.1	46.8
12:15 AM - 12:20 AM	48.8	59.2	47.8

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Read., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023573-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-17
Parameter Noise
Location N3 : หม่านน้ำโซนุก 5 (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	48.4	54.6	47.7
12:25 AM - 12:30 AM	48.1	54.2	47.3
12:30 AM - 12:35 AM	47.5	54.4	46.9
12:35 AM - 12:40 AM	48.0	54.4	47.2
12:40 AM - 12:45 AM	48.1	53.4	47.3
12:45 AM - 12:50 AM	48.2	55.4	47.0
12:50 AM - 12:55 AM	48.3	57.3	46.9
12:55 AM - 01:00 AM	47.4	54.5	46.4
01:00 AM - 01:05 AM	47.4	52.5	46.5
01:05 AM - 01:10 AM	47.4	54.3	46.3
01:10 AM - 01:15 AM	46.9	53.4	46.1
01:15 AM - 01:20 AM	47.7	54.6	46.8
01:20 AM - 01:25 AM	47.8	54.9	46.8
01:25 AM - 01:30 AM	47.7	52.9	46.8
01:30 AM - 01:35 AM	48.6	53.5	47.6
01:35 AM - 01:40 AM	48.9	52.9	48.1
01:40 AM - 01:45 AM	49.8	63.1	47.8
01:45 AM - 01:50 AM	47.7	63.9	43.2
01:50 AM - 01:55 AM	49.2	55.3	48.3
01:55 AM - 02:00 AM	49.4	54.7	48.6
02:00 AM - 02:05 AM	49.4	53.4	48.7
02:05 AM - 02:10 AM	49.1	53.3	48.2
02:10 AM - 02:15 AM	48.3	54.0	47.4
02:15 AM - 02:20 AM	48.1	52.9	47.2
02:20 AM - 02:25 AM	48.3	53.3	47.4
02:25 AM - 02:30 AM	48.4	55.1	47.5
02:30 AM - 02:35 AM	48.8	55.3	48.1
02:35 AM - 02:40 AM	48.8	54.7	47.9
02:40 AM - 02:45 AM	48.5	53.9	47.8
02:45 AM - 02:50 AM	48.3	55.5	47.3
02:50 AM - 02:55 AM	49.1	54.2	48.2
02:55 AM - 03:00 AM	47.1	55.8	45.9
03:00 AM - 03:05 AM	46.8	53.9	45.5
03:05 AM - 03:10 AM	45.8	52.2	44.7
03:10 AM - 03:15 AM	46.8	55.2	45.4
03:15 AM - 03:20 AM	45.8	52.9	44.2
03:20 AM - 03:25 AM	45.9	51.4	44.6
03:25 AM - 03:30 AM	45.3	51.3	43.3
03:30 AM - 03:35 AM	44.3	50.9	42.6
03:35 AM - 03:40 AM	45.6	53.3	44.5

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023573-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-17
Parameter Noise
Location N3 : หม่านน้ำโซนุก 5 (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	45.0	53.9	43.3
03:45 AM - 03:50 AM	45.9	49.6	44.9
03:50 AM - 03:55 AM	45.1	50.9	44.2
03:55 AM - 04:00 AM	44.5	49.9	43.4
04:00 AM - 04:05 AM	43.2	49.2	42.3
04:05 AM - 04:10 AM	43.4	53.1	42.1
04:10 AM - 04:15 AM	42.4	48.6	41.4
04:15 AM - 04:20 AM	41.5	48.8	40.6
04:20 AM - 04:25 AM	41.3	46.6	40.3
04:25 AM - 04:30 AM	41.4	48.8	40.3
04:30 AM - 04:35 AM	41.5	48.0	40.3
04:35 AM - 04:40 AM	41.2	47.9	40.2
04:40 AM - 04:45 AM	41.6	46.2	40.5
04:45 AM - 04:50 AM	48.5	69.4	41.2
04:50 AM - 04:55 AM	42.0	51.7	41.0
04:55 AM - 05:00 AM	41.8	49.7	40.8
05:00 AM - 05:05 AM	45.0	69.1	40.3
05:05 AM - 05:10 AM	45.1	68.0	44.3
05:10 AM - 05:15 AM	45.2	69.3	44.2
05:15 AM - 05:20 AM	43.2	48.2	42.8
05:20 AM - 05:25 AM	45.6	52.5	44.1
05:25 AM - 05:30 AM	45.5	48.2	44.5
05:30 AM - 05:35 AM	44.4	57.8	43.6
05:35 AM - 05:40 AM	42.7	47.5	41.9
05:40 AM - 05:45 AM	44.1	61.3	42.3
05:45 AM - 05:50 AM	46.8	67.2	42.1
05:50 AM - 05:55 AM	45.4	59.5	40.3
05:55 AM - 06:00 AM	43.6	52.5	41.8
06:00 AM - 07:00 AM	51.6	78.9	42.4
07:00 AM - 08:00 AM	52.9	76.4	43.4
08:00 AM - 09:00 AM	52.9	73.1	41.8
09:00 AM - 10:00 AM	52.9	74.8	42.1

Reference Method :
1 ISO 1996 1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงต่อเนื่อง 24 ชั่วโมง และระดับเสียงของเครื่องจักรหรือกลุ่มเครื่องจักรในโรงงาน พ.ศ. 2557

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Wilawan Borirak
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023574-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-18
Parameter Noise
Location N3 : หม่านน้ำโซนุก 5 (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.3	73.4	42.6
11:00 AM - 12:00 PM	48.6	72.2	41.9
12:00 PM - 01:00 PM	49.3	72.0	42.1
01:00 PM - 02:00 PM	48.8	73.4	43.7
02:00 PM - 03:00 PM	47.9	71.1	42.7
03:00 PM - 04:00 PM	44.9	65.9	40.5
04:00 PM - 05:00 PM	44.7	65.1	40.0
05:00 PM - 06:00 PM	46.6	73.0	42.9
06:00 PM - 07:00 PM	46.2	67.5	42.7
07:00 PM - 08:00 PM	49.6	63.8	47.2
08:00 PM - 09:00 PM	48.0	57.6	47.1
09:00 PM - 10:00 PM	47.3	68.7	45.9
10:00 PM - 10:05 PM	47.1	57.6	45.7
10:05 PM - 10:10 PM	47.4	55.2	46.9
10:10 PM - 10:15 PM	47.3	54.2	46.5
10:15 PM - 10:20 PM	47.5	53.5	46.4
10:20 PM - 10:25 PM	47.0	55.6	45.5
10:25 PM - 10:30 PM	46.9	53.7	45.2
10:30 PM - 10:35 PM	46.8	54.2	45.0
10:35 PM - 10:40 PM	46.3	51.6	45.1
10:40 PM - 10:45 PM	46.8	55.2	45.0
10:45 PM - 10:50 PM	46.7	52.1	44.8
10:50 PM - 10:55 PM	50.0	55.7	45.8
10:55 PM - 11:00 PM	46.6	51.2	44.8
11:00 PM - 11:05 PM	46.0	54.2	44.0
11:05 PM - 11:10 PM	45.4	52.0	43.9
11:10 PM - 11:15 PM	45.4	53.4	43.9
11:15 PM - 11:20 PM	45.4	53.2	44.2
11:20 PM - 11:25 PM	46.9	53.6	45.1
11:25 PM - 11:30 PM	46.4	64.7	44.2
11:30 PM - 11:35 PM	46.6	54.1	44.4
11:35 PM - 11:40 PM	45.5	51.2	44.1
11:40 PM - 11:45 PM	45.7	52.6	43.9
11:45 PM - 11:50 PM	44.6	51.0	43.2
11:50 PM - 11:55 PM	43.2	49.0	43.8
11:55 PM - 12:00 AM	45.6	59.9	44.0
12:00 AM - 12:05 AM	45.3	50.9	44.0
12:05 AM - 12:10 AM	45.5	58.0	44.1
12:10 AM - 12:15 AM	45.0	49.4	43.5
12:15 AM - 12:20 AM	45.7	58.9	44.5

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Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023574-1

Sample No. 2450169-18
Parameter Noise
Location N3 : หน้าบริษัท 5 (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	44.9	52.5	43.6
12:25 AM - 12:30 AM	46.9	55.8	44.7
12:30 AM - 12:35 AM	45.7	51.5	44.9
12:35 AM - 12:40 AM	45.5	52.2	44.6
12:40 AM - 12:45 AM	46.2	54.4	44.0
12:45 AM - 12:50 AM	46.2	50.4	44.6
12:50 AM - 12:55 AM	46.2	51.6	45.0
12:55 AM - 01:00 AM	46.5	50.1	45.3
01:00 AM - 01:05 AM	46.0	49.1	45.1
01:05 AM - 01:10 AM	46.1	49.8	45.4
01:10 AM - 01:15 AM	45.8	50.1	45.1
01:15 AM - 01:20 AM	45.5	49.3	44.6
01:20 AM - 01:25 AM	45.0	48.9	43.7
01:25 AM - 01:30 AM	44.7	51.5	42.5
01:30 AM - 01:35 AM	42.9	47.9	42.1
01:35 AM - 01:40 AM	44.7	53.4	42.1
01:40 AM - 01:45 AM	45.3	49.7	44.1
01:45 AM - 01:50 AM	44.0	53.4	42.6
01:50 AM - 01:55 AM	41.7	46.6	42.1
01:55 AM - 02:00 AM	44.2	47.3	43.5
02:00 AM - 02:05 AM	44.3	50.3	43.5
02:05 AM - 02:10 AM	51.2	69.3	44.2
02:10 AM - 02:15 AM	51.4	68.9	45.7
02:15 AM - 02:20 AM	51.9	70.6	45.2
02:20 AM - 02:25 AM	53.8	74.3	45.1
02:25 AM - 02:30 AM	44.3	47.2	43.6
02:30 AM - 02:35 AM	45.3	49.7	44.3
02:35 AM - 02:40 AM	44.7	47.2	41.9
02:40 AM - 02:45 AM	43.8	46.8	41.7
02:45 AM - 02:50 AM	43.1	48.4	41.0
02:50 AM - 02:55 AM	42.4	50.1	40.8
02:55 AM - 03:00 AM	46.6	59.3	40.3
03:00 AM - 03:05 AM	41.5	46.7	40.5
03:05 AM - 03:10 AM	45.1	56.4	42.9
03:10 AM - 03:15 AM	44.2	49.8	42.3
03:15 AM - 03:20 AM	43.4	47.2	42.6
03:20 AM - 03:25 AM	43.3	50.2	40.5
03:25 AM - 03:30 AM	41.3	47.8	39.6
03:30 AM - 03:35 AM	41.1	53.1	39.7
03:35 AM - 03:40 AM	41.8	51.3	40.7

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023574-1

Sample No. 2450169-18
Parameter Noise
Location N3 : หน้าบริษัท 5 (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	41.6	47.3	39.8
03:45 AM - 03:50 AM	41.8	48.6	40.6
03:50 AM - 03:55 AM	40.5	46.0	39.3
03:55 AM - 04:00 AM	49.0	67.0	39.8
04:00 AM - 04:05 AM	53.9	70.5	40.9
04:05 AM - 04:10 AM	50.6	68.9	41.1
04:10 AM - 04:15 AM	48.2	67.0	41.1
04:15 AM - 04:20 AM	43.1	59.5	41.0
04:20 AM - 04:25 AM	49.5	66.7	41.2
04:25 AM - 04:30 AM	49.9	67.3	41.8
04:30 AM - 04:35 AM	50.3	67.3	41.7
04:35 AM - 04:40 AM	47.9	67.4	41.0
04:40 AM - 04:45 AM	48.6	66.2	40.3
04:45 AM - 04:50 AM	54.4	68.7	40.4
04:50 AM - 04:55 AM	52.6	69.9	40.2
04:55 AM - 05:00 AM	53.7	69.3	40.3
05:00 AM - 05:05 AM	52.8	69.3	40.6
05:05 AM - 05:10 AM	52.4	68.8	41.1
05:10 AM - 05:15 AM	52.2	68.6	41.2
05:15 AM - 05:20 AM	53.3	68.3	40.4
05:20 AM - 05:25 AM	51.9	68.4	41.5
05:25 AM - 05:30 AM	54.9	68.7	41.4
05:30 AM - 05:35 AM	55.6	68.3	41.2
05:35 AM - 05:40 AM	52.4	68.8	42.5
05:40 AM - 05:45 AM	43.6	59.8	42.7
05:45 AM - 05:50 AM	54.8	80.5	43.4
05:50 AM - 05:55 AM	44.9	51.2	44.1
05:55 AM - 06:00 AM	45.1	47.7	44.3
06:00 AM - 07:00 AM	48.4	73.4	41.2
07:00 AM - 08:00 AM	48.0	69.7	40.5
08:00 AM - 09:00 AM	47.0	68.3	41.4
09:00 AM - 10:00 AM	49.9	77.4	40.9

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจระดับเสียงจากแต่ละเสียงจากกรณี ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดเพื่อคำนวณหาปริมาณเสียงจาก พ.ศ. 2567

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023575-1

Sample No. 2450169-19
Parameter Noise
Location N3 : หน้าบริษัท 5 (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	46.3	64.3	40.9
11:00 AM - 12:00 PM	47.2	67.4	42.6
12:00 PM - 01:00 PM	47.7	72.0	41.5
01:00 PM - 02:00 PM	49.0	71.4	42.1
02:00 PM - 03:00 PM	51.6	78.5	41.9
03:00 PM - 04:00 PM	49.4	70.3	42.3
04:00 PM - 05:00 PM	46.9	68.6	40.8
05:00 PM - 06:00 PM	47.4	75.6	41.8
06:00 PM - 07:00 PM	46.7	63.9	42.9
07:00 PM - 08:00 PM	52.1	75.5	42.4
08:00 PM - 09:00 PM	49.6	73.8	40.9
09:00 PM - 10:00 PM	52.4	81.2	40.8
10:00 PM - 10:05 PM	50.0	56.3	48.9
10:05 PM - 10:10 PM	49.5	57.6	48.6
10:10 PM - 10:15 PM	49.9	60.3	49.0
10:15 PM - 10:20 PM	49.4	58.6	48.7
10:20 PM - 10:25 PM	49.7	63.2	49.3
10:25 PM - 10:30 PM	50.7	64.0	48.8
10:30 PM - 10:35 PM	50.5	56.4	49.4
10:35 PM - 10:40 PM	50.0	56.5	49.1
10:40 PM - 10:45 PM	49.8	52.3	49.0
10:45 PM - 10:50 PM	49.6	52.8	48.8
10:50 PM - 10:55 PM	50.1	58.9	49.0
10:55 PM - 11:00 PM	49.2	52.7	48.4
11:00 PM - 11:05 PM	49.3	54.2	47.1
11:05 PM - 11:10 PM	50.6	71.5	48.1
11:10 PM - 11:15 PM	48.9	57.4	47.3
11:15 PM - 11:20 PM	47.9	55.9	45.9
11:20 PM - 11:25 PM	49.6	58.5	48.2
11:25 PM - 11:30 PM	50.4	66.1	45.8
11:30 PM - 11:35 PM	48.5	54.1	47.7
11:35 PM - 11:40 PM	48.5	55.5	47.6
11:40 PM - 11:45 PM	48.9	57.8	48.0
11:45 PM - 11:50 PM	48.4	52.0	47.6
11:50 PM - 11:55 PM	48.8	56.0	47.5
11:55 PM - 12:00 AM	48.4	53.4	48.4
12:00 AM - 12:05 AM	48.0	52.0	47.3
12:05 AM - 12:10 AM	48.5	58.1	47.3
12:10 AM - 12:15 AM	48.2	53.0	46.9
12:15 AM - 12:20 AM	47.4	52.7	45.8

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023575-1

Sample No. 2450169-19
Parameter Noise
Location N3 : หน้าบริษัท 5 (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	49.0	58.0	47.7
12:25 AM - 12:30 AM	48.8	56.8	47.7
12:30 AM - 12:35 AM	47.8	53.4	45.8
12:35 AM - 12:40 AM	47.1	55.4	44.7
12:40 AM - 12:45 AM	47.5	52.8	46.4
12:45 AM - 12:50 AM	47.2	52.3	46.2
12:50 AM - 12:55 AM	46.6	50.9	43.7
12:55 AM - 01:00 AM	44.1	48.7	42.6
01:00 AM - 01:05 AM	45.9	57.0	43.7
01:05 AM - 01:10 AM	46.5	52.6	44.0
01:10 AM - 01:15 AM	47.5	50.2	46.9
01:15 AM - 01:20 AM	47.4	52.2	46.3
01:20 AM - 01:25 AM	47.3	50.0	46.3
01:25 AM - 01:30 AM	47.3	51.5	46.4
01:30 AM - 01:35 AM	47.2	55.1	46.3
01:35 AM - 01:40 AM	47.2	56.3	46.0
01:40 AM - 01:45 AM	47.3	52.2	46.2
01:45 AM - 01:50 AM	47.1	50.2	46.4
01:50 AM - 01:55 AM	47.1	50.4	46.3
01:55 AM - 02:00 AM	54.8	71.4	47.1
02:00 AM - 02:05 AM	54.9	75.5	48.6
02:05 AM - 02:10 AM	48.8	71.2	46.3
02:10 AM - 02:15 AM	47.3	50.1	46.5
02:15 AM - 02:20 AM	47.0	53.4	46.3
02:20 AM - 02:25 AM	46.6	51.5	45.5
02:25 AM - 02:30 AM	47.1	50.5	45.8
02:30 AM - 02:35 AM	45.7	49.4	44.2
02:35 AM - 02:40 AM	44.8	56.0	43.7
02:40 AM - 02:45 AM	45.3	64.1	43.6
02:45 AM - 02:50 AM	44.2	61.9	43.2
02:50 AM - 02:55 AM	46.1	53.8	43.2
02:55 AM - 03:00 AM	45.5	68.0	43.2
03:00 AM - 03:05 AM	44.2	61.4	42.4
03:05 AM - 03:10 AM	42.7	48.3	41.8
03:10 AM - 03:15 AM	42.9	47.8	41.9
03:15 AM - 03:20 AM	42.1	44.9	41.3
03:20 AM - 03:25 AM	42.7	49.3	41.2
03:25 AM - 03:30 AM	42.2	49.3	41.1
03:30 AM - 03:35 AM	44.2	57.3	41.3
03:35 AM - 03:40 AM	52.1	66.7	40.9

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023576-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-19
Parameter Noise
Location N3 : หน้าบ้านโรงงาน 5 (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.0	67.2	40.9
03:45 AM - 03:50 AM	47.7	65.8	41.3
03:50 AM - 03:55 AM	47.0	63.9	40.9
03:55 AM - 04:00 AM	48.9	67.7	40.8
04:00 AM - 04:05 AM	47.4	66.5	40.2
04:05 AM - 04:10 AM	48.3	66.7	39.6
04:10 AM - 04:15 AM	48.3	65.8	39.2
04:15 AM - 04:20 AM	48.8	66.8	40.0
04:20 AM - 04:25 AM	47.9	65.6	42.3
04:25 AM - 04:30 AM	47.1	67.0	42.2
04:30 AM - 04:35 AM	49.2	66.4	41.3
04:35 AM - 04:40 AM	46.6	61.1	41.3
04:40 AM - 04:45 AM	45.6	65.9	40.2
04:45 AM - 04:50 AM	50.4	67.5	39.4
04:50 AM - 04:55 AM	49.5	67.5	37.9
04:55 AM - 05:00 AM	45.3	67.1	38.3
05:00 AM - 05:05 AM	39.8	51.3	38.1
05:05 AM - 05:10 AM	48.0	68.2	38.3
05:10 AM - 05:15 AM	41.4	60.6	39.3
05:15 AM - 05:20 AM	47.8	61.2	39.2
05:20 AM - 05:25 AM	52.2	66.8	39.5
05:25 AM - 05:30 AM	50.3	65.7	40.1
05:30 AM - 05:35 AM	49.1	63.7	41.0
05:35 AM - 05:40 AM	48.0	63.5	41.8
05:40 AM - 05:45 AM	47.6	66.3	41.2
05:45 AM - 05:50 AM	47.4	59.6	42.2
05:50 AM - 05:55 AM	50.0	78.8	42.1
05:55 AM - 06:00 AM	63.5	78.4	42.1
06:00 AM - 07:00 AM	62.9	78.5	41.2
07:00 AM - 08:00 AM	52.5	72.7	40.9
08:00 AM - 09:00 AM	46.7	71.4	38.8
09:00 AM - 10:00 AM	47.6	71.7	38.9

Reference Method
1 ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023576-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-20
Parameter Noise
Location N3 : หน้าบ้านโรงงาน 5 (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	49.9	72.6	38.7
11:00 AM - 12:00 PM	44.6	73.5	37.3
12:00 PM - 01:00 PM	44.7	73.7	38.2
01:00 PM - 02:00 PM	47.4	70.0	38.0
02:00 PM - 03:00 PM	46.7	69.0	38.9
03:00 PM - 04:00 PM	46.8	67.3	41.4
04:00 PM - 05:00 PM	47.0	67.9	40.7
05:00 PM - 06:00 PM	45.6	66.0	40.7
06:00 PM - 07:00 PM	46.6	69.0	41.3
07:00 PM - 08:00 PM	50.4	76.3	47.8
08:00 PM - 09:00 PM	48.1	60.9	46.9
09:00 PM - 10:00 PM	47.8	71.2	45.1
10:00 PM - 10:05 PM	47.0	55.3	45.7
10:05 PM - 10:10 PM	47.8	67.6	45.8
10:10 PM - 10:15 PM	48.3	59.4	46.2
10:15 PM - 10:20 PM	48.2	61.6	46.2
10:20 PM - 10:25 PM	47.7	63.5	46.1
10:25 PM - 10:30 PM	46.7	61.7	45.6
10:30 PM - 10:35 PM	46.3	61.0	43.9
10:35 PM - 10:40 PM	47.8	67.9	45.7
10:40 PM - 10:45 PM	46.7	62.6	43.8
10:45 PM - 10:50 PM	46.5	58.7	44.3
10:50 PM - 10:55 PM	46.7	58.3	43.8
10:55 PM - 11:00 PM	46.6	58.3	43.7
11:00 PM - 11:05 PM	46.3	51.2	45.3
11:05 PM - 11:10 PM	46.5	52.6	45.3
11:10 PM - 11:15 PM	47.1	56.5	45.2
11:15 PM - 11:20 PM	46.4	53.8	45.2
11:20 PM - 11:25 PM	46.8	59.6	45.0
11:25 PM - 11:30 PM	45.9	51.3	44.8
11:30 PM - 11:35 PM	46.1	54.1	45.0
11:35 PM - 11:40 PM	46.2	53.5	45.1
11:40 PM - 11:45 PM	45.7	50.9	44.9
11:45 PM - 11:50 PM	44.9	51.4	44.1
11:50 PM - 11:55 PM	45.3	55.9	44.3
11:55 PM - 12:00 AM	45.2	48.4	44.5
12:00 AM - 12:05 AM	45.7	56.0	44.2
12:05 AM - 12:10 AM	45.0	48.1	44.3
12:10 AM - 12:15 AM	44.8	49.3	44.0
12:15 AM - 12:20 AM	44.8	48.9	43.8

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023576-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-20
Parameter Noise
Location N3 : หน้าบ้านโรงงาน 5 (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	43.9	54.4	41.5
12:25 AM - 12:30 AM	44.9	63.6	42.3
12:30 AM - 12:35 AM	45.6	51.2	44.1
12:35 AM - 12:40 AM	45.2	50.2	44.1
12:40 AM - 12:45 AM	44.8	47.8	43.9
12:45 AM - 12:50 AM	45.4	55.2	44.3
12:50 AM - 12:55 AM	44.4	47.1	41.9
12:55 AM - 01:00 AM	48.4	67.5	41.1
01:00 AM - 01:05 AM	45.2	57.3	43.8
01:05 AM - 01:10 AM	47.6	66.1	44.2
01:10 AM - 01:15 AM	44.5	48.7	43.8
01:15 AM - 01:20 AM	45.2	66.2	43.9
01:20 AM - 01:25 AM	47.0	66.6	43.9
01:25 AM - 01:30 AM	48.9	67.1	43.3
01:30 AM - 01:35 AM	49.1	67.4	43.0
01:35 AM - 01:40 AM	43.8	53.6	43.0
01:40 AM - 01:45 AM	53.7	71.3	45.4
01:45 AM - 01:50 AM	55.5	74.7	43.6
01:50 AM - 01:55 AM	50.0	72.6	41.8
01:55 AM - 02:00 AM	44.6	46.9	43.9
02:00 AM - 02:05 AM	44.9	49.2	44.1
02:05 AM - 02:10 AM	44.7	48.7	43.9
02:10 AM - 02:15 AM	44.4	48.6	43.8
02:15 AM - 02:20 AM	44.4	51.1	43.7
02:20 AM - 02:25 AM	44.2	46.4	43.6
02:25 AM - 02:30 AM	44.5	50.0	43.7
02:30 AM - 02:35 AM	44.3	49.2	43.5
02:35 AM - 02:40 AM	43.3	47.6	42.7
02:40 AM - 02:45 AM	44.4	47.1	42.5
02:45 AM - 02:50 AM	45.2	49.6	44.4
02:50 AM - 02:55 AM	42.5	49.4	40.7
02:55 AM - 03:00 AM	43.2	54.9	40.5
03:00 AM - 03:05 AM	43.8	47.5	40.8
03:05 AM - 03:10 AM	41.9	46.0	41.2
03:10 AM - 03:15 AM	42.4	60.5	40.9
03:15 AM - 03:20 AM	41.9	51.4	40.7
03:20 AM - 03:25 AM	42.0	49.8	41.0
03:25 AM - 03:30 AM	43.1	61.4	41.0
03:30 AM - 03:35 AM	53.0	77.1	41.8
03:35 AM - 03:40 AM	55.8	72.9	41.6

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023576-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-20
Parameter Noise
Location N3 : หน้าบ้านโรงงาน 5 (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	41.9	49.7	40.3
03:45 AM - 03:50 AM	42.0	52.2	41.4
03:50 AM - 03:55 AM	42.1	48.1	41.2
03:55 AM - 04:00 AM	41.7	45.0	40.8
04:00 AM - 04:05 AM	50.4	67.3	40.1
04:05 AM - 04:10 AM	47.7	67.1	39.4
04:10 AM - 04:15 AM	40.2	48.3	39.1
04:15 AM - 04:20 AM	51.2	70.1	38.7
04:20 AM - 04:25 AM	51.6	71.9	39.9
04:25 AM - 04:30 AM	54.3	71.4	40.7
04:30 AM - 04:35 AM	47.2	71.2	41.1
04:35 AM - 04:40 AM	56.9	72.3	39.7
04:40 AM - 04:45 AM	53.3	72.7	38.7
04:45 AM - 04:50 AM	56.2	72.5	38.5
04:50 AM - 04:55 AM	54.6	71.8	38.8
04:55 AM - 05:00 AM	54.2	73.9	38.1
05:00 AM - 05:05 AM	51.6	71.9	38.3
05:05 AM - 05:10 AM	52.0	70.7	38.8
05:10 AM - 05:15 AM	54.7	72.7	39.7
05:15 AM - 05:20 AM	55.4	72.3	40.1
05:20 AM - 05:25 AM	55.9	72.1	41.4
05:25 AM - 05:30 AM	55.4	71.9	41.2
05:30 AM - 05:35 AM	54.4	71.7	42.0
05:35 AM - 05:40 AM	53.6	71.8	42.2
05:40 AM - 05:45 AM	55.0	72.5	42.3
05:45 AM - 05:50 AM	49.7	64.0	43.6
05:50 AM - 05:55 AM	50.6	71.1	42.8
05:55 AM - 06:00 AM	48.8	66.9	42.0
06:00 AM - 07:00 AM	51.9	73.2	42.4
07:00 AM - 08:00 AM	51.9	72.7	44.8
08:00 AM - 09:00 AM	51.7	72.9	41.6
09:00 AM - 10:00 AM	49.9	71.0	39.4

Reference Method
1 ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023577-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-21
Parameter Noise
Location N3 : หน้าบ้านโซน 5 (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	44.0	67.6	39.3
11:00 AM - 12:00 PM	45.8	72.4	38.8
12:00 PM - 01:00 PM	45.8	70.4	39.6
01:00 PM - 02:00 PM	43.4	64.8	37.3
02:00 PM - 03:00 PM	43.7	68.2	38.5
03:00 PM - 04:00 PM	45.4	64.8	40.8
04:00 PM - 05:00 PM	45.5	67.8	40.0
05:00 PM - 06:00 PM	50.4	87.8	40.2
06:00 PM - 07:00 PM	45.5	63.9	41.1
07:00 PM - 08:00 PM	49.4	72.7	46.7
08:00 PM - 09:00 PM	48.3	73.4	45.9
09:00 PM - 10:00 PM	46.5	69.1	44.7
10:00 PM - 10:05 PM	46.7	51.8	45.8
10:05 PM - 10:10 PM	48.4	55.0	47.2
10:10 PM - 10:15 PM	47.4	54.5	45.7
10:15 PM - 10:20 PM	46.4	52.4	45.5
10:20 PM - 10:25 PM	46.3	57.7	45.4
10:25 PM - 10:30 PM	46.7	53.1	45.6
10:30 PM - 10:35 PM	46.7	52.6	45.6
10:35 PM - 10:40 PM	48.2	70.2	46.5
10:40 PM - 10:45 PM	47.4	51.8	46.6
10:45 PM - 10:50 PM	47.9	53.2	46.9
10:50 PM - 10:55 PM	48.1	64.9	47.0
10:55 PM - 11:00 PM	46.5	50.6	45.7
11:00 PM - 11:05 PM	47.9	51.4	46.8
11:05 PM - 11:10 PM	46.8	50.3	45.9
11:10 PM - 11:15 PM	46.8	51.3	46.0
11:15 PM - 11:20 PM	46.3	59.7	44.9
11:20 PM - 11:25 PM	45.8	52.5	44.1
11:25 PM - 11:30 PM	46.6	63.0	45.5
11:30 PM - 11:35 PM	46.1	49.8	45.3
11:35 PM - 11:40 PM	45.6	51.6	43.5
11:40 PM - 11:45 PM	44.6	50.8	42.6
11:45 PM - 11:50 PM	42.9	46.2	42.0
11:50 PM - 11:55 PM	43.3	46.3	41.9
11:55 PM - 12:00 AM	44.5	55.4	42.4
12:00 AM - 12:05 AM	44.3	47.2	43.4
12:05 AM - 12:10 AM	44.0	48.8	43.1
12:10 AM - 12:15 AM	44.4	50.6	43.6
12:15 AM - 12:20 AM	44.7	52.2	44.0

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023577-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-21
Parameter Noise
Location N3 : หน้าบ้านโซน 5 (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	45.4	49.9	44.2
12:25 AM - 12:30 AM	45.0	50.1	44.0
12:30 AM - 12:35 AM	44.3	47.8	43.1
12:35 AM - 12:40 AM	44.4	49.3	43.7
12:40 AM - 12:45 AM	43.9	49.5	43.1
12:45 AM - 12:50 AM	44.4	61.0	43.4
12:50 AM - 12:55 AM	44.8	64.6	43.8
12:55 AM - 01:00 AM	44.3	50.8	43.6
01:00 AM - 01:05 AM	44.6	51.6	43.9
01:05 AM - 01:10 AM	45.8	47.7	44.1
01:10 AM - 01:15 AM	44.0	46.5	43.1
01:15 AM - 01:20 AM	44.5	49.9	43.4
01:20 AM - 01:25 AM	43.2	49.2	42.3
01:25 AM - 01:30 AM	47.7	63.9	43.2
01:30 AM - 01:35 AM	44.5	60.1	42.5
01:35 AM - 01:40 AM	54.1	72.2	45.8
01:40 AM - 01:45 AM	43.6	56.5	41.8
01:45 AM - 01:50 AM	42.9	59.3	41.3
01:50 AM - 01:55 AM	41.8	46.2	40.5
01:55 AM - 02:00 AM	41.6	49.0	40.3
02:00 AM - 02:05 AM	41.6	47.2	40.6
02:05 AM - 02:10 AM	54.5	68.9	41.8
02:10 AM - 02:15 AM	44.9	51.2	44.1
02:15 AM - 02:20 AM	45.1	47.7	44.3
02:20 AM - 02:25 AM	45.1	48.0	44.3
02:25 AM - 02:30 AM	45.2	49.3	44.2
02:30 AM - 02:35 AM	45.2	48.2	43.8
02:35 AM - 02:40 AM	45.6	52.5	44.1
02:40 AM - 02:45 AM	45.5	48.2	44.3
02:45 AM - 02:50 AM	44.4	57.8	43.4
02:50 AM - 02:55 AM	42.7	47.5	41.9
02:55 AM - 03:00 AM	43.5	50.2	42.5
03:00 AM - 03:05 AM	43.9	51.5	42.6
03:05 AM - 03:10 AM	43.5	49.1	42.6
03:10 AM - 03:15 AM	43.9	53.8	43.2
03:15 AM - 03:20 AM	44.7	55.9	43.1
03:20 AM - 03:25 AM	44.5	50.5	43.0
03:25 AM - 03:30 AM	45.9	63.6	43.0
03:30 AM - 03:35 AM	45.4	48.8	43.6
03:35 AM - 03:40 AM	45.8	50.4	44.5

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023577-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-21
Parameter Noise
Location N3 : หน้าบ้านโซน 5 (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 00472126

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	43.9	49.9	43.1
03:45 AM - 03:50 AM	47.0	63.6	44.5
03:50 AM - 03:55 AM	44.4	50.2	42.5
03:55 AM - 04:00 AM	43.3	47.7	42.4
04:00 AM - 04:05 AM	45.1	49.2	43.6
04:05 AM - 04:10 AM	44.0	48.3	42.4
04:10 AM - 04:15 AM	54.5	70.6	42.1
04:15 AM - 04:20 AM	53.0	67.7	41.7
04:20 AM - 04:25 AM	42.9	51.3	41.4
04:25 AM - 04:30 AM	50.6	67.7	40.9
04:30 AM - 04:35 AM	47.3	67.4	40.0
04:35 AM - 04:40 AM	48.9	67.7	39.2
04:40 AM - 04:45 AM	51.7	67.9	38.9
04:45 AM - 04:50 AM	53.6	68.3	39.0
04:50 AM - 04:55 AM	51.1	67.8	38.0
04:55 AM - 05:00 AM	53.8	79.0	38.4
05:00 AM - 05:05 AM	52.7	68.0	39.3
05:05 AM - 05:10 AM	52.3	68.4	38.6
05:10 AM - 05:15 AM	54.0	68.4	38.0
05:15 AM - 05:20 AM	52.4	69.2	39.2
05:20 AM - 05:25 AM	54.3	69.1	38.4
05:25 AM - 05:30 AM	52.2	69.2	38.2
05:30 AM - 05:35 AM	49.2	68.8	38.2
05:35 AM - 05:40 AM	53.7	69.1	40.6
05:40 AM - 05:45 AM	54.8	68.6	41.8
05:45 AM - 05:50 AM	55.0	70.6	41.6
05:50 AM - 05:55 AM	48.0	69.6	41.5
05:55 AM - 06:00 AM	45.3	56.3	41.9
06:00 AM - 07:00 AM	53.1	86.2	42.5
07:00 AM - 08:00 AM	48.3	67.9	44.4
08:00 AM - 09:00 AM	42.5	76.8	42.1
09:00 AM - 10:00 AM	48.8	83.7	39.0

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากชุมชน ระยะเวลาเฉลี่ย 24 ชั่วโมง และระดับเสียงของเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023578-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-22
Parameter Noise
Location N4 : ตึกสหกิจชุมนิวาสหมอ 5 ฝั่งนครศักดิ์ (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 023391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.8	72.7	46.1
11:00 AM - 12:00 PM	52.6	79.5	45.3
12:00 PM - 01:00 PM	51.8	75.1	47.2
01:00 PM - 02:00 PM	51.9	70.1	48.1
02:00 PM - 03:00 PM	51.1	70.7	47.2
03:00 PM - 04:00 PM	52.9	80.1	48.4
04:00 PM - 05:00 PM	52.6	77.5	47.9
05:00 PM - 06:00 PM	53.2	79.8	47.8
06:00 PM - 07:00 PM	54.5	77.6	49.2
07:00 PM - 08:00 PM	54.8	78.3	51.6
08:00 PM - 09:00 PM	54.2	73.4	51.8
09:00 PM - 10:00 PM	52.1	71.1	49.8
10:00 PM - 10:05 PM	53.9	67.5	50.1
10:05 PM - 10:10 PM	53.1	68.3	50.1
10:10 PM - 10:15 PM	51.8	64.8	49.5
10:15 PM - 10:20 PM	52.7	69.3	49.3
10:20 PM - 10:25 PM	52.8	67.1	49.9
10:25 PM - 10:30 PM	51.1	56.9	48.9
10:30 PM - 10:35 PM	52.8	69.6	49.0
10:35 PM - 10:40 PM	53.5	67.9	49.5
10:40 PM - 10:45 PM	52.4	65.4	49.3
10:45 PM - 10:50 PM	51.6	59.3	49.1
10:50 PM - 10:55 PM	52.6	56.8	50.0
10:55 PM - 11:00 PM	53.6	63.1	50.0
11:00 PM - 11:05 PM	52.5	57.1	49.9
11:05 PM - 11:10 PM	54.3	60.3	49.7
11:10 PM - 11:15 PM	52.4	59.8	48.9
11:15 PM - 11:20 PM	52.5	67.5	48.5
11:20 PM - 11:25 PM	51.4	58.8	48.0
11:25 PM - 11:30 PM	51.3	57.0	48.2
11:30 PM - 11:35 PM	50.8	58.4	48.3
11:35 PM - 11:40 PM	51.1	56.3	48.8
11:40 PM - 11:45 PM	52.0	64.2	49.0
11:45 PM - 11:50 PM	50.8	56.5	48.6
11:50 PM - 11:55 PM	50.8	60.8	48.0
11:55 PM - 12:00 AM	51.8	55.9	48.8
12:00 AM - 12:05 AM	51.2	60.1	48.4
12:05 AM - 12:10 AM	50.7	60.0	47.8
12:10 AM - 12:15 AM	50.0	60.3	47.5
12:15 AM - 12:20 AM	51.5	63.2	47.9

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023578-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-22
Parameter Noise
Location N4 : หัวท้ายหมู่บ้านบริเวณหมู่ 5 ม่านศุรศักดิ์ (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	51.5	62.0	47.8
12:25 AM - 12:30 AM	50.6	62.7	47.7
12:30 AM - 12:35 AM	49.4	55.6	47.7
12:35 AM - 12:40 AM	49.8	55.1	47.3
12:40 AM - 12:45 AM	59.3	80.6	47.3
12:45 AM - 12:50 AM	52.1	68.7	48.3
12:50 AM - 12:55 AM	49.8	61.3	47.7
12:55 AM - 01:00 AM	50.2	64.2	46.8
01:00 AM - 01:05 AM	49.6	58.8	47.1
01:05 AM - 01:10 AM	55.1	77.0	46.8
01:10 AM - 01:15 AM	48.5	53.8	47.0
01:15 AM - 01:20 AM	50.6	64.8	46.9
01:20 AM - 01:25 AM	48.2	57.7	46.8
01:25 AM - 01:30 AM	47.8	52.4	46.5
01:30 AM - 01:35 AM	49.1	64.2	46.7
01:35 AM - 01:40 AM	47.7	53.5	46.2
01:40 AM - 01:45 AM	48.2	57.4	45.9
01:45 AM - 01:50 AM	47.5	57.0	46.1
01:50 AM - 01:55 AM	49.6	64.0	46.5
01:55 AM - 02:00 AM	48.2	55.4	46.2
02:00 AM - 02:05 AM	47.9	55.0	46.2
02:05 AM - 02:10 AM	47.1	52.5	45.7
02:10 AM - 02:15 AM	47.4	57.9	45.8
02:15 AM - 02:20 AM	47.2	58.0	45.6
02:20 AM - 02:25 AM	46.8	52.2	45.7
02:25 AM - 02:30 AM	47.0	54.6	45.7
02:30 AM - 02:35 AM	50.4	67.1	45.7
02:35 AM - 02:40 AM	48.1	61.8	45.4
02:40 AM - 02:45 AM	47.9	53.3	45.7
02:45 AM - 02:50 AM	50.6	68.5	46.1
02:50 AM - 02:55 AM	47.0	52.7	45.6
02:55 AM - 03:00 AM	47.3	55.1	45.7
03:00 AM - 03:05 AM	48.1	54.2	46.2
03:05 AM - 03:10 AM	49.1	59.1	46.4
03:10 AM - 03:15 AM	48.0	56.7	45.6
03:15 AM - 03:20 AM	49.9	61.1	45.4
03:20 AM - 03:25 AM	51.0	61.9	45.7
03:25 AM - 03:30 AM	47.7	58.5	45.6
03:30 AM - 03:35 AM	49.4	66.2	45.7
03:35 AM - 03:40 AM	47.8	54.4	46.2

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023578-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-22
Parameter Noise
Location N4 : หัวท้ายหมู่บ้านบริเวณหมู่ 5 ม่านศุรศักดิ์ (Shut down)
Measurement Date May 29 - 30, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	48.1	57.2	46.1
03:45 AM - 03:50 AM	47.2	53.5	45.8
03:50 AM - 03:55 AM	47.9	57.5	46.1
03:55 AM - 04:00 AM	47.0	55.8	45.9
04:00 AM - 04:05 AM	47.8	57.7	45.8
04:05 AM - 04:10 AM	47.5	56.2	45.7
04:10 AM - 04:15 AM	48.2	56.2	46.0
04:15 AM - 04:20 AM	49.6	61.1	46.0
04:20 AM - 04:25 AM	50.6	62.2	46.0
04:25 AM - 04:30 AM	48.4	59.7	45.8
04:30 AM - 04:35 AM	47.8	57.5	45.7
04:35 AM - 04:40 AM	47.7	55.9	46.0
04:40 AM - 04:45 AM	50.6	61.5	46.3
04:45 AM - 04:50 AM	50.8	65.5	47.1
04:50 AM - 04:55 AM	49.8	58.1	47.1
04:55 AM - 05:00 AM	49.2	55.7	47.5
05:00 AM - 05:05 AM	48.3	55.4	46.8
05:05 AM - 05:10 AM	50.6	71.6	47.0
05:10 AM - 05:15 AM	53.1	74.6	48.0
05:15 AM - 05:20 AM	51.9	71.4	48.0
05:20 AM - 05:25 AM	52.7	62.7	49.1
05:25 AM - 05:30 AM	53.3	65.1	50.1
05:30 AM - 05:35 AM	54.1	63.7	49.3
05:35 AM - 05:40 AM	51.6	63.0	48.3
05:40 AM - 05:45 AM	51.7	72.0	48.2
05:45 AM - 05:50 AM	50.3	70.8	48.2
05:50 AM - 05:55 AM	52.1	70.6	48.5
05:55 AM - 06:00 AM	51.5	63.9	48.6
06:00 AM - 07:00 AM	52.3	73.1	48.2
07:00 AM - 08:00 AM	52.4	73.4	47.7
08:00 AM - 09:00 AM	50.3	67.7	46.3
09:00 AM - 10:00 AM	50.2	68.7	45.9

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องวัดเสียงรบกวนประกอบมาตรฐานทางวิชาการ พ.ศ. 2567

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023579-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-23
Parameter Noise
Location N4 : หัวท้ายหมู่บ้านบริเวณหมู่ 5 ม่านศุรศักดิ์ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.7	69.7	48.2
11:00 AM - 12:00 PM	55.1	77.6	49.0
12:00 PM - 01:00 PM	51.9	80.5	45.0
01:00 PM - 02:00 PM	50.0	64.9	46.6
02:00 PM - 03:00 PM	51.5	72.3	47.7
03:00 PM - 04:00 PM	50.1	77.8	45.9
04:00 PM - 05:00 PM	52.6	71.1	47.9
05:00 PM - 06:00 PM	52.6	69.5	49.3
06:00 PM - 07:00 PM	53.4	76.5	49.1
07:00 PM - 08:00 PM	51.9	71.5	48.7
08:00 PM - 09:00 PM	51.2	68.7	48.7
09:00 PM - 10:00 PM	51.5	71.9	48.0
10:00 PM - 10:05 PM	52.6	69.0	47.8
10:05 PM - 10:10 PM	58.4	75.9	49.0
10:10 PM - 10:15 PM	52.8	58.9	50.1
10:15 PM - 10:20 PM	53.1	55.7	51.0
10:20 PM - 10:25 PM	53.5	64.9	50.1
10:25 PM - 10:30 PM	53.6	62.4	51.0
10:30 PM - 10:35 PM	54.2	66.5	51.4
10:35 PM - 10:40 PM	53.9	60.8	51.2
10:40 PM - 10:45 PM	53.5	61.2	50.2
10:45 PM - 10:50 PM	55.5	81.4	51.8
10:50 PM - 10:55 PM	53.5	62.3	51.3
10:55 PM - 11:00 PM	54.4	63.8	52.3
11:00 PM - 11:05 PM	54.0	58.8	52.1
11:05 PM - 11:10 PM	53.9	60.3	52.1
11:10 PM - 11:15 PM	53.7	60.5	51.4
11:15 PM - 11:20 PM	54.3	58.1	52.6
11:20 PM - 11:25 PM	54.7	58.4	53.2
11:25 PM - 11:30 PM	54.8	63.8	52.3
11:30 PM - 11:35 PM	54.6	60.5	52.5
11:35 PM - 11:40 PM	53.4	58.9	51.9
11:40 PM - 11:45 PM	52.7	61.7	51.5
11:45 PM - 11:50 PM	54.3	63.1	52.6
11:50 PM - 11:55 PM	54.5	62.4	52.3
11:55 PM - 12:00 AM	55.0	71.3	52.7
12:00 AM - 12:05 AM	56.1	68.9	54.4
12:05 AM - 12:10 AM	53.7	65.9	53.6
12:10 AM - 12:15 AM	55.5	73.3	52.9
12:15 AM - 12:20 AM	55.1	71.3	53.4

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Approved by
Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023579-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-23
Parameter Noise
Location N4 : หัวท้ายหมู่บ้านบริเวณหมู่ 5 ม่านศุรศักดิ์ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	56.6	73.5	52.3
12:25 AM - 12:30 AM	55.4	63.1	53.0
12:30 AM - 12:35 AM	55.1	58.0	53.0
12:35 AM - 12:40 AM	55.2	60.1	52.5
12:40 AM - 12:45 AM	55.6	63.0	52.6
12:45 AM - 12:50 AM	56.6	72.7	53.8
12:50 AM - 12:55 AM	56.7	63.5	54.4
12:55 AM - 01:00 AM	55.9	66.7	53.7
01:00 AM - 01:05 AM	54.2	58.3	52.8
01:05 AM - 01:10 AM	55.5	63.4	52.6
01:10 AM - 01:15 AM	55.3	62.2	52.7
01:15 AM - 01:20 AM	54.6	62.6	52.2
01:20 AM - 01:25 AM	54.6	59.2	52.7
01:25 AM - 01:30 AM	55.7	68.1	53.9
01:30 AM - 01:35 AM	54.8	59.2	52.7
01:35 AM - 01:40 AM	53.5	57.3	48.4
01:40 AM - 01:45 AM	54.1	64.8	51.4
01:45 AM - 01:50 AM	53.1	61.5	50.6
01:50 AM - 01:55 AM	53.4	59.3	47.1
01:55 AM - 02:00 AM	54.5	59.8	52.2
02:00 AM - 02:05 AM	54.1	61.4	50.6
02:05 AM - 02:10 AM	53.3	59.5	50.9
02:10 AM - 02:15 AM	53.2	58.7	50.5
02:15 AM - 02:20 AM	53.3	60.8	49.4
02:20 AM - 02:25 AM	53.3	58.7	49.8
02:25 AM - 02:30 AM	50.7	58.2	47.6
02:30 AM - 02:35 AM	51.8	62.9	48.3
02:35 AM - 02:40 AM	50.2	58.5	46.3
02:40 AM - 02:45 AM	51.1	65.4	45.8
02:45 AM - 02:50 AM	48.6	60.9	45.1
02:50 AM - 02:55 AM	48.6	59.3	45.5
02:55 AM - 03:00 AM	50.4	66.3	46.2
03:00 AM - 03:05 AM	48.6	57.5	45.4
03:05 AM - 03:10 AM	48.8	55.9	45.6
03:10 AM - 03:15 AM	48.9	57.2	44.9
03:15 AM - 03:20 AM	47.2	58.9	45.1
03:20 AM - 03:25 AM	48.0	59.7	45.2
03:25 AM - 03:30 AM	50.3	61.4	45.1
03:30 AM - 03:35 AM	48.9	61.7	45.1
03:35 AM - 03:40 AM	48.4	60.8	45.1

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Wilawan Borirak
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Saltahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023579-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-23
Parameter Noise
Location N4 : ทิศทางเดินรถเวลาหยุด 5 นำนตุรศัพท์ (Shut down)
Measurement Date May 30 - 31, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	50.3	67.4	45.4
03:45 AM - 03:50 AM	47.6	55.7	45.5
03:50 AM - 03:55 AM	47.9	58.1	44.9
03:55 AM - 04:00 AM	47.2	57.6	44.5
04:00 AM - 04:05 AM	47.4	59.0	44.5
04:05 AM - 04:10 AM	48.5	64.2	44.7
04:10 AM - 04:15 AM	47.2	59.4	44.5
04:15 AM - 04:20 AM	48.1	57.4	45.3
04:20 AM - 04:25 AM	51.2	66.8	45.1
04:25 AM - 04:30 AM	52.1	65.4	45.7
04:30 AM - 04:35 AM	51.4	61.9	45.4
04:35 AM - 04:40 AM	52.1	63.5	45.6
04:40 AM - 04:45 AM	51.4	62.7	45.5
04:45 AM - 04:50 AM	51.2	65.6	45.6
04:50 AM - 04:55 AM	49.5	61.9	45.8
04:55 AM - 05:00 AM	50.5	61.5	45.9
05:00 AM - 05:05 AM	51.3	67.5	46.7
05:05 AM - 05:10 AM	49.9	61.3	46.2
05:10 AM - 05:15 AM	49.6	61.4	46.3
05:15 AM - 05:20 AM	51.2	69.5	46.5
05:20 AM - 05:25 AM	52.8	66.3	47.3
05:25 AM - 05:30 AM	53.5	66.4	48.7
05:30 AM - 05:35 AM	55.1	72.2	51.5
05:35 AM - 05:40 AM	54.7	72.4	51.2
05:40 AM - 05:45 AM	53.0	61.5	49.8
05:45 AM - 05:50 AM	53.0	67.5	49.6
05:50 AM - 05:55 AM	52.7	61.7	49.2
05:55 AM - 06:00 AM	53.5	77.3	47.9
06:00 AM - 07:00 AM	52.6	73.7	48.9
07:00 AM - 08:00 AM	53.3	70.6	49.9
08:00 AM - 09:00 AM	53.4	75.0	49.4
09:00 AM - 10:00 AM	53.5	75.5	49.5

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงงาน ระยะเวลาเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Saltahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023580-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-24
Parameter Noise
Location N4 : ทิศทางเดินรถเวลาหยุด 5 นำนตุรศัพท์ (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.1	78.0	48.0
11:00 AM - 12:00 PM	52.1	73.5	48.2
12:00 PM - 01:00 PM	51.9	72.2	48.2
01:00 PM - 02:00 PM	52.9	81.4	46.9
02:00 PM - 03:00 PM	52.5	81.2	46.1
03:00 PM - 04:00 PM	52.9	78.9	46.2
04:00 PM - 05:00 PM	51.5	74.0	45.9
05:00 PM - 06:00 PM	53.3	82.1	48.1
06:00 PM - 07:00 PM	54.4	82.2	48.8
07:00 PM - 08:00 PM	52.6	71.5	49.1
08:00 PM - 09:00 PM	53.5	73.0	51.4
09:00 PM - 10:00 PM	55.9	70.4	53.7
10:00 PM - 10:05 PM	56.0	61.1	54.2
10:05 PM - 10:10 PM	56.2	64.1	53.8
10:10 PM - 10:15 PM	54.0	61.1	54.3
10:15 PM - 10:20 PM	56.3	59.2	54.9
10:20 PM - 10:25 PM	56.2	62.9	54.0
10:25 PM - 10:30 PM	56.0	58.9	54.5
10:30 PM - 10:35 PM	55.9	60.7	53.9
10:35 PM - 10:40 PM	56.1	65.3	52.5
10:40 PM - 10:45 PM	55.2	67.3	52.0
10:45 PM - 10:50 PM	54.5	58.7	51.4
10:50 PM - 10:55 PM	55.7	66.2	52.0
10:55 PM - 11:00 PM	55.8	60.2	53.4
11:00 PM - 11:05 PM	56.1	64.4	53.8
11:05 PM - 11:10 PM	55.6	59.8	53.4
11:10 PM - 11:15 PM	55.6	69.5	52.9
11:15 PM - 11:20 PM	58.1	71.4	53.6
11:20 PM - 11:25 PM	55.1	69.0	53.4
11:25 PM - 11:30 PM	56.0	59.4	54.1
11:30 PM - 11:35 PM	56.7	59.5	55.2
11:35 PM - 11:40 PM	56.8	58.8	46.9
11:40 PM - 11:45 PM	48.8	56.0	45.8
11:45 PM - 11:50 PM	50.8	62.6	45.7
11:50 PM - 11:55 PM	50.9	63.5	45.7
11:55 PM - 12:00 AM	48.6	67.8	46.4
12:00 AM - 12:05 AM	49.2	59.1	46.0
12:05 AM - 12:10 AM	53.0	68.1	48.3
12:10 AM - 12:15 AM	50.5	61.6	46.8
12:15 AM - 12:20 AM	53.5	69.2	48.1

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Saltahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023580-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-24
Parameter Noise
Location N4 : ทิศทางเดินรถเวลาหยุด 5 นำนตุรศัพท์ (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	51.9	65.9	45.7
12:25 AM - 12:30 AM	49.9	63.1	45.3
12:30 AM - 12:35 AM	47.8	65.1	44.6
12:35 AM - 12:40 AM	48.1	57.4	45.4
12:40 AM - 12:45 AM	48.6	58.5	44.6
12:45 AM - 12:50 AM	50.5	66.1	44.8
12:50 AM - 12:55 AM	56.3	82.2	46.5
12:55 AM - 01:00 AM	57.7	60.8	55.9
01:00 AM - 01:05 AM	57.8	60.9	56.4
01:05 AM - 01:10 AM	58.4	63.4	56.4
01:10 AM - 01:15 AM	58.0	61.4	56.2
01:15 AM - 01:20 AM	58.1	61.9	56.4
01:20 AM - 01:25 AM	58.4	61.8	57.2
01:25 AM - 01:30 AM	58.1	60.6	56.9
01:30 AM - 01:35 AM	58.5	61.5	57.3
01:35 AM - 01:40 AM	58.7	61.6	57.5
01:40 AM - 01:45 AM	58.0	62.7	56.7
01:45 AM - 01:50 AM	58.0	63.7	56.6
01:50 AM - 01:55 AM	58.0	62.1	56.7
01:55 AM - 02:00 AM	57.9	61.3	56.8
02:00 AM - 02:05 AM	58.1	60.9	57.1
02:05 AM - 02:10 AM	58.0	61.6	57.0
02:10 AM - 02:15 AM	57.3	60.6	56.3
02:15 AM - 02:20 AM	56.8	59.6	56.0
02:20 AM - 02:25 AM	56.9	64.8	55.7
02:25 AM - 02:30 AM	56.7	61.8	55.9
02:30 AM - 02:35 AM	56.5	59.8	55.6
02:35 AM - 02:40 AM	56.7	59.2	56.0
02:40 AM - 02:45 AM	56.9	62.1	56.1
02:45 AM - 02:50 AM	57.0	68.4	55.6
02:50 AM - 02:55 AM	56.0	60.8	55.2
02:55 AM - 03:00 AM	55.1	60.5	54.5
03:00 AM - 03:05 AM	54.9	73.0	53.4
03:05 AM - 03:10 AM	53.5	61.0	52.4
03:10 AM - 03:15 AM	52.7	56.6	51.9
03:15 AM - 03:20 AM	54.9	70.7	51.8
03:20 AM - 03:25 AM	52.1	58.5	51.0
03:25 AM - 03:30 AM	51.7	61.1	50.6
03:30 AM - 03:35 AM	52.6	72.1	50.3
03:35 AM - 03:40 AM	51.4	58.9	50.0

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Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Saltahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023580-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-24
Parameter Noise
Location N4 : ทิศทางเดินรถเวลาหยุด 5 นำนตุรศัพท์ (Shut down)
Measurement Date May 31 - Jun 01, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	50.4	56.0	49.2
03:45 AM - 03:50 AM	50.2	58.8	48.4
03:50 AM - 03:55 AM	49.8	55.4	48.2
03:55 AM - 04:00 AM	49.0	56.1	47.9
04:00 AM - 04:05 AM	49.0	56.9	47.3
04:05 AM - 04:10 AM	48.8	58.8	47.2
04:10 AM - 04:15 AM	51.3	71.9	47.4
04:15 AM - 04:20 AM	48.7	57.5	47.2
04:20 AM - 04:25 AM	51.5	63.1	47.3
04:25 AM - 04:30 AM	52.2	62.0	47.5
04:30 AM - 04:35 AM	51.3	60.7	48.2
04:35 AM - 04:40 AM	51.5	61.3	48.2
04:40 AM - 04:45 AM	49.8	60.5	47.7
04:45 AM - 04:50 AM	51.1	60.9	47.9
04:50 AM - 04:55 AM	50.0	59.5	48.1
04:55 AM - 05:00 AM	50.3	61.1	47.9
05:00 AM - 05:05 AM	48.6	54.0	47.4
05:05 AM - 05:10 AM	49.8	56.2	47.9
05:10 AM - 05:15 AM	51.4	67.0	47.8
05:15 AM - 05:20 AM	52.2	63.9	48.5
05:20 AM - 05:25 AM	53.1	63.4	49.0
05:25 AM - 05:30 AM	53.5	60.2	48.8
05:30 AM - 05:35 AM	53.9	71.8	51.0
05:35 AM - 05:40 AM	55.0	66.7	52.0
05:40 AM - 05:45 AM	54.4	76.3	50.1
05:45 AM - 05:50 AM	51.7	60.8	49.6
05:50 AM - 05:55 AM	54.5	73.6	49.7
05:55 AM - 06:00 AM	52.1	61.8	49.4
06:00 AM - 07:00 AM	53.7	75.5	50.9
07:00 AM - 08:00 AM	53.2	74.1	51.6
08:00 AM - 09:00 AM	53.4	82.8	50.5
09:00 AM - 10:00 AM	53.5	76.3	49.7

Reference Method :
1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงงาน ระยะเวลาเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 30235B1-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-25
Parameter Noise
Location N4 : ที่ทำการหัวหน้าวงษ์ที่ 5 ปากเหล็กดำ (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 10:00 AM	52.8	77.1	49.0
11:00 AM - 12:00 PM	53.8	78.1	49.2
12:00 PM - 01:00 PM	53.2	78.8	48.6
01:00 PM - 02:00 PM	53.6	78.4	49.5
02:00 PM - 03:00 PM	53.9	83.3	48.5
03:00 PM - 04:00 PM	51.7	68.6	46.5
04:00 PM - 05:00 PM	51.0	60.8	46.4
05:00 PM - 06:00 PM	51.5	73.3	49.7
06:00 PM - 07:00 PM	53.7	73.3	50.8
07:00 PM - 08:00 PM	54.2	72.2	51.5
08:00 PM - 09:00 PM	55.6	70.3	52.7
09:00 PM - 10:00 PM	55.8	69.0	52.6
10:00 PM - 10:05 PM	51.4	61.3	48.7
10:05 PM - 10:10 PM	51.7	66.9	48.2
10:10 PM - 10:15 PM	52.8	70.9	48.6
10:15 PM - 10:20 PM	51.7	61.7	48.6
10:20 PM - 10:25 PM	50.8	61.4	47.6
10:25 PM - 10:30 PM	52.3	67.8	47.6
10:30 PM - 10:35 PM	51.2	59.5	48.8
10:35 PM - 10:40 PM	50.1	57.9	47.7
10:40 PM - 10:45 PM	52.1	65.0	48.8
10:45 PM - 10:50 PM	53.4	69.1	48.1
10:50 PM - 10:55 PM	52.1	62.8	49.2
10:55 PM - 11:00 PM	53.1	70.5	48.6
11:00 PM - 11:05 PM	50.4	56.6	48.3
11:05 PM - 11:10 PM	51.3	60.9	48.5
11:10 PM - 11:15 PM	50.9	56.7	49.0
11:15 PM - 11:20 PM	50.2	64.7	48.3
11:20 PM - 11:25 PM	51.0	61.0	48.3
11:25 PM - 11:30 PM	51.3	61.5	48.9
11:30 PM - 11:35 PM	50.9	64.0	48.8
11:35 PM - 11:40 PM	50.8	62.5	48.3
11:40 PM - 11:45 PM	52.8	75.5	48.8
11:45 PM - 11:50 PM	52.1	65.1	48.4
11:50 PM - 11:55 PM	53.0	69.7	49.2
11:55 PM - 12:00 AM	51.2	60.9	48.1
12:00 AM - 12:05 AM	57.4	66.5	55.7
12:05 AM - 12:10 AM	57.4	66.5	55.4
12:10 AM - 12:15 AM	57.2	61.0	55.6
12:15 AM - 12:20 AM	57.4	66.7	55.5

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 30235B1-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-25
Parameter Noise
Location N4 : ที่ทำการหัวหน้าวงษ์ที่ 5 ปากเหล็กดำ (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	56.3	60.0	53.8
12:25 AM - 12:30 AM	56.9	59.7	54.6
12:30 AM - 12:35 AM	56.1	60.1	53.8
12:35 AM - 12:40 AM	57.3	60.4	55.4
12:40 AM - 12:45 AM	57.3	60.5	55.5
12:45 AM - 12:50 AM	56.3	60.4	54.0
12:50 AM - 12:55 AM	55.4	60.7	52.7
12:55 AM - 01:00 AM	55.0	61.6	52.2
01:00 AM - 01:05 AM	55.5	62.2	52.4
01:05 AM - 01:10 AM	55.8	63.6	53.6
01:10 AM - 01:15 AM	56.1	67.1	53.3
01:15 AM - 01:20 AM	55.5	66.7	51.9
01:20 AM - 01:25 AM	54.3	62.7	50.3
01:25 AM - 01:30 AM	54.5	58.5	51.2
01:30 AM - 01:35 AM	55.2	62.7	51.9
01:35 AM - 01:40 AM	54.5	59.2	50.7
01:40 AM - 01:45 AM	54.3	60.4	51.1
01:45 AM - 01:50 AM	56.2	61.8	51.7
01:50 AM - 01:55 AM	55.1	61.2	50.8
01:55 AM - 02:00 AM	55.0	72.6	50.8
02:00 AM - 02:05 AM	53.3	60.0	48.4
02:05 AM - 02:10 AM	53.2	58.7	48.7
02:10 AM - 02:15 AM	52.0	58.5	48.3
02:15 AM - 02:20 AM	53.2	57.4	49.9
02:20 AM - 02:25 AM	52.6	61.1	47.9
02:25 AM - 02:30 AM	52.7	59.1	47.7
02:30 AM - 02:35 AM	53.1	56.2	48.2
02:35 AM - 02:40 AM	51.3	56.1	47.3
02:40 AM - 02:45 AM	52.5	59.7	48.4
02:45 AM - 02:50 AM	52.1	63.1	48.2
02:50 AM - 02:55 AM	52.0	56.3	48.0
02:55 AM - 03:00 AM	52.7	57.3	48.2
03:00 AM - 03:05 AM	52.8	57.6	48.1
03:05 AM - 03:10 AM	52.0	58.0	47.8
03:10 AM - 03:15 AM	50.4	56.3	47.2
03:15 AM - 03:20 AM	51.4	58.2	48.1
03:20 AM - 03:25 AM	51.1	54.5	47.9
03:25 AM - 03:30 AM	50.6	57.0	47.5
03:30 AM - 03:35 AM	50.4	57.3	47.5
03:35 AM - 03:40 AM	51.1	65.9	47.7

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Wilawan Borirak
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 30235B1-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-25
Parameter Noise
Location N4 : ที่ทำการหัวหน้าวงษ์ที่ 5 ปากเหล็กดำ (Shut down)
Measurement Date Jun 01 - 02, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	51.4	58.7	47.8
03:45 AM - 03:50 AM	51.4	59.7	47.9
03:50 AM - 03:55 AM	50.6	63.7	47.5
03:55 AM - 04:00 AM	51.5	61.9	47.3
04:00 AM - 04:05 AM	52.3	62.7	47.7
04:05 AM - 04:10 AM	52.6	62.7	48.3
04:10 AM - 04:15 AM	50.6	62.9	47.6
04:15 AM - 04:20 AM	49.7	57.6	47.4
04:20 AM - 04:25 AM	48.6	58.7	47.2
04:25 AM - 04:30 AM	49.7	64.7	47.0
04:30 AM - 04:35 AM	49.7	59.9	47.4
04:35 AM - 04:40 AM	52.1	70.7	48.1
04:40 AM - 04:45 AM	54.0	78.4	48.1
04:45 AM - 04:50 AM	49.4	57.7	47.8
04:50 AM - 04:55 AM	49.4	61.6	48.0
04:55 AM - 05:00 AM	49.3	59.3	48.1
05:00 AM - 05:05 AM	49.8	56.1	48.4
05:05 AM - 05:10 AM	50.5	63.2	48.6
05:10 AM - 05:15 AM	50.0	62.3	48.5
05:15 AM - 05:20 AM	52.0	61.2	49.1
05:20 AM - 05:25 AM	54.3	65.9	49.0
05:25 AM - 05:30 AM	56.8	67.1	54.7
05:30 AM - 05:35 AM	53.4	64.0	49.5
05:35 AM - 05:40 AM	53.2	63.1	49.3
05:40 AM - 05:45 AM	52.7	78.0	49.2
05:45 AM - 05:50 AM	53.2	69.2	48.8
05:50 AM - 05:55 AM	54.3	65.7	49.3
05:55 AM - 06:00 AM	52.6	66.0	49.1
06:00 AM - 07:00 AM	52.2	74.1	49.0
07:00 AM - 08:00 AM	53.2	80.9	47.9
08:00 AM - 09:00 AM	51.4	71.7	47.2
09:00 AM - 10:00 AM	51.5	76.1	47.1

Reference Method :
1 ISO 1996-1
2 ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกระดาษ ระดับเสียงเฉลี่ย 24 ชั่วโมง และการปรับระดับเสียงสำหรับการประกอบกิจการโรงงาน พ.ศ. 2562

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 30235B2-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-26
Parameter Noise
Location N4 : ที่ทำการหัวหน้าวงษ์ที่ 5 ปากเหล็กดำ (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.6	66.3	47.3
11:00 AM - 12:00 PM	52.5	85.9	47.0
12:00 PM - 01:00 PM	51.1	71.2	46.9
01:00 PM - 02:00 PM	51.5	69.7	47.7
02:00 PM - 03:00 PM	50.7	70.3	46.8
03:00 PM - 04:00 PM	52.5	79.7	48.0
04:00 PM - 05:00 PM	52.2	77.1	47.5
05:00 PM - 06:00 PM	52.8	79.4	47.4
06:00 PM - 07:00 PM	54.1	77.2	48.8
07:00 PM - 08:00 PM	54.4	77.9	51.2
08:00 PM - 09:00 PM	53.8	73.0	51.4
09:00 PM - 10:00 PM	51.7	68.7	49.4
10:00 PM - 10:05 PM	53.5	67.1	49.7
10:05 PM - 10:10 PM	52.7	67.9	49.7
10:10 PM - 10:15 PM	51.4	64.4	49.1
10:15 PM - 10:20 PM	52.3	68.9	48.9
10:20 PM - 10:25 PM	53.4	66.7	49.5
10:25 PM - 10:30 PM	50.7	66.5	48.5
10:30 PM - 10:35 PM	52.4	69.2	48.6
10:35 PM - 10:40 PM	53.1	67.5	49.1
10:40 PM - 10:45 PM	52.0	65.0	48.9
10:45 PM - 10:50 PM	51.2	68.9	48.3
10:50 PM - 10:55 PM	52.2	66.4	49.6
10:55 PM - 11:00 PM	53.2	62.7	49.6
11:00 PM - 11:05 PM	52.1	66.7	49.5
11:05 PM - 11:10 PM	53.9	59.9	49.3
11:10 PM - 11:15 PM	52.0	59.4	48.5
11:15 PM - 11:20 PM	53.1	67.1	48.1
11:20 PM - 11:25 PM	51.0	58.4	47.6
11:25 PM - 11:30 PM	50.9	59.6	47.8
11:30 PM - 11:35 PM	50.4	58.0	47.9
11:35 PM - 11:40 PM	50.7	55.9	48.4
11:40 PM - 11:45 PM	51.6	63.8	48.6
11:45 PM - 11:50 PM	50.4	56.1	48.2
11:50 PM - 11:55 PM	50.4	60.2	47.8
11:55 PM - 12:00 AM	51.4	63.5	48.4
12:00 AM - 12:05 AM	50.8	59.7	48.0
12:05 AM - 12:10 AM	50.3	59.6	47.4
12:10 AM - 12:15 AM	49.6	59.9	47.1
12:15 AM - 12:20 AM	51.1	62.9	47.5

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023582-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-26
Parameter Noise
Location N4 : ที่ทำการพัฒนาชุมชนใหม่ 5 ปานสุรศักดิ์ (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	51.1	61.6	47.4
12:25 AM - 12:30 AM	50.2	62.3	47.3
12:30 AM - 12:35 AM	49.0	55.2	47.3
12:35 AM - 12:40 AM	48.4	54.7	46.9
12:40 AM - 12:45 AM	58.7	80.2	45.9
12:45 AM - 12:50 AM	51.9	68.3	47.9
12:50 AM - 12:55 AM	49.4	60.9	47.3
12:55 AM - 01:00 AM	49.8	61.8	46.2
01:00 AM - 01:05 AM	49.2	58.4	46.7
01:05 AM - 01:10 AM	54.7	76.6	46.4
01:10 AM - 01:15 AM	48.3	52.4	46.8
01:15 AM - 01:20 AM	50.0	64.4	46.5
01:20 AM - 01:25 AM	47.8	57.3	46.4
01:25 AM - 01:30 AM	47.6	52.0	46.1
01:30 AM - 01:35 AM	48.7	61.9	46.3
01:35 AM - 01:40 AM	47.3	53.1	45.8
01:40 AM - 01:45 AM	47.8	57.0	45.5
01:45 AM - 01:50 AM	47.1	56.6	45.7
01:50 AM - 01:55 AM	49.2	63.6	46.1
01:55 AM - 02:00 AM	47.8	55.0	45.8
02:00 AM - 02:05 AM	47.5	54.6	45.8
02:05 AM - 02:10 AM	46.3	52.1	45.3
02:10 AM - 02:15 AM	47.0	57.5	45.4
02:15 AM - 02:20 AM	46.8	57.6	45.2
02:20 AM - 02:25 AM	46.4	51.6	45.3
02:25 AM - 02:30 AM	46.6	54.2	45.3
02:30 AM - 02:35 AM	50.0	66.7	45.3
02:35 AM - 02:40 AM	47.7	61.4	45.0
02:40 AM - 02:45 AM	46.6	52.9	45.3
02:45 AM - 02:50 AM	50.3	68.1	45.7
02:50 AM - 02:55 AM	46.6	52.3	45.2
02:55 AM - 03:00 AM	46.9	54.7	45.3
03:00 AM - 03:05 AM	47.7	53.6	45.8
03:05 AM - 03:10 AM	48.7	58.7	46.0
03:10 AM - 03:15 AM	47.6	56.3	45.2
03:15 AM - 03:20 AM	49.3	68.7	45.0
03:20 AM - 03:25 AM	50.6	61.5	45.3
03:25 AM - 03:30 AM	47.3	58.1	45.2
03:30 AM - 03:35 AM	49.0	65.8	45.3
03:35 AM - 03:40 AM	47.4	54.0	45.8

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Approved by
Wilawan Borirak
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023582-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-26
Parameter Noise
Location N4 : ที่ทำการพัฒนาชุมชนใหม่ 5 ปานสุรศักดิ์ (Shut down)
Measurement Date Jun 02 - 03, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	47.7	56.8	45.7
03:45 AM - 03:50 AM	46.8	53.1	45.4
03:50 AM - 03:55 AM	47.5	57.1	45.9
03:55 AM - 04:00 AM	46.8	55.2	45.5
04:00 AM - 04:05 AM	47.4	57.3	45.4
04:05 AM - 04:10 AM	47.1	55.8	45.3
04:10 AM - 04:15 AM	47.8	55.8	45.6
04:15 AM - 04:20 AM	49.2	60.7	45.6
04:20 AM - 04:25 AM	50.2	63.8	45.6
04:25 AM - 04:30 AM	48.0	59.3	45.4
04:30 AM - 04:35 AM	47.4	57.1	45.3
04:35 AM - 04:40 AM	47.3	55.5	45.6
04:40 AM - 04:45 AM	50.7	61.1	45.9
04:45 AM - 04:50 AM	50.4	65.1	46.7
04:50 AM - 04:55 AM	49.4	57.7	46.7
04:55 AM - 05:00 AM	48.8	55.3	47.1
05:00 AM - 05:05 AM	47.9	55.0	46.4
05:05 AM - 05:10 AM	50.2	71.2	46.6
05:10 AM - 05:15 AM	52.7	74.2	47.6
05:15 AM - 05:20 AM	51.3	73.0	47.6
05:20 AM - 05:25 AM	52.3	62.3	48.7
05:25 AM - 05:30 AM	52.9	64.7	49.7
05:30 AM - 05:35 AM	53.7	63.3	48.9
05:35 AM - 05:40 AM	51.2	62.6	47.9
05:40 AM - 05:45 AM	51.3	72.5	47.8
05:45 AM - 05:50 AM	49.9	70.4	47.8
05:50 AM - 05:55 AM	53.7	70.2	48.1
05:55 AM - 06:00 AM	51.1	63.5	48.2
06:00 AM - 07:00 AM	51.9	72.7	47.8
07:00 AM - 08:00 AM	52.0	72.6	47.3
08:00 AM - 09:00 AM	49.9	67.3	45.9
09:00 AM - 10:00 AM	49.8	68.3	45.5

Reference Method :
1. ISO 1996-1
2. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง หลักเกณฑ์และวิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงดังเกินกว่า 24 ชั่วโมง และระดับเสียงสูงสุดที่เครื่องวัดระดับเสียงแสดงค่าขณะตรวจวัดรบกวน พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023583-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-27
Parameter Noise
Location N4 : ที่ทำการพัฒนาชุมชนใหม่ 5 ปานสุรศักดิ์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.2	67.7	46.1
11:00 AM - 12:00 PM	51.5	61.8	45.5
12:00 PM - 01:00 PM	49.6	68.9	44.9
01:00 PM - 02:00 PM	50.3	69.6	45.1
02:00 PM - 03:00 PM	49.9	75.6	45.5
03:00 PM - 04:00 PM	52.0	79.6	46.6
04:00 PM - 05:00 PM	51.6	70.5	47.9
05:00 PM - 06:00 PM	51.0	75.1	48.2
06:00 PM - 07:00 PM	52.5	73.8	48.7
07:00 PM - 08:00 PM	51.3	73.8	50.8
08:00 PM - 09:00 PM	53.0	71.6	50.3
09:00 PM - 10:00 PM	52.0	77.2	48.7
10:00 PM - 10:05 PM	49.1	55.6	47.5
10:05 PM - 10:10 PM	50.7	69.5	47.9
10:10 PM - 10:15 PM	50.1	58.8	48.2
10:15 PM - 10:20 PM	49.4	54.4	47.8
10:20 PM - 10:25 PM	49.4	62.7	47.5
10:25 PM - 10:30 PM	48.8	56.0	47.2
10:30 PM - 10:35 PM	49.9	61.7	47.3
10:35 PM - 10:40 PM	50.7	66.6	47.1
10:40 PM - 10:45 PM	49.1	56.8	47.2
10:45 PM - 10:50 PM	48.7	58.7	46.9
10:50 PM - 10:55 PM	49.6	59.6	47.3
10:55 PM - 11:00 PM	49.9	58.9	47.6
11:00 PM - 11:05 PM	50.1	59.9	47.8
11:05 PM - 11:10 PM	51.0	65.3	47.8
11:10 PM - 11:15 PM	49.0	54.8	47.2
11:15 PM - 11:20 PM	48.4	54.5	47.0
11:20 PM - 11:25 PM	49.8	63.5	47.4
11:25 PM - 11:30 PM	51.2	63.5	47.4
11:30 PM - 11:35 PM	48.6	56.5	46.7
11:35 PM - 11:40 PM	48.3	53.4	46.9
11:40 PM - 11:45 PM	48.6	54.8	46.9
11:45 PM - 11:50 PM	48.7	55.1	46.8
11:50 PM - 11:55 PM	48.9	55.8	46.9
11:55 PM - 12:00 AM	49.7	59.0	46.7
12:00 AM - 12:05 AM	48.1	54.8	46.7
12:05 AM - 12:10 AM	47.5	52.7	46.6
12:10 AM - 12:15 AM	50.4	62.0	46.5
12:15 AM - 12:20 AM	50.9	67.8	46.5

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Approved by
Wilawan Borirak
Manager

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ALS LABORATORY GROUP (THAILAND) CO. LTD. An ALS Limited Company
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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023583-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-27
Parameter Noise
Location N4 : ที่ทำการพัฒนาชุมชนใหม่ 5 ปานสุรศักดิ์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	50.0	66.5	46.6
12:25 AM - 12:30 AM	47.5	51.8	46.1
12:30 AM - 12:35 AM	49.1	56.1	46.8
12:35 AM - 12:40 AM	48.9	58.8	46.6
12:40 AM - 12:45 AM	47.4	51.9	46.0
12:45 AM - 12:50 AM	47.9	58.2	46.3
12:50 AM - 12:55 AM	47.5	54.0	46.1
12:55 AM - 01:00 AM	48.4	56.5	46.4
01:00 AM - 01:05 AM	48.4	61.1	46.5
01:05 AM - 01:10 AM	48.1	58.6	46.5
01:10 AM - 01:15 AM	48.4	56.0	46.6
01:15 AM - 01:20 AM	47.9	55.8	46.3
01:20 AM - 01:25 AM	47.4	59.1	45.9
01:25 AM - 01:30 AM	47.1	60.1	45.2
01:30 AM - 01:35 AM	46.5	52.1	45.2
01:35 AM - 01:40 AM	47.4	56.2	45.6
01:40 AM - 01:45 AM	46.9	57.1	45.1
01:45 AM - 01:50 AM	46.9	53.2	45.6
01:50 AM - 01:55 AM	46.9	51.1	45.7
01:55 AM - 02:00 AM	48.1	60.7	45.8
02:00 AM - 02:05 AM	48.5	58.9	45.7
02:05 AM - 02:10 AM	54.1	71.4	45.9
02:10 AM - 02:15 AM	46.9	51.9	45.8
02:15 AM - 02:20 AM	46.6	51.0	45.3
02:20 AM - 02:25 AM	48.4	56.9	45.8
02:25 AM - 02:30 AM	47.2	57.1	45.4
02:30 AM - 02:35 AM	49.3	66.8	45.3
02:35 AM - 02:40 AM	49.2	63.0	45.6
02:40 AM - 02:45 AM	46.8	56.2	45.4
02:45 AM - 02:50 AM	51.2	68.8	45.9
02:50 AM - 02:55 AM	47.4	53.3	45.6
02:55 AM - 03:00 AM	46.8	51.7	45.3
03:00 AM - 03:05 AM	47.1	55.3	45.5
03:05 AM - 03:10 AM	47.4	56.6	45.4
03:10 AM - 03:15 AM	47.6	58.3	45.0
03:15 AM - 03:20 AM	50.0	72.5	45.5
03:20 AM - 03:25 AM	47.8	57.9	45.3
03:25 AM - 03:30 AM	47.2	59.1	45.1
03:30 AM - 03:35 AM	48.5	60.0	44.8
03:35 AM - 03:40 AM	48.4	58.2	44.8

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Wilawan Borirak
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023583-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-27
Parameter Noise
Location N4 : ทิศทางด้านบริเวณหมู่ 5 ปานสรรค์ (Shut down)
Measurement Date Jun 03 - 04, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	47.7	58.3	44.9
03:45 AM - 03:50 AM	47.4	59.0	44.6
03:50 AM - 03:55 AM	47.8	58.4	44.9
03:55 AM - 04:00 AM	47.1	58.6	44.6
04:00 AM - 04:05 AM	48.6	71.6	44.8
04:05 AM - 04:10 AM	48.2	59.2	45.1
04:10 AM - 04:15 AM	47.9	60.3	44.5
04:15 AM - 04:20 AM	48.4	59.5	45.7
04:20 AM - 04:25 AM	52.4	75.7	45.8
04:25 AM - 04:30 AM	50.6	61.8	45.5
04:30 AM - 04:35 AM	49.8	61.9	45.5
04:35 AM - 04:40 AM	50.5	60.6	45.7
04:40 AM - 04:45 AM	50.0	66.1	45.5
04:45 AM - 04:50 AM	49.2	57.8	45.8
04:50 AM - 04:55 AM	51.2	72.1	45.2
04:55 AM - 05:00 AM	47.7	63.9	44.2
05:00 AM - 05:05 AM	47.8	64.0	44.0
05:05 AM - 05:10 AM	48.8	67.9	44.8
05:10 AM - 05:15 AM	53.3	71.7	45.6
05:15 AM - 05:20 AM	50.3	63.9	45.8
05:20 AM - 05:25 AM	53.0	70.5	46.2
05:25 AM - 05:30 AM	52.8	68.0	46.8
05:30 AM - 05:35 AM	51.6	63.1	46.4
05:35 AM - 05:40 AM	52.0	66.2	46.9
05:40 AM - 05:45 AM	53.1	64.4	46.0
05:45 AM - 05:50 AM	52.9	72.7	46.4
05:50 AM - 05:55 AM	53.3	67.2	46.4
05:55 AM - 06:00 AM	51.1	63.4	46.7
06:00 AM - 07:00 AM	53.8	77.0	46.8
07:00 AM - 08:00 AM	54.2	69.2	51.7
08:00 AM - 09:00 AM	55.1	90.1	47.8
09:00 AM - 10:00 AM	52.8	80.7	46.4

Reference Method :
1 ISO 1996-1
2 ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงาน ระดับเสียงเกินกว่า 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากประกอบกิจการโรงงาน พ.ศ. 2567

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023584-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Sample No. 2450169-28
Parameter Noise
Location N4 : ทิศทางด้านบริเวณหมู่ 5 ปานสรรค์ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	53.6	79.7	45.9
11:00 AM - 12:00 PM	54.9	76.5	45.8
12:00 PM - 01:00 PM	52.5	84.3	43.5
01:00 PM - 02:00 PM	52.9	81.1	44.9
02:00 PM - 03:00 PM	53.8	81.3	46.4
03:00 PM - 04:00 PM	53.7	76.2	48.0
04:00 PM - 05:00 PM	53.3	85.2	46.1
05:00 PM - 06:00 PM	52.0	75.2	46.3
06:00 PM - 07:00 PM	52.1	75.3	47.2
07:00 PM - 08:00 PM	53.7	73.3	48.9
08:00 PM - 09:00 PM	51.8	72.5	48.2
09:00 PM - 10:00 PM	50.9	67.5	47.1
10:00 PM - 10:05 PM	49.1	58.1	46.2
10:05 PM - 10:10 PM	48.6	56.4	46.0
10:10 PM - 10:15 PM	50.4	61.5	47.4
10:15 PM - 10:20 PM	49.9	59.7	47.0
10:20 PM - 10:25 PM	49.1	57.5	46.9
10:25 PM - 10:30 PM	50.4	61.4	47.4
10:30 PM - 10:35 PM	49.8	59.6	47.1
10:35 PM - 10:40 PM	49.5	57.7	47.5
10:40 PM - 10:45 PM	50.2	64.9	46.7
10:45 PM - 10:50 PM	52.4	72.8	46.9
10:50 PM - 10:55 PM	51.1	63.7	46.8
10:55 PM - 11:00 PM	50.2	60.4	46.6
11:00 PM - 11:05 PM	51.8	63.1	46.6
11:05 PM - 11:10 PM	53.4	68.3	47.0
11:10 PM - 11:15 PM	50.6	59.1	47.3
11:15 PM - 11:20 PM	51.5	64.2	47.2
11:20 PM - 11:25 PM	50.6	59.9	47.0
11:25 PM - 11:30 PM	50.2	61.1	46.3
11:30 PM - 11:35 PM	51.3	63.3	47.3
11:35 PM - 11:40 PM	52.9	76.6	46.8
11:40 PM - 11:45 PM	48.9	56.6	46.3
11:45 PM - 11:50 PM	48.5	61.5	46.2
11:50 PM - 11:55 PM	49.5	58.0	46.1
11:55 PM - 12:00 AM	51.0	74.4	46.6
12:00 AM - 12:05 AM	48.8	59.1	46.3
12:05 AM - 12:10 AM	49.7	59.4	46.6
12:10 AM - 12:15 AM	49.2	58.0	46.6
12:15 AM - 12:20 AM	50.8	66.4	46.2

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023584-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-28
Parameter Noise
Location N4 : ทิศทางด้านบริเวณหมู่ 5 ปานสรรค์ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	48.7	56.1	46.5
12:25 AM - 12:30 AM	52.5	78.8	46.8
12:30 AM - 12:35 AM	48.5	52.6	46.7
12:35 AM - 12:40 AM	49.7	60.8	47.1
12:40 AM - 12:45 AM	48.8	58.4	46.8
12:45 AM - 12:50 AM	49.2	61.2	46.8
12:50 AM - 12:55 AM	49.7	60.5	46.8
12:55 AM - 01:00 AM	48.6	56.5	46.7
01:00 AM - 01:05 AM	49.2	58.4	47.2
01:05 AM - 01:10 AM	49.9	59.0	47.1
01:10 AM - 01:15 AM	48.5	60.0	46.7
01:15 AM - 01:20 AM	48.8	58.6	47.1
01:20 AM - 01:25 AM	48.7	58.6	47.1
01:25 AM - 01:30 AM	49.5	61.0	47.3
01:30 AM - 01:35 AM	49.4	58.2	46.9
01:35 AM - 01:40 AM	49.1	59.9	46.9
01:40 AM - 01:45 AM	48.9	58.7	46.8
01:45 AM - 01:50 AM	49.5	61.6	47.1
01:50 AM - 01:55 AM	49.5	58.3	47.0
01:55 AM - 02:00 AM	50.9	65.9	46.7
02:00 AM - 02:05 AM	53.1	71.6	47.0
02:05 AM - 02:10 AM	49.3	59.7	46.8
02:10 AM - 02:15 AM	48.3	53.1	46.8
02:15 AM - 02:20 AM	50.1	60.1	47.2
02:20 AM - 02:25 AM	49.8	55.6	46.8
02:25 AM - 02:30 AM	49.7	64.3	47.1
02:30 AM - 02:35 AM	50.8	71.2	47.1
02:35 AM - 02:40 AM	49.0	54.7	46.9
02:40 AM - 02:45 AM	51.8	68.6	47.4
02:45 AM - 02:50 AM	50.7	62.3	47.5
02:50 AM - 02:55 AM	48.6	55.1	46.8
02:55 AM - 03:00 AM	50.9	70.7	47.6
03:00 AM - 03:05 AM	53.7	70.9	47.4
03:05 AM - 03:10 AM	49.3	63.9	47.0
03:10 AM - 03:15 AM	48.9	57.7	46.7
03:15 AM - 03:20 AM	49.9	57.3	47.7
03:20 AM - 03:25 AM	50.3	60.4	47.9
03:25 AM - 03:30 AM	52.5	70.6	47.7
03:30 AM - 03:35 AM	50.5	61.8	47.5
03:35 AM - 03:40 AM	49.8	63.0	47.1

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

Lot ID: 2450169
Date Received :Jun 12, 2024
Date Reported :Jun 17, 2024
Report No. : 3023584-1

P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location

Sample No. 2450169-28
Parameter Noise
Location N4 : ทิศทางด้านบริเวณหมู่ 5 ปานสรรค์ (Shut down)
Measurement Date Jun 04 - 05, 2024
Measurement by Santi Chaichana
Sound Level Meter 623391

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.4	59.6	47.0
03:45 AM - 03:50 AM	48.6	55.3	47.1
03:50 AM - 03:55 AM	50.2	65.3	47.2
03:55 AM - 04:00 AM	53.2	80.7	47.3
04:00 AM - 04:05 AM	48.6	66.5	47.8
04:05 AM - 04:10 AM	54.9	74.2	47.7
04:10 AM - 04:15 AM	49.2	59.1	47.2
04:15 AM - 04:20 AM	56.9	77.5	46.8
04:20 AM - 04:25 AM	50.8	65.0	47.1
04:25 AM - 04:30 AM	51.6	61.4	47.3
04:30 AM - 04:35 AM	51.6	62.2	47.7
04:35 AM - 04:40 AM	50.7	60.2	47.1
04:40 AM - 04:45 AM	50.6	63.3	47.0
04:45 AM - 04:50 AM	51.2	62.7	47.3
04:50 AM - 04:55 AM	49.5	62.6	46.6
04:55 AM - 05:00 AM	59.1	86.0	47.5
05:00 AM - 05:05 AM	52.6	77.3	46.9
05:05 AM - 05:10 AM	52.0	74.8	46.9
05:10 AM - 05:15 AM	50.0	66.2	47.0
05:15 AM - 05:20 AM	51.3	68.2	48.0
05:20 AM - 05:25 AM	51.6	62.7	48.0
05:25 AM - 05:30 AM	56.1	79.3	49.1
05:30 AM - 05:35 AM	54.9	76.7	49.8
05:35 AM - 05:40 AM	53.1	61.8	49.4
05:40 AM - 05:45 AM	54.6	71.9	48.7
05:45 AM - 05:50 AM	51.9	59.3	47.9
05:50 AM - 05:55 AM	52.5	72.6	48.0
05:55 AM - 06:00 AM	50.3	59.2	47.7
06:00 AM - 07:00 AM	53.9	76.6	50.2
07:00 AM - 08:00 AM	53.7	70.7	52.2
08:00 AM - 09:00 AM	53.4	76.8	48.2
09:00 AM - 10:00 AM	52.2	76.5	45.9

Reference Method :
1 ISO 1996-1
2 ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากกรงาน ระดับเสียงเกินกว่า 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากประกอบกิจการโรงงาน พ.ศ. 2567

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ภาคผนวก ค-3

ผลการตรวจวิเคราะห์คุณภาพน้ำเสีย-น้ำทิ้งหลังผ่านการบำบัด

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894530-1

Sample Number	23145063-1
Sampled Date	Jan 18, 2024 10:17 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.7	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	28	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.012	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	6.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (b)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	31.9	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	6580	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L		1.0	9.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management Narumon Banchongkit, Supervisor, หน.ฝ่ายแลป ว.323-ง-9445
Approved by Dej Changchon, Senior Manager, หน.ฝ่ายแลป ว.323-ง-9442

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ADDRESS 616/1D 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

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894530-1

Sample Number	23145063-1
Sampled Date	Jan 18, 2024 10:17 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Samoen Khuiyoksul หน.ฝ่ายแลป ว.323-ง-0005 , Samart Khumphlee หน.ฝ่ายแลป ว.204-ง-7830

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

Technical Management Narumon Banchongkit, Supervisor, หน.ฝ่ายแลป ว.323-ง-9445
Approved by Dej Changchon, Senior Manager, หน.ฝ่ายแลป ว.323-ง-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894530-2

Sample Number	23145063-1
Sampled Date	Jan 18, 2024 10:17 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jan 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.0006	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.003	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.008	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.06	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Oil & Grease *	mg/L		3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Sampling By : Samoen Khuiyoksul หน.ฝ่ายแลป ว.323-ง-0005 , Samart Khumphlee หน.ฝ่ายแลป ว.204-ง-7830

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

Technical Management Sawitree Noisangiam, Manager, หน.ฝ่ายแลป ว.204-ง-4709
Approved by Kanokkorn Anek, Senior Manager, หน.ฝ่ายแลป ว.204-ก-6111

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894530-2

* Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management Sawitree Noisangiam, Manager, หน.ฝ่ายแลป ว.204-ง-4709
Approved by Kanokkorn Anek, Senior Manager, หน.ฝ่ายแลป ว.204-ก-6111

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23145063

Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894530-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โรงการรวบรวมอุตสาหกรรมโรงงาน ระยะที่ (โรงงานปลาทู)
Project Location: WWTP

Sample Number	23145063-1
Sampled Date	Jan 18, 2024 10:17 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
[A] Aluminium	mg/L	0.003	0.005	2.69	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.08	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	225	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	7629	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	9.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Sampling By : Sansoen Khuiyoksuk , Samart Khumphlee

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

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

Analysis / Test Report

TESTING
No.0042

Lot ID: 23145063

Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โรงการรวบรวมอุตสาหกรรมโรงงาน ระยะที่ (โรงงานปลาทู)
Project Location: WWTP

Sample Number	23145063-2
Sampled Date	Jan 18, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight 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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	<25	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.007	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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

Technical Management
Narumon Banchongkit
Supervisor
หมายเลขที่ ว-323-ง-9445

Approved by
Dej Changchon
Senior Manager
หมายเลขที่ ว-323-ก-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 23145063

Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โรงการรวบรวมอุตสาหกรรมโรงงาน ระยะที่ (โรงงานปลาทู)
Project Location: WWTP

Sample Number	23145063-2
Sampled Date	Jan 18, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.7	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5920	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	6.3	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, พ.ศ.2560 (2017).
Sampling By : Sansoen Khuiyoksuk หมายเลขที่ ว-323-ง-0005 , Samart Khumphlee หมายเลขที่ ว-204-ง-7830

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

Technical Management
Narumon Banchongkit
Supervisor
หมายเลขที่ ว-323-ง-9445

Approved by
Dej Changchon
Senior Manager
หมายเลขที่ ว-323-ก-9442

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Analysis / Test Report

TESTING
No.0009

Lot ID: 23145063

Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โรงการรวบรวมอุตสาหกรรมโรงงาน ระยะที่ (โรงงานปลาทู)
Project Location: WWTP

Sample Number	23145063-2
Sampled Date	Jan 18, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jan 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.001	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.002	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.006	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.05	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.006	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Sawitree Nolsangiam
Manager
หมายเลขที่ ว-204-ง-4709

Approved by
Kanokkorn Anek
Senior Manager
หมายเลขที่ ว-204-ก-6111

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Analysis / Test Report

TESTING
No.0009
Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมอร์น)
Project Location: WWTP

Sample Number	23145063-2
Sampled Date	Jan 18, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jan 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Sansoen Khuiyoksuil ทะเบียนเลขที่ ว-323-ง-0005 , Samart Khumphlee ทะเบียนเลขที่ ว-204-ง-7830

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

Technical Management Sawitree Nolsanglarn, Manager, ทะเบียนเลขที่ ว-204-ง-4709
Approved by Kanokkorn Anek, Senior Manager, ทะเบียนเลขที่ ว-204-ง-6111

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Analysis / Test Report

TESTING
No.0042
Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมอร์น)
Project Location: WWTP

Sample Number	23145063-2
Sampled Date	Jan 18, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jan 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Aluminium	mg/L	0.003	0.005	2.68	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.05	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	207	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	6685	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	10.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

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

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 the report is not reproduced except in full.

Approved by Narumon Banchongkit, Supervisor

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

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Analysis / Test Report

TESTING
No.0042
Lot ID: 23145063
Date Received : Jan 18, 2024
Date Reported : Jan 25, 2024
Report Number : 2894531 3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมอร์น)
Project Location: WWTP

Sampling By : Sansoen Khuiyoksuil , Samart Khumphlee

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

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 the report is not reproduced except in full.

Approved by Narumon Banchongkit, Supervisor

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Analysis / Test Report

TESTING
No.0042
Lot ID: 2410097
Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924051 1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมอร์น)
Project Location: WWTP

Sample Number	2410097-1
Sampled Date	Feb 22, 2024 9:58 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L		2.0	<2.0	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	29	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C				7.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	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	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	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	5220	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L		1.0	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-ง-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-323-ง-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 the report is not reproduced except in full.

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ระยอง (โรจนะปลวิน)
Project Location : WWTP

Lot ID: 2410097
Date Received :Feb 22, 2024
Date Reported :Mar 01, 2024
Report Number :2924051-1

Sample Number	2410097-1
Sampled Date	Feb 22, 2024 9:58 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Tanasit Wongsachal หมายเลขที่ ว-323-ง-9460 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-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
หมายเลขที่ ว-323-ง-9445

Approved by Dej Changchon
Dej Changchon
Senior Manager
หมายเลขที่ ว-323-ก-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ระยอง (โรจนะปลวิน)
Project Location : WWTP

Lot ID: 2410097
Date Received :Feb 22, 2024
Date Reported :Mar 01, 2024
Report Number :2924051-2

Sample Number	2410097-1
Sampled Date	Feb 22, 2024 9:58 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Feb 23, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.004	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.003	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.09	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.007	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Sampling By : Tanasit Wongsachal หมายเลขที่ ว-323-ง-9460 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-0002

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

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
หมายเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
หมายเลขที่ ว-204-ก-0004

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ระยอง (โรจนะปลวิน)
Project Location : WWTP

Lot ID: 2410097
Date Received :Feb 22, 2024
Date Reported :Mar 01, 2024
Report Number :2924051-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
หมายเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
หมายเลขที่ ว-204-ก-0004

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ระยอง (โรจนะปลวิน)
Project Location : WWTP

Lot ID: 2410097
Date Received :Feb 22, 2024
Date Reported :Mar 01, 2024
Report Number :2924051-3

Sample Number	2410097-1
Sampled Date	Feb 22, 2024 9:58 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
[A] Aluminium	mg/L	0.003	0.005	3.31	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.29	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	321	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	6179	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	9.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	9.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Sampling By : Tanasit Wongsachal , Pattarapol Sawangjaitam

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

Approved by N.Banchongkit
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะกากอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2410097
Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-1

Sample Number	2410097-2
Sampled Date	Feb 22, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight 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	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	28	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.02	0.1	Not Detected	≤1.0	Wastewater analysis manual Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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 (D, F)	Rayong

Technical Management
Narumon Banchongkit
Supervisor
การบินพลศึกษา ๑-323-๑-9445

Approved by
Dej Changchon
Senior Manager
การบินพลศึกษา ๑-323-๑-9442

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะกากอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2410097
Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-1

Sample Number	2410097-2
Sampled Date	Feb 22, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	32.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	4540	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.7	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Tanasit Wongsachai การบินพลศึกษา ๑-323-๑-9460 , Pattarapol Sawangjaiam การบินพลศึกษา ๑-204-๑-0002

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
Narumon Banchongkit
Supervisor
การบินพลศึกษา ๑-323-๑-9445

Approved by
Dej Changchon
Senior Manager
การบินพลศึกษา ๑-323-๑-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะกากอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2410097
Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-2

Sample Number	2410097-2
Sampled Date	Feb 22, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Feb 23, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.001	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.05	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.006	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management
Sawitree Noisangiam
Manager
การบินพลศึกษา ๑-204-๑-0007

Approved by
Kanokkorn Anek
Senior Manager
การบินพลศึกษา ๑-204-๑-0004

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

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะกากอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2410097
Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-2

Sample Number	2410097-2
Sampled Date	Feb 22, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Feb 23, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Oil & Grease *	mg/L		3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Tanasit Wongsachai การบินพลศึกษา ๑-323-๑-9460 , Pattarapol Sawangjaiam การบินพลศึกษา ๑-204-๑-0002

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

Technical Management
Sawitree Noisangiam
Manager
การบินพลศึกษา ๑-204-๑-0007

Approved by
Kanokkorn Anek
Senior Manager
การบินพลศึกษา ๑-204-๑-0004

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

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2410097

Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะปลวัน)
Project Location: WWTP

Sample Number	2410097-2
Sampled Date	Feb 22, 2024 10:05 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Feb 22, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Aluminium	mg/L	0.003	0.005	2.51	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	170	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	5465	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	9.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

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

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

Approved by
Narumon Banchongkit
Supervisor

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

Analysis / Test Report

TESTING
No.0042

Lot ID: 2410097

Date Received : Feb 22, 2024
Date Reported : Mar 01, 2024
Report Number : 2924052-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะปลวัน)
Project Location: WWTP

Sampling By : Tanasit Wongsachai , Pattarapol Sawangjaitam

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

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

Approved by
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2423746

Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949502-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะปลวัน)
Project Location: WWTP

Sample Number	2423746-1
Sampled Date	Mar 20, 2024 10:54 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	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	32	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	31.9	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	5080	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	6.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management
Photchana Seeda
Scientist (4)
ทะเบียนเลขที่ ว-323-ง-9446

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ง-9442

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

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2423746

Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949502-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะปลวัน)
Project Location: WWTP

Sample Number	2423746-1
Sampled Date	Mar 20, 2024 10:54 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-ง-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 Seeda
Scientist (4)
ทะเบียนเลขที่ ว-323-ง-9446

Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ง-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949502-2

Sample Number	2423746-1
Sampled Date	Mar 20, 2024 10:54 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Mar 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.004	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.002	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.009	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.04	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Sampling By : Pitthaya Thongtaeng หน่วยแรงที่ ว 323 จ-9448 , Pattarapol Sawangjaitam หน่วยแรงที่ ว-204-จ-0002

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

Technical Management
Chanattajarn Imchom
Section Head
หน่วยแรงที่ ว-204-จ-0009

Approved by
Kanokkorn Anek
Senior Manager
หน่วยแรงที่ ว-204-จ-0004

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949502-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
Chanattajarn Imchom
Section Head
หน่วยแรงที่ ว-204-จ-0009

Approved by
Kanokkorn Anek
Senior Manager
หน่วยแรงที่ ว-204-จ-0004

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 28, 2024
Report Number : 2949502-3

Sample Number	2423746-1
Sampled Date	Mar 20, 2024 10:54 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
[A] Aluminum	mg/L	0.003	0.005	3.60	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.17	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	158	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	6637	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L		0.1	9.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	7.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

Approved by
Naruemon Banchongkit
Supervisor

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949503-1

Sample Number	2423746-2
Sampled Date	Mar 20, 2024 11:04 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight 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	2.8	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-		7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H+ (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L		0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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

Technical Management
Photchana S.
Photchana Seeda
Scientist (4)
หน่วยแรงที่ ว 323 จ-9446

Approved by
Dej Changchon
Senior Manager
หน่วยแรงที่ ว-323-จ-9442

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of the 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

Analysis / Test Report

TESTING
No.0042
Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949503-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Ittathai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2423746-2
Sampled Date	Mar 20, 2024 11:04 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	32.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5160	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.0	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Pitthaya Thongtaeng การเป็นเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam การเป็นเลขที่ ว-204-ง-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)
การเป็นเลขที่ ว-323-ง-9446

Approved by Dej Changchon
Senior Manager
การเป็นเลขที่ ว-323-ง-9447

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

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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Analysis / Test Report

TESTING
No.0009
Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949503-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Ittathai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2423746-2
Sampled Date	Mar 20, 2024 11:04 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Mar 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.004	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.009	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.11	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.009	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Chanatt L.
Chanattagarn Imchom
Section Head
การเป็นเลขที่ ว-204-ง-0008

Approved by Kanokkorn Anek
Senior Manager
การเป็นเลขที่ ว-204-ง-0004

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

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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Analysis / Test Report

TESTING
No.0009
Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 27, 2024
Report Number : 2949503-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Ittathai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2423746-2
Sampled Date	Mar 20, 2024 11:04 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Mar 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.04	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Pitthaya Thongtaeng การเป็นเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam การเป็นเลขที่ ว-204-ง-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 Chanatt L.
Chanattagarn Imchom
Section Head
การเป็นเลขที่ ว-204-ง-0008

Approved by Kanokkorn Anek
Senior Manager
การเป็นเลขที่ ว-204-ง-0004

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

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Analysis / Test Report

TESTING
No.0042
Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 28, 2024
Report Number : 2949503-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Ittathai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2423746-2
Sampled Date	Mar 20, 2024 11:04 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Mar 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[4] Aluminum	mg/L	0.003	0.005	3.20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Iron	mg/L	0.003	0.005	0.16	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	172	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	6491	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	9.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	8.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

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

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 N.Banchongkit
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการรวมบุคลากรกรมโรงงาน ชลบุรี (โรงงานบ่อวัน)
Project Location : WWTP

Lot ID: 2423746
Date Received : Mar 20, 2024
Date Reported : Mar 28, 2024
Report Number : 2949503-3

Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการรวมบุคลากรกรมโรงงาน ชลบุรี (โรงงานบ่อวัน)
Project Location : WWTP

Lot ID: 2437021
Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062990-1

Sample Number	2437021-1
Sampled Date	Apr 18, 2024 10:25 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Apr 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	32.3	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	3840	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Note : This Analysis test report is reissued to supersede report No.2974097-1, Date Reported : Apr 25, 2024 due to revise analytical information.

Technical Management
Chonticha Subongkoch
Scientist (3)
หมายเลขที่ 323-ง-9449

Approved by
Dej Changchon
Senior Manager
หมายเลขที่ 323-ง-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.

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการรวมบุคลากรกรมโรงงาน ชลบุรี (โรงงานบ่อวัน)
Project Location : WWTP

Lot ID: 2437021
Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062990-1

Sampling By : Pitthaya Thongtaeng หมายเลขที่ 323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ 204-ง-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
Chonticha Subongkoch
Scientist (3)
หมายเลขที่ 323-ง-9449

Approved by
Dej Changchon
Senior Manager
หมายเลขที่ 323-ง-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.

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการรวมบุคลากรกรมโรงงาน ชลบุรี (โรงงานบ่อวัน)
Project Location : WWTP

Lot ID: 2437021
Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062990-2

Sample Number	2437021-1
Sampled Date	Apr 18, 2024 10:25 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Apr 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.004	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	<0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0007	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.04	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.006	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Note : This Analysis test report is reissued to supersede report No.2974097-2, Date Reported : Apr 25, 2024 due to revise analytical information

Sampling By : Pitthaya Thongtaeng หมายเลขที่ 323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ 204-ง-0002

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

Technical Management
Sawitree Nohsanglams
Manager
หมายเลขที่ 204-ง-0007

Approved by
Kanoksom Anek
Assistant General Manager
หมายเลขที่ 204-ง-0004

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2437021
Date Received :Apr 18, 2024
Date Reported :Jul 24, 2024
Report Number :3062990-2

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
หมายเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Assistant General Manager
หมายเลขที่ ว-204-ง-0004

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

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2437021
Date Received :Apr 18, 2024
Date Reported :Jul 24, 2024
Report Number :3062990-3

Sample Number 2437021-1
Sampled Date Apr 18, 2024 10:25 AM
Sample Description Wastewater
Location Influent WWT#2
Date Analysis Commenced Apr 18, 2024
Condition of Sample Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
[A] Aluminium	mg/L	0.003	0.005	0.59	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	159	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	4755	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	4.8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Note : This Analysis test report is reissued to supersede report No.2974097-3, Date Reported : Apr 25, 2024 due to revise analytical information.

Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

Approved by Chonticha Subongkoch
Scientist (3)

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2437021
Date Received :Apr 18, 2024
Date Reported :Jul 24, 2024
Report Number :3062990-4

Sample Number 2437021-1
Sampled Date Apr 18, 2024 10:25 AM
Sample Description Wastewater
Location Influent WWT#2
Date Analysis Commenced Apr 19, 2024
Condition of Sample Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
COD	mg/L	1.5	25	26	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong

Note : This Analysis test report is reissued to supersede report No.2974097-1, Date Reported : Apr 25, 2024 due to revise analytical information.

Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-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 Chonticha Subongkoch
Scientist (3)
หมายเลขที่ ว-323-ง-9449

Approved by Dej Changchon
Senior Manager
หมายเลขที่ ว-323-ง-9442

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Analysis / Test Report

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Lot ID: 2437021
Date Received :Apr 18, 2024
Date Reported :Jul 24, 2024
Report Number :3062990-5

Sample Number 2437021-1
Sampled Date Apr 18, 2024 10:25 AM
Sample Description Wastewater
Location Influent WWT#2
Date Analysis Commenced Apr 20, 2024
Condition of Sample Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Note : This Analysis test report is reissued to supersede report No.2974097-2, Date Reported : Apr 25, 2024 due to revise analytical information.

Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-0002

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

Technical Management Sirilak P.
Sirilak Bunnak
Section Head
หมายเลขที่ ว-204-ง-0013

Approved by Kanokkorn Anek
Assistant General Manager
หมายเลขที่ ว-204-ง-0004

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

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2437021

Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Sample Number	2437021-2
Sampled Date	Apr 18, 2024 10:35 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Apr 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight 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	18.9	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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	-	-	31.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Technical Management Chontichak
Chontichа Subongkoch
Scientist (3)
หน่วยแลบที่ 1-323-n-9449

Approved by Dej Changchon
Senior Manager
หน่วยแลบที่ 1-323-n-9442

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2437021

Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Sample Number	2437021-2
Sampled Date	Apr 18, 2024 10:35 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Apr 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2820	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 22nd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	5.8	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : This Analysis test report is reissued to supersede report No.2974098-1, Date Reported : Apr 25, 2024 due to revise analytical information.
Sampling By : Pathaya Thongtaeng หน่วยแลบที่ 1-323-n-9448 , Pattarapol Sawangjaitam หน่วยแลบที่ 1-204-n-0002

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

Technical Management Chontichak
Chontichа Subongkoch
Scientist (3)
หน่วยแลบที่ 1-323-n-9449

Approved by Dej Changchon
Senior Manager
หน่วยแลบที่ 1-323-n-9442

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2437021

Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Sample Number	2437021-2
Sampled Date	Apr 18, 2024 10:35 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Apr 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.003	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.0006	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.008	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.07	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.03	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
หน่วยแลบที่ 1-204-n-0007

Approved by Kanokkorn Anek
Assistant General Manager
หน่วยแลบที่ 1-204-n-0004

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2437021

Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location : WWTP

Sample Number	2437021-2
Sampled Date	Apr 18, 2024 10:35 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Apr 19, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.06	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : This Analysis test report is reissued to supersede report No.2974098-2, Date Reported : Apr 25, 2024 due to revise analytical information.
Sampling By : Pathaya Thongtaeng หน่วยแลบที่ 1-323-n-9448 , Pattarapol Sawangjaitam หน่วยแลบที่ 1-204-n-0002

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

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
หน่วยแลบที่ 1-204-n-0007

Approved by Kanokkorn Anek
Assistant General Manager
หน่วยแลบที่ 1-204-n-0004

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Analysis / Test Report

TESTING
No.0009
Lot ID: 2437021
Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2437021-2
Sampled Date	Apr 18, 2024 10:35 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Apr 18, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Aluminium	mg/L	0.003	0.005	0.56	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.11	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	203	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	3844	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	5.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Note : This Analysis test report is reissued to supersede report No.2974098-3, Date Reported : Apr 25, 2024 due to revise analytical information.
Sampling By : Pathaya Thongtaeng , Pattarapol Sawangjaitam

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

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Approved by Chontichak
Chonticha Subongkoch
Scientist (3)

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

Analysis / Test Report

TESTING
No.0009
Lot ID: 2437021
Date Received : Apr 18, 2024
Date Reported : Jul 24, 2024
Report Number : 3062991-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd Songkhla Branch, DSS Accreditation No. 0166.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by Chontichak
Chonticha Subongkoch
Scientist (3)

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14016-437 (EMAIL)

Analysis / Test Report

TESTING
No.0042
Lot ID: 2449081
Date Received : May 06, 2024
Date Reported : May 10, 2024
Report Number : 2980271-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2449081-1
Sampled Date	May 06, 2024 9:15 AM
Sample Description	Wastewater
Location	ระบบบำบัดน้ำเสียบริเวณ : Effluent WWT#2
Date Analysis Commenced	May 06, 2024
Condition of Sample	Contained in one amber glass bottle and 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							
COD	mg/L	1.5	25	102	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Tanasit Wongsachat หน่วยแรงงานที่ ว-323-ว-9460

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)
หน่วยแรงงานที่ ว-323-ว-9446

Approved by Dej Changchon
Senior Manager
หน่วยแรงงานที่ ว-323-ว-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 the report is not reproduced except in full.

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

Analysis / Test Report

TESTING
No.0042
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005784-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสวนอุตสาหกรรมโรจนะ ชลบุรี (โรจนะบ่อวิน)
Project Location: WWTP

Sample Number	2449475-1
Sampled Date	May 20, 2024 9:41 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.2	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	81	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Temperature *	Degree C	-	-	33.2	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	1012	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management Photchana S.
Photchana Seeda
Scientist (4)
หน่วยแรงงานที่ ว-323-ว-9446

Approved by Dej Changchon
Senior Manager
หน่วยแรงงานที่ ว-323-ว-9442

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

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะการระบายน้ำ ชนะรี (โรงงานบ่อใน)
Project Location : WWTP

Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005784-1

Sample Number	2449475-1
Sampled Date	May 20, 2024 9:41 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-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)
หมายเลขที่ ว-323-ง-9446

Approved by Dej Changchon
Senior Manager
หมายเลขที่ ว-323-ง-9442

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะการระบายน้ำ ชนะรี (โรงงานบ่อใน)
Project Location : WWTP

Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005784-2

Sample Number	2449475-1
Sampled Date	May 20, 2024 9:41 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	May 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.009	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.007	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.009	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.13	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Oil & Grease *	mg/L	-	3	5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-0002

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

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
หมายเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หมายเลขที่ ว-204-ง-0004

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

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะการระบายน้ำ ชนะรี (โรงงานบ่อใน)
Project Location : WWTP

Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005784-2

Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management Sawitree N.
Sawitree Noisangiam
Manager
หมายเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หมายเลขที่ ว-204-ง-0004

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

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

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการตรวจคุณลักษณะการระบายน้ำ ชนะรี (โรงงานบ่อใน)
Project Location : WWTP

Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005784-3

Sample Number	2449475-1
Sampled Date	May 20, 2024 9:41 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
[A] Aluminium	mg/L	0.003	0.005	0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.09	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	287	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	1552	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L		0.1	4.8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-		0.0000000	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	2.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

Remark :
LOD Limit of Detection
"-" Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025
[A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DIS Accreditation No. 0009
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 the report may be reproduced in any form without written consent from the laboratory ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by Photchana S.
Photchana Seeda
Scientist (4)

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

Analysis / Test Report

TESTING
No.0042
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005785-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรงงาน ชลบุรี (โรงงานบ่อวิน)
Project Location: WWTP

Sample Number	2449475-2
Sampled Date	May 20, 2024 9:50 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight 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	3.1	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	57	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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

Technical Management Photchana S.
Photchana Seeda
Scientist (4)
หน่วยแผนที่ ว-323-ก-9446

Approved by D.Changchon
Dej Changchon
Senior Manager
หน่วยแผนที่ ว-323-ก-9442

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

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Analysis / Test Report

TESTING
No.0042
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005785-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรงงาน ชลบุรี (โรงงานบ่อวิน)
Project Location: WWTP

Sample Number	2449475-2
Sampled Date	May 20, 2024 9:50 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	33.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2980	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.9	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, Industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Pitthaya Thongtaeng หน่วยแผนที่ ว-323-ก-9448 , Pattarapol Sawangjaitam หน่วยแผนที่ ว-204-ก-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)
หน่วยแผนที่ ว-323-ก-9446

Approved by D.Changchon
Dej Changchon
Senior Manager
หน่วยแผนที่ ว-323-ก-9442

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Analysis / Test Report

TESTING
No.0009
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005785-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรงงาน ชลบุรี (โรงงานบ่อวิน)
Project Location: WWTP

Sample Number	2449475-2
Sampled Date	May 20, 2024 9:50 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	May 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.0007	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.02	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Noisanglam
Manager
หน่วยแผนที่ ว-204-ก-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
หน่วยแผนที่ ว-204-ก-0004

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RIGHT SOLUTIONS RIGHT PARTNER

Analysis / Test Report

TESTING
No.0009
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3005785-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Itaithai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรงงาน ชลบุรี (โรงงานบ่อวิน)
Project Location: WWTP

Sample Number	2449475-2
Sampled Date	May 20, 2024 9:50 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	May 21, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.07	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Guideline : Effluent standard for factories, Industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Pitthaya Thongtaeng หน่วยแผนที่ ว-323-ก-9448 , Pattarapol Sawangjaitam หน่วยแผนที่ ว-204-ก-0002

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

Technical Management Sawitree N.
Sawitree Noisanglam
Manager
หน่วยแผนที่ ว-204-ก-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
หน่วยแผนที่ ว-204-ก-0004

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RIGHT SOLUTIONS RIGHT PARTNER

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3065785-3

Sample Number	2449475-2
Sampled Date	May 20, 2024 9:50 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	May 20, 2024
Condition of Sample	Contained in one BOD bottle, one amber glass bottle, two glass vials and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Aluminium	mg/L	0.003	0.005	2.47	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Iron	mg/L	0.003	0.005	0.15	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	257	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm		0.5	3865	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	9.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.0000000	No Standard	Flow meter	Rayong
Fluoride	mg/L	0.05	0.2	6.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong

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

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.

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

Approved by Photchana S.
Photchana Seeda
Scientist (4)

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

Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP
Lot ID: 2449475
Date Received : May 20, 2024
Date Reported : May 28, 2024
Report Number : 3065785-3

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

Approved by Photchana S.
Photchana Seeda
Scientist (4)
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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP

Lot ID: 2457873
Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039031-1

Sample Number	2457873-1
Sampled Date	Jun 21, 2024 9:00 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 Degree C)	mg/L		2.0	6.0	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	56	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.007	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C				7.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L		0.1	0.2	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	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	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	3720	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L		1.0	44	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Technical Management Chontichak
Chontticha Subongkoch
Scientist (3)
ทะเบียนเลขที่ ว 323-จ 9449

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

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Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายอุตสาหกรรมโรจนะ ชลบุรี (โรจนะมาบใน)
Project Location : WWTP
Lot ID: 2457873
Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039031-1

Sample Number	2457873-1
Sampled Date	Jun 21, 2024 9:00 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Total Suspended Solids Dried at 103-105 degree C	mg/L		5	6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Sampling By : Tanasit Wongpachai ทะเบียนเลขที่ ว 323-จ 9460 , Pattarapol Sawangjaiam ทะเบียนเลขที่ ว 204-จ 0002

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

Technical Management Chontichak
Chontticha Subongkoch
Scientist (3)
ทะเบียนเลขที่ ว 323-จ 9449
Approved by
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว 323-จ 9442
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Analysis / Test Report

TESTING
No.0009

Lot ID: 2457873
Date Received :Jun 21, 2024
Date Reported :Jun 28, 2024
Report Number :3039031-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักทรมน้ำโรงงาน ระยอง (โรงงานบ่อใน)
Project Location : WWTP

Sample Number	2457873-1
Sampled Date	Jun 21, 2024 9:00 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jun 24, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	0.004	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.001	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.02	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.004	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.07	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	<0.0005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.06	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Sampling By : Tanasit Wongsachai หน่วยแรงที่ ว-323-ง-9460 , Pattarapol Sawanglakarn หน่วยแรงที่ ว-204-ง-0002

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

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
หน่วยแรงที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หน่วยแรงที่ ว-204-ง-0004

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2457873
Date Received :Jun 21, 2024
Date Reported :Jun 28, 2024
Report Number :3039033-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักทรมน้ำโรงงาน ระยอง (โรงงานบ่อใน)
Project Location : WWTP

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
หน่วยแรงที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หน่วยแรงที่ ว-204-ง-0004

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14016-43/ (Th)

Analysis / Test Report

TESTING
No.0009

Lot ID: 2457873
Date Received :Jun 21, 2024
Date Reported :Jun 28, 2024
Report Number :3039031-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักทรมน้ำโรงงาน ระยอง (โรงงานบ่อใน)
Project Location : WWTP

Sample Number	2457873-1
Sampled Date	Jun 21, 2024 9:00 AM
Sample Description	Wastewater
Location	Influent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Aluminium	mg/L	0.003	0.005	0.62	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing						
Chloride as Cl *	mg/L	0.5	1	249	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	4839	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L	-	0.1	8.8	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.000	Flow meter	Rayong
Fluoride as F *	mg/L	0.06	0.2	5.6	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (D)	Rayong

Sampling By : Tanasit Wongsachai , Pattarapol Sawanglakarn

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

Approved by Sawitree N.
Sawitree Nolsanglam
Manager

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14016-43/ (Th)

Analysis / Test Report

TESTING
No.0042

Lot ID: 2457873
Date Received :Jun 21, 2024
Date Reported :Jun 28, 2024
Report Number :3039032-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok
Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักทรมน้ำโรงงาน ระยอง (โรงงานบ่อใน)
Project Location: WWTP

Sample Number	2457873-2
Sampled Date	Jun 21, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight 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	3.9	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	46	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 CN (C, E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater analysis manual. Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
pH at 25 degree C		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	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

Technical Management Chontichak
Chontitcha Subongkoch
Scientist (3)
หน่วยแรงที่ ว-323-ง-9449

Approved by Dej Changchon
Senior Manager
หน่วยแรงที่ ว-323-ง-9492

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14016-43/ (Th)

Analysis / Test Report

TESTING No.0042

Lot ID: 2457873

Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039032-1

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักกรมโรงงาน ชนบี (โรงงานบ่อน้ำ)
Project Location : WWTP

Sample Number	2457873-2
Sampled Date	Jun 21, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C		-	33.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	3600	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L		1.0	3.4	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L		5	34	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Tanasit Wongsachai หน้าบันทดลองที่ ว-323-ง-9460 , Pattarapol Sawangjaitam หน้าบันทดลองที่ ว-204-ง-0002

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

Technical Management Chontichak
Chontitcha Subongkoch
Scientist (3)
หน้าบันทดลองที่ ว-323-ง-9449

Approved by Dej Changchon
Senior Manager
หน้าบันทดลองที่ ว-323-ง-9442

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

Analysis / Test Report

TESTING No.0009

Lot ID: 2457873

Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039032-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักกรมโรงงาน ชนบี (โรงงานบ่อน้ำ)
Project Location : WWTP

Sample Number	2457873-2
Sampled Date	Jun 21, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jun 24, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	0.001	≤0.03	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.03	≤2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.002	≤0.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.05	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Nolsangiam
Manager
หน้าบันทดลองที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หน้าบันทดลองที่ ว-204-ง-0004

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

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

Analysis / Test Report

TESTING No.0009

Lot ID: 2457873

Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039032-2

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักกรมโรงงาน ชนบี (โรงงานบ่อน้ำ)
Project Location : WWTP

Sample Number	2457873-2
Sampled Date	Jun 21, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jun 24, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Zinc	mg/L	0.003	0.005	0.06	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Oil & Grease *	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampling By : Tanasit Wongsachai หน้าบันทดลองที่ ว-323-ง-9460 , Pattarapol Sawangjaitam หน้าบันทดลองที่ ว-204-ง-0002

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

Technical Management Sawitree N.
Sawitree Nolsangiam
Manager
หน้าบันทดลองที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Senior Manager
หน้าบันทดลองที่ ว-204-ง-0004

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Analysis / Test Report

TESTING No.0009

Lot ID: 2457873

Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039032-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการขยายบ่อพักกรมโรงงาน ชนบี (โรงงานบ่อน้ำ)
Project Location : WWTP

Sample Number	2457873-2
Sampled Date	Jun 21, 2024 9:15 AM
Sample Description	Wastewater
Location	Effluent WWT#2
Date Analysis Commenced	Jun 21, 2024
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Aluminium	mg/L	0.003	0.005	1.69	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.24	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	214	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (D)	Rayong
Conductivity at 25 Degree C *	micromhos/cm		0.5	4357	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen *	mg/L		0.1	9.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.000	No Standard	Flow meter	Rayong
Fluoride as F *	mg/L	0.06	0.2	5.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (D)	Rayong

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

Approved by Sawitree N.
Sawitree Nolsangiam
Manager

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Analysis / Test Report

TESTING
No.0009

Lot ID: 2457873

Date Received : Jun 21, 2024
Date Reported : Jun 28, 2024
Report Number : 3039032-3

Client : Rojana Industrial Management Co., Ltd.
2034/115 26TH Fl. Italthai Tower, New Petchburi Road, Bangkapi, Huaykwang, Bangkok Thailand 10310
P/O :
Project Name : โครงการสถานีสูบน้ำเสียบริเวณ ซอยนิด (โรงแรมอโนมา)
Project Location: WWTP

Sampling By : Tanault Wongsachai , Pattarapol Sawangjaham

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

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Approved by Sawitree N.
Sawitree Notsangtam
Manager

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ภาคผนวก ค-4

ผลการตรวจวิเคราะห์คุณภาพน้ำผิวดิน

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-1
Sampled Date Jan 16, 2024 10:30 AM
Sample Description Surface Water
Location SW1 : หน้าประตูทางออกโรงงาน
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Aluminium	mg/L	0.003	0.005	0.06	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.001	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.17	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STH 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-1
Sampled Date Jan 16, 2024 10:30 AM
Sample Description Surface Water
Location SW1 : หน้าประตูทางออกโรงงาน
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Nickel	mg/L	0.0003	0.0005	0.001	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	<0.005	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[A] Fecal Coliform	MPN/100mL	-	-	49000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[A] Total Coliform	MPN/100mL	-	-	490000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	0.68	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	9.7	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Approved by
Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-1
Sampled Date Jan 16, 2024 10:30 AM
Sample Description Surface Water
Location SW1 : หน้าประตูทางออกโรงงาน
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L		0.1	5.4	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.264	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.93	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.8	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C		-	26.9	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed. 2017, part 2550 B	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หมายเลขที่ 323 และ 6460 , Patcharapol Sawangjaeram หมายเลขที่ 204 และ 0062

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

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Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025

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

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Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-2
Sampled Date	Jan 16, 2024 10:50 AM
Sample Description	Surface Water
Location	SW2 : หน้าสถานีสูบน้ำคลองหนองขี้เหล็กโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Aluminium	mg/L	0.003	0.005	0.27	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Arsenic	mg/L	0.0003	0.0005	0.01	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.09	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	1.10	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0003	Not Detected	≤0.002	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-2
Sampled Date	Jan 16, 2024 10:50 AM
Sample Description	Surface Water
Location	SW2 : หน้าสถานีสูบน้ำคลองหนองขี้เหล็กโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Nickel	mg/L	0.0003	0.0005	0.04	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.20	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[A] Fecal Coliform	MPN/100mL	-	-	17000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[A] Total Coliform	MPN/100mL	-	-	22000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	3.22	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	8.1	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Narumon Banchongkit
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www.alsglobal.com
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S (Water), A4, 2QL.rpt (11.23.69)

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-2
Sampled Date	Jan 16, 2024 10:50 AM
Sample Description	Surface Water
Location	SW2 : หน้าสถานีสูบน้ำคลองหนองขี้เหล็กโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	3.9	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.585	No Standard	No Standard	Flow meter	Rayong
NItrate as N *	mg/L	0.015	0.05	2.65	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	26.3	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : (1) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environment Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai ทนสิทธิ์ ว-323 ง-9460 , Pattarapol Sawangjaroen ทนัฐพล ส-204 ง-0002

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

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S (Water), A4, 2QL.rpt (11.23.69)

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

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Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-3
Sampled Date	Jan 16, 2024 10:17 AM
Sample Description	Surface Water
Location	SW3 : หน้าฝนเสร็จ ถอนไหลผ่านคลื่นที่โครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Aluminium	mg/L	0.003	0.005	0.07	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Arsenic	mg/L	0.0003	0.0005	0.003	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.004	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.32	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002. EPA Method 1631, Revision E	Bangkok

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Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-3
Sampled Date	Jan 16, 2024 10:17 AM
Sample Description	Surface Water
Location	SW3 : หน้าฝนเสร็จ ถอนไหลผ่านคลื่นที่โครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Nickel	mg/L	0.0003	0.0005	0.05	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.006	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[A] Fecal Coliform	MPN/100mL		-	79000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[A] Total Coliform	MPN/100mL	-	-	240000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	0.97	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-3
Sampled Date	Jan 16, 2024 10:17 AM
Sample Description	Surface Water
Location	SW3 : หน้าฝนเสร็จ ถอนไหลผ่านคลื่นที่โครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L		0.1	6.0	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-		0.112	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	2.21	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C				7.5	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H+ (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-		25.4	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หมายเลขที่ 323-9460 , Patiarepol Sawangladarn หมายเลขที่ 1-204-9-0002

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

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025

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

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

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-4
Sampled Date	Jan 16, 2024 9:51 AM
Sample Description	Surface Water
Location	SW4 : ท่อระบายน้ำฝั่งตะวันตกของโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Aluminium	mg/L	0.003	0.005	0.56	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Cadmium	mg/L	0.0003	0.0005	<0.0005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Copper	mg/L	0.0003	0.0005	0.03	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[4] Iron	mg/L	0.003	0.005	0.48	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Mercury	mg/L	0.0001	0.0005	<0.0005	≤0.002	≤0.002	In-house method : STH 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-4
Sampled Date	Jan 16, 2024 9:51 AM
Sample Description	Surface Water
Location	SW4 : ท่อระบายน้ำฝั่งตะวันตกของโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Nickel	mg/L	0.0003	0.0005	0.02	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Zinc	mg/L	0.003	0.005	0.07	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[4] Fecal Coliform	MPN/100mL	-	-	4900.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[4] Total Coliform	MPN/100mL	-	-	24000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	3.18	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number	23144506-4
Sampled Date	Jan 16, 2024 9:51 AM
Sample Description	Surface Water
Location	SW4 : ท่อระบายน้ำฝั่งตะวันตกของโครงการ
Date Analysis Commenced	Jan 16, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.8	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.150	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	49.2	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	26.1	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachal เทนนิพนพงศ์ ว-323-จ-9460 , Pattarapol Sawangjaksorn พรรัตน์ ว-204-จ-0002

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

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

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

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

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-5
Sampled Date Jan 16, 2024 11:15 AM
Sample Description Surface Water
Location SW5 : หน้าสนามตีกอล์ฟ หลังสวนต้นน้ำโครงการ
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Aluminium	mg/L	0.003	0.005	0.35	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Arsenic	mg/L	0.0003	0.0005	0.007	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Copper	mg/L	0.0003	0.0005	0.03	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[4] Iron	mg/L	0.003	0.005	0.42	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STH 03-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-5
Sampled Date Jan 16, 2024 11:15 AM
Sample Description Surface Water
Location SW5 : หน้าสนามตีกอล์ฟ หลังสวนต้นน้ำโครงการ
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Nickel	mg/L	0.0003	0.0005	0.03	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Zinc	mg/L	0.003	0.005	0.06	≤1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[5] Fecal Coliform	MPN/100mL	-	-	3300.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[5] Total Coliform	MPN/100mL	-	-	33000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	1.58	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3-(D)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Sample Number 23144506-5
Sampled Date Jan 16, 2024 11:15 AM
Sample Description Surface Water
Location SW5 : หน้าสนามตีกอล์ฟ หลังสวนต้นน้ำโครงการ
Date Analysis Commenced Jan 16, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L		0.1	4.8	≥4	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.600	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	45.6	≤5	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C				7.6	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C			27.5	(c)	(c)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanarit Wongsachai หนังสือเดินทาง ว 323 จ 9460 , Pattaraporl Sawangjaiam หนังสือเดินทาง ว 204 จ 4062

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

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Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O :
Project Name : Chonburi Bowin
Project Location :

Lot ID: 23144506
Date Received : Jan 16, 2024
Date Reported : Jan 24, 2024
Report Number : 2866018-1

Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

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

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-1
Sampled Date Apr 11, 2024 9:25 AM
Sample Description Surface Water
Location SW1 : หน้าบ่อบวก ถอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Aluminium	mg/L	0.003	0.005	0.16	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Arsenic	mg/L	0.0003	0.0005	0.009	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.002	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.30	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0005	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STH 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

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 the report is not reproduced except in full.

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Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-1
Sampled Date Apr 11, 2024 9:25 AM
Sample Description Surface Water
Location SW1 : หน้าบ่อบวก ถอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Nickel	mg/L	0.0003	0.0005	0.002	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.007	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[A] Fecal Coliform	MPN/100mL	-	-	49000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[A] Total Coliform	MPN/100mL	-	-	330000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	0.68	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

Approved by
Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-1
Sampled Date Apr 11, 2024 9:25 AM
Sample Description Surface Water
Location SW1 : หน้าบ่อบวก ถอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.7	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.553	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.52	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.8	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	31.5	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Water Supply Quality Standard Amata City Industrial Estate
Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai ทะนัสชาลย์ ว-323-ง-9460 , Samart Khumphlee ทะนัสชาลย์ ว-204-ง-0084

Remark :
* LOD Limit of Detection

Approved by
Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

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

Approved by
Narumon Banchongkit
Supervisor

Analysis / Test Report

TESTING
No.0042

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168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-2
Sampled Date Apr 11, 2024 9:40 AM
Sample Description Surface Water
Location SW2 : หัวหอสาธารณะ คลองไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Aluminium	mg/L	0.003	0.005	0.36	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Arsenic	mg/L	0.0003	0.0005	0.01	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Copper	mg/L	0.0003	0.0005	0.05	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[4] Iron	mg/L	0.003	0.005	0.76	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

Approved by

Narumon Banchongkit
Supervisor

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P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-2
Sampled Date Apr 11, 2024 9:40 AM
Sample Description Surface Water
Location SW2 : หัวหอสาธารณะ คลองไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Nickel	mg/L	0.0003	0.0005	0.07	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Zinc	mg/L	0.003	0.005	0.23	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[4] Fecal Coliform	MPN/100mL	-	-	49000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[4] Total Coliform	MPN/100mL		-	79000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	4.45	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

Approved by

Narumon Banchongkit
Supervisor

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-2
Sampled Date Apr 11, 2024 9:40 AM
Sample Description Surface Water
Location SW2 : หัวหอสาธารณะ คลองไหลผ่านพื้นที่โครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L		0.1	5.5	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.676	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.45	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C				7.5	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C		-	31.4	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Water Supply Quality Standards Amata City Industrial Estate
Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หมายเลขที่ 9-323-9460 , Samart Khumphiee หมายเลขที่ 3-2049-0084

Remark :
LOD : Limit of Detection

Approved by

Narumon Banchongkit
Supervisor

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No.0042
Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

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

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Analysis / Test Report

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No.0042

Lot ID: 2438878

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66

Project Name : Chonburi Bowin

Project Location :

Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-3
Sampled Date	Apr 11, 2024 11:00 AM
Sample Description	Surface Water
Location	SW3 : หน้าหน่วยเคลือ กอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[a] Aluminium	mg/L	0.003	0.005	0.29	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Arsenic	mg/L	0.0003	0.0005	0.007	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Copper	mg/L	0.0003	0.0005	0.005	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[a] Iron	mg/L	0.003	0.005	0.93	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

Approved by

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No.0042

Lot ID: 2438878

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66

Project Name : Chonburi Bowin

Project Location :

Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-3
Sampled Date	Apr 11, 2024 11:00 AM
Sample Description	Surface Water
Location	SW3 : หน้าหน่วยเคลือ กอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[a] Nickel	mg/L	0.0003	0.0005	0.04	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[a] Zinc	mg/L	0.003	0.005	0.02	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[a] Fecal Coliform	MPN/100ml	-	-	79000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[a] Total Coliform	MPN/100ml	-	-	110000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	1.67	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

Approved by

Narumon Banchongkit
Supervisor

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TESTING
No.0042

Lot ID: 2438878

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230

P/O : RJN-BW009/66

Project Name : Chonburi Bowin

Project Location :

Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-3
Sampled Date	Apr 11, 2024 11.00 AM
Sample Description	Surface Water
Location	SW3 : หน้าหน่วยเคลือ กอนไหลผ่านพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	11.9	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.276	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.38	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.5	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	32.1	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Water Supply Quality Standard Amata City Industrial Estate
Guideline : (1) 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 Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)
(2) 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 Gazettle, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หมายเลขที่ 1-323-1-9400 , Samart Khumphlee หมายเลขที่ 1-204-1-0084

Remark .
- LOD : Limit of Detection

Approved by

Narumon Banchongkit
Supervisor

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P/O : RJN-BW009/66

Project Name : Chonburi Bowin

Project Location :

Date Received : Apr 11, 2024
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P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-4
Sampled Date Apr 11, 2024 10:40 AM
Sample Description Surface Water
Location SW4 : ฝายห้วยตลิ่ง บริเวณจุดระบายน้ำทิ้งของโครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Aluminium	mg/L	0.003	0.005	0.71	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Arsenic	mg/L	0.0003	0.0005	0.008	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	<0.0005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.01	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[A] Iron	mg/L	0.003	0.005	0.53	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0008	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

Approved by

Narumon Banchongkit
Supervisor

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TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-4
Sampled Date Apr 11, 2024 10:40 AM
Sample Description Surface Water
Location SW4 : ฝายห้วยตลิ่ง บริเวณจุดระบายน้ำทิ้งของโครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[A] Nickel	mg/L	0.0003	0.0005	0.03	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.05	≤1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[A] Fecal Coliform	MPN/100mL	-	-	79000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[A] Total Coliform	MPN/100mL	-	-	280000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	2.68	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L		2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number 2438878-4
Sampled Date Apr 11, 2024 10:40 AM
Sample Description Surface Water
Location SW4 : ฝายห้วยตลิ่ง บริเวณจุดระบายน้ำทิ้งของโครงการ
Date Analysis Commenced Apr 11, 2024
Condition of Sample Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.4	≥4	≥2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s			0.945	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	25.0	≤5	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C				7.5	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C			31.9	(c)	(c)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Water Supply Quality Standards Amata City Industrial Estate
Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หมายเลขบัตร ว 323 ว 9460 , Samart Khumphlee หมายเลขบัตร ว 204 ง 0084

Remark
LOD Limit of Detection

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

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

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

Approved by

Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-S
Sampled Date	Apr 11, 2024 10:05 AM
Sample Description	Surface Water
Location	SW5 : ฝายสันเคล็ด หลังงานพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Aluminium	mg/L	0.003	0.005	0.48	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Arsenic	mg/L	0.0003	0.0005	0.010	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Copper	mg/L	0.0003	0.0005	0.01	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
[4] Iron	mg/L	0.003	0.005	0.54	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Lead	mg/L	0.0003	0.0005	0.0009	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	In-house method : STH 05-007 based on United States Environmental Protection Agency, 2002. EPA Method 1631, Revision E	Bangkok

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Narumon Banchongkit
Supervisor

Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-S
Sampled Date	Apr 11, 2024 10:05 AM
Sample Description	Surface Water
Location	SW5 : ฝายสันเคล็ด หลังงานพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
[4] Nickel	mg/L	0.0003	0.0005	0.03	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
[4] Zinc	mg/L	0.003	0.005	0.05	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
[4] Fecal Coliform	MPN/100mL	-	-	79000.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
[4] Total Coliform	MPN/100mL	-	-	330000.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	1.90	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Narumon Banchongkit
Supervisor
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22905-312 (HAS) S (Aqueous), A# 203.rpt (8 48A#)

Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

Sample Number	2438878-S
Sampled Date	Apr 11, 2024 10:05 AM
Sample Description	Surface Water
Location	SW5 : ฝายสันเคล็ด หลังงานพื้นที่โครงการ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in one BOD bottle, two glass vials and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.9	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-	-	0.397	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	17.5	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	32.4	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Guideline : Water Supply Quality Standards Amata City Industrial Estate
Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachai หวังในเลขที่ 7-323-9-9460 , Samart Khumphlee หวังในเลขที่ 7-204-9-0084

Remark :
- LOD : Limit of Detection

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of the report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that the report is not reproduced except in full.
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Narumon Banchongkit
Supervisor
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22905-312 (HAS) S (Aqueous), A# 203.rpt (8 48A#)

Analysis / Test Report
TESTING
No.0042
Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :
Lot ID: 2438878
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956809-1

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

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

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of the report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that the report is not reproduced except in full.
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22905-312 (HAS) S (Aqueous), A# 203.rpt (8 48A#)

Analysis / Test Report

TESTING No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-1
Sampled Date	Apr 11, 2024 3:35 PM
Sample Description	Surface Water
Location	SW6 : ตรวจคุณภาพน้ำหลังปล่อยน้ำ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Aluminium	mg/L	0.003	0.005	0.13	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.0007	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.003	0.005	0.09	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

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Approved by
Tuanjai Thangklang
Manager

Analysis / Test Report

TESTING No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-1
Sampled Date	Apr 11, 2024 3:35 PM
Sample Description	Surface Water
Location	SW6 : ตรวจคุณภาพน้ำหลังปล่อยน้ำ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Nickel	mg/L	0.0003	0.0005	0.002	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.008	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing								
Fecal Coliform	MPN/100mL	-	-	240.0	≤4000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	-	-	330.0	≤20000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing								
Ammonia Nitrogen *	mg/L	0.02	0.05	0.12	≤0.5	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (F)	Rayong
BOD (5 days at 20 Degree C) *	mg/L		2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong

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Approved by
Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-1
Sampled Date	Apr 11, 2024 3:35 PM
Sample Description	Surface Water
Location	SW6 : ตรวจคุณภาพน้ำหลังปล่อยน้ำ
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Cyanide as CN *	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.9	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF 23rd ed. 2017, part 4500-O (C)	Rayong
Flow rate *	m3/s	-		0.000	No Standard	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.19	≤5	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
pH at 25 degree C *				8.7	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (E)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Temperature *	Degree C	-	-	32.4	(c)	(c)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF 23rd ed., 2017, part 2550 B	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasil Wongsachat โทร.089-xxx-9460 , Samart Khumphlee โทร.084-xxx-0084

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

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 the report is not reproduced except in full.

Approved by
Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

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Approved by
Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-2
Sampled Date	Apr 11, 2024 11:30 AM
Sample Description	Surface Water
Location	อ่างเก็บน้ำดิน
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Aluminium	mg/L	0.003	0.005	0.02	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	Not Detected	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Iron	mg/L	0.003	0.005	0.02	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	≤0.002	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok

Approved by

Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-2
Sampled Date	Apr 11, 2024 11:30 AM
Sample Description	Surface Water
Location	อ่างเก็บน้ำดิน
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Metals Testing								
Nickel	mg/L	0.0003	0.0005	0.002	≤0.10	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.02	≤1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Water Testing								
BOD (5 days at 20 Degree C) *	mg/L	-	2.0	<2.0	≤2	≤4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Chloride as Cl *	mg/L	0.5	1	33	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
COD *	mg/L	-	25	<25	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Cyanide as CN *	mg/L	0.001	0.005	<0.005	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CN (C, E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	8.4	≥4	≥2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

Approved by

Tuanjai Thangklang
Manager

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Client : Rojana Industrial Park Public Co., Ltd.
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P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-2
Sampled Date	Apr 11, 2024 11:30 AM
Sample Description	Surface Water
Location	อ่างเก็บน้ำดิน
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Fluoride *	mg/L	-	0.2	0.3	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Formaldehyde *	mg/L	0.03	0.1	Not Detected	No Standard	No Standard	Wastewater analysis manual, Environmental Engineering Association of Thailand, 4th ed.,2004	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Bangkok
pH at 25 degree C *		-	-	8.3	5.0-9.0	5.0-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	No Standard	No Standard	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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-S2 (C, F)	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	203	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 22nd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N *	mg/L	-	1.0	<1.0	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D)	Rayong

Approved by

Tuanjai Thangklang
Manager

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438880
Date Received : Apr 11, 2024
Date Reported : Apr 22, 2024
Report Number : 2956821-1

Sample Number	2438880-2
Sampled Date	Apr 11, 2024 11:30 AM
Sample Description	Surface Water
Location	อ่างเก็บน้ำดิน
Date Analysis Commenced	Apr 11, 2024
Condition of Sample	Contained in two glass vials, one BOD bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
Water Testing								
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : (1) 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)
(2) Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 4)
(a) Not Change from natural condition
(b) Non Objectionable
(c) Change from Natural condition not more than 3 degree C

Sampling By : Tanasit Wongsachal หมายเลขบัตรที่ 1-323-4-9460 , Samart Khumphilee หมายเลขบัตรที่ 1-204-4-0084

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

Approved by

Tuanjai Thangklang
Manager

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ภาคผนวก ค-5

ผลการตรวจวิเคราะห์คุณภาพน้ำใต้ดิน

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981838-1

Sample Number	2438929-1
Sampled Date	Apr 26, 2024 9:45 AM
Sample Description	Underground Water
Location	GW1 ; พื้นที่ตั้งอยู่ในบริเวณด้านหน้าของโครงการด้านทิศเหนือ
Date Analysis Commenced	Apr 26, 2024
Condition of Sample	Contained in 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							
pH at 25 degree C		-	-	6.6	6.5-9.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(1): ในกรณีที่ตัวอย่างน้ำมีความขุ่นของตะกอนดินเกินกว่าที่จะสามารถวิเคราะห์ได้ ให้ทำการย่อยตัวอย่างน้ำก่อนการวิเคราะห์ ด้วยกรดไนตริกเข้มข้นตามวิธีมาตรฐานการวิเคราะห์ และให้ทำการเปรียบเทียบผลการวิเคราะห์ก่อนและหลังการย่อยด้วย
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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

Technical Management Narumon Banchongkit, Supervisor, ทะเบียนเลขที่ ว-323-จ-9445
Approved by Dej Changchon, Senior Manager, ทะเบียนเลขที่ ว-204-จ-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981838-2

Sample Number	2438929-1
Sampled Date	Apr 26, 2024 9:45 AM
Sample Description	Underground Water
Location	GW1 ; พื้นที่ตั้งอยู่ในบริเวณด้านหน้าของโครงการด้านทิศเหนือ
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.18	0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.21	160	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	2.09	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	0.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.0008	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree Noisangiam, Manager, ทะเบียนเลขที่ ว-204-จ-0007
Approved by Kanokkorn Anek, Senior Manager, ทะเบียนเลขที่ ว-204-จ-0004

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981838-2

Sample Number	2438929-1
Sampled Date	Apr 26, 2024 9:45 AM
Sample Description	Underground Water
Location	GW1 ; พื้นที่ตั้งอยู่ในบริเวณด้านหน้าของโครงการด้านทิศเหนือ
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Selenium	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L		0.01	<0.01	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	Not Detected	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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

Technical Management Sawitree Noisangiam, Manager, ทะเบียนเลขที่ ว-204-จ-0007
Approved by Kanokkorn Anek, Senior Manager, ทะเบียนเลขที่ ว-204-จ-0004

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981838-3

Sample Number	2438929-1
Sampled Date	Apr 26, 2024 9:45 AM
Sample Description	Underground Water
Location	GW1 ; พื้นที่ตั้งอยู่ในบริเวณด้านหน้าของโครงการด้านทิศเหนือ
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	0.02	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	23.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL			<1.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	22	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Color	Color unit		5	10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L		0.2	0.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	0.19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Approved by Sawitree Noisangiam, Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981838-3

Sample Number 2438929-1
Sampled Date Apr 26, 2024 9:45 AM
Sample Description Underground Water
Location GW1 ; พื้นที่ติดกับโรงงานด้านขวามือของโครงการด้านทิศใต้
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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							
Permanent Hardness as CaCO3	mg/L	-	1	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	12.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L	-	1	20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	84	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L	-	1	26	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU	-	0.1	85.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pathaya Thongtaeng , Pattarapol Sawangjaitam

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

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Approved by Sawitree N.
Sawitree Nolsangiam
Manager

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Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981839-1

Sample Number 2438929-2
Sampled Date Apr 26, 2024 11:45 AM
Sample Description Underground Water
Location GW2 ; พื้นที่ติดกับโรงงานด้านขวามือของโครงการด้านทิศใต้
Date Analysis Commenced Apr 26, 2024
Condition of Sample Contained in 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							
pH at 25 degree C		-	-	6.8	6.5-9.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(1): ในพื้นที่มีการปนเปื้อนของสารเคมีอย่างใดอย่างหนึ่งในชั้นบนหรือบางส่วนของชั้นน้ำที่ใช้ในการผลิตหรือการอุปโภคบริโภค ให้ดำเนินการตรวจสอบเพิ่มเติมในแหล่งน้ำใต้ดินในชั้นนั้นๆ ให้มีค่าเป็นกลางที่ระดับ 6.5-9.2
Sampling By : Pathaya Thongtaeng ทะเบียนเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-ง-0002

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

Technical Management N.Banchongkit
Narunron Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-ง-9445

Approved by D.Changchon
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ง-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981839-2

Sample Number 2438929-2
Sampled Date Apr 26, 2024 11:45 AM
Sample Description Underground Water
Location GW2 ; พื้นที่ติดกับโรงงานด้านขวามือของโครงการด้านทิศใต้
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.003	0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.32	160	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	4.01	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	0.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.008	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Nolsangiam
Manager
ทะเบียนเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ง-0004

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981839-2

Sample Number 2438929-2
Sampled Date Apr 26, 2024 11:45 AM
Sample Description Underground Water
Location GW2 ; พื้นที่ติดกับโรงงานด้านขวามือของโครงการด้านทิศใต้
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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
Metals Testing							
Selenium	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	0.01	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	<0.005	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pathaya Thongtaeng ทะเบียนเลขที่ ว-323-ง-9448 , PattarapolSawangjaitam ทะเบียนเลขที่ ว-204-ง-0002

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

Technical Management Sawitree N.
Sawitree Nolsangiam
Manager
ทะเบียนเลขที่ ว-204-ง-0007

Approved by Kanokkorn Anek
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ง-0004

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981839-3

Sample Number	2438929-2
Sampled Date	Apr 26, 2024 11:45 AM
Sample Description	Underground Water
Location	GW2 ; พื้นที่ติดกับบ่อบำบัดของโครงการด้านทิศใต้
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	0.13	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.0010	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.55	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL	-	-	<1.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	31	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Color	Color unit	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L	-	0.2	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	0.08	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

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Sawitree Nolsanglam
Manager

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981839-3

Sample Number	2438929-2
Sampled Date	Apr 26, 2024 11:45 AM
Sample Description	Underground Water
Location	GW2 ; พื้นที่ติดกับบ่อบำบัดของโครงการด้านทิศใต้
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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							
Permanent Hardness as CaCO3	mg/L		1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	10.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L	-	1	167	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	256	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L	-	1	166	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU	-	0.1	13.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

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 the report is not reproduced except in full.

Approved by Sawitree N.
Sawitree Nolsanglam
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981840-1

Sample Number	2438929-3
Sampled Date	Apr 26, 2024 2:35 PM
Sample Description	Underground Water
Location	GW3 ; พื้นที่ติดกับบ่อบำบัดของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 26, 2024
Condition of Sample	Contained in 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							
pH at 25 degree C		-	-	5.4	6.5-9.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017 part 4500 - H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(1): โดยค่าที่มีการเปลี่ยนแปลงจากเกณฑ์มาตรฐานให้เป็นไปตามหลักการระดับชาติเชิงอุตสาหกรรมที่ได้รับการยอมรับจากหน่วยงานที่มีหน้าที่รับผิดชอบด้านการจัดการน้ำเสียของประเทศ ซึ่งจะแตกต่างกันตามประเภทอุตสาหกรรม ค่าต่ำสุดและสูงสุดของมาตรฐานหมายถึงค่าที่ยอมรับได้ในช่วงนั้น ๆ โดยการตัดสินใจขึ้นอยู่กับเกณฑ์ที่ใช้ ตัวอย่างเช่น ในอุตสาหกรรมการผลิตเครื่องดื่มของอุตสาหกรรมอาหารค่าที่ยอมรับได้ในช่วงคือ 6.5-9.2
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0007

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

Technical Management N.Banchongkit
Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by D.Chongchon
Dej Chongchon
Senior Manager
ทะเบียนเลขที่ ว-323-จ-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981840-2

Sample Number	2438929-3
Sampled Date	Apr 26, 2024 2:35 PM
Sample Description	Underground Water
Location	GW3 ; พื้นที่ติดกับบ่อบำบัดของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.0006	0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.19	160	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.009	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	1.68	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	0.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.002	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Nolsanglam
Manager
ทะเบียนเลขที่ ว-204-จ-0007

Approved by Kanokkorn Asek
Kanokkorn Asek
Senior Manager
ทะเบียนเลขที่ ว-204-จ-0004

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981840-2

Sample Number	2438929-3
Sampled Date	Apr 26, 2024 2:35 PM
Sample Description	Underground Water
Location	GW3 ; พื้นที่ติดเขื่อนในแนวทิศเหนือของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Selenium	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.03	10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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

Technical Management Sawitree N.
Sawitree Noisanglam
Manager
ทะเบียนเลขที่ ว-204-จ-0007

Approved by Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-จ-0001

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

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981840-3

Sample Number	2438929-3
Sampled Date	Apr 26, 2024 2:35 PM
Sample Description	Underground Water
Location	GW3 ; พื้นที่ติดเขื่อนในแนวทิศเหนือของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	0.16	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	<0.0005	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.55	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL	-	-	<1.8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	14	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Color	Color unit	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L	-	0.2	<0.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	0.07	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

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

Approved by Sawitree N.
Sawitree Noisanglam
Manager

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

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981840-3

Sample Number	2438929-3
Sampled Date	Apr 26, 2024 2:35 PM
Sample Description	Underground Water
Location	GW3 ; พื้นที่ติดเขื่อนในแนวทิศเหนือของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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							
Permanent Hardness as CaCO3	mg/L	-	1	26	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	31.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L	-	1	8	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	108	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L	-	1	33	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU	-	0.1	16.0	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

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

Approved by Sawitree N.
Sawitree Noisanglam
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981841-1

Sample Number	2438929-4
Sampled Date	Apr 26, 2024 10:45 AM
Sample Description	Underground Water
Location	GW4 ; พื้นที่ติดเขื่อนในแนวทิศเหนือของโครงการด้านทิศตะวันตก
Date Analysis Commenced	Apr 26, 2024
Condition of Sample	Contained in 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							
pH at 25 degree C		-	-	7.5	6.5-9.2 (1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(1): ในกรณีที่มีการปนเปื้อนของสารหลายชนิดในพื้นที่ปริมาณเพิ่มเติมเหล่านี้ควรนำมาพิจารณาร่วมด้วย เช่น ค่าความเป็นกรดและด่างของน้ำใต้ดินที่ปนเปื้อนสารหลายชนิดในพื้นที่ เนื่องจากสารปนเปื้อนบางชนิดมีความสามารถในการละลายน้ำได้ดีในสภาวะที่เป็นกรดหรือด่างมาก ซึ่งอาจส่งผลกระทบต่อสิ่งแวดล้อมได้ เช่น ค่าความเป็นกรดและด่างของน้ำใต้ดินที่ปนเปื้อนสารหลายชนิดในพื้นที่ มีค่าอยู่ในช่วง 6.5-9.2
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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

Technical Management N.Bangkit
Nanumon Banchongkit
Supervisor
ทะเบียนเลขที่ ว-323-จ-9445

Approved by D.Chuncho
Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-จ-9442

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

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981841-2

Sample Number	2438929-4
Sampled Date	Apr 26, 2024 10:48 AM
Sample Description	Underground Water
Location	GW4 ; ที่มหรัสดุ้บริเวณด้านขอบของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.02	0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.49	10.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	2.36	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	0.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.001	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree N.
Sawitree Nohsangiam
Manager
ทะเบียนเลขที่ ว-204-ก-0007

Approved by Kanokkorn Anek.
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ก-0004

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

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

Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981841-2

Sample Number	2438929-4
Sampled Date	Apr 26, 2024 10:48 AM
Sample Description	Underground Water
Location	GW4 ; ที่มหรัสดุ้บริเวณด้านขอบของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Selenium	mg/L	0.0003	0.0005	Not Detected	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	Not Detected	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-ข-0448 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-ข-0002

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

Technical Management Sawitree N.
Sawitree Nohsangiam
Manager
ทะเบียนเลขที่ ว-204-ก-0007

Approved by Kanokkorn Anek.
Kanokkorn Anek
Senior Manager
ทะเบียนเลขที่ ว-204-ก-0004

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981841-3

Sample Number	2438929-4
Sampled Date	Apr 26, 2024 10:48 AM
Sample Description	Underground Water
Location	GW4 ; ที่มหรัสดุ้บริเวณด้านขอบของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	0.12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.0006	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	4.35	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL			<1.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	22	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (E)	Rayong
Color	Color unit		5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L		0.2	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	0.06	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

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Approved by Sawitree N.
Sawitree Nohsangiam
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road , Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981841-3

Sample Number	2438929-4
Sampled Date	Apr 26, 2024 10:48 AM
Sample Description	Underground Water
Location	GW4 ; ที่มหรัสดุ้บริเวณด้านขอบของโครงการด้านทิศตะวันออก
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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							
Permanent Hardness as CaCO3	mg/L		1	58	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017. part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	3.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L		1	293	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017. part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L		5	412	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L		1	351	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU		0.1	70.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

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

Approved by Sawitree N.
Sawitree Nohsangiam
Manager

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10969-31/ENGL
5 (Reports), A4 GL rpt (4 PPM)

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981842-1

Sample Number 2438929-5
Sampled Date Apr 26, 2024 2:56 PM
Sample Description Underground Water
Location ม.4 บ้านฝั่งหลังใน
Date Analysis Commenced Apr 26, 2024
Condition of Sample Contained in 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							
pH at 25 degree C		-	-	7.0	6.5-9.2 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(1): ในกรณีที่มีการปนเปื้อนของสารหนิดตางใดเป็นผลมาจากธรรมชาติ ให้ใช้ค่าที่ตรวจวัดได้จากการสำรวจหาค่าพื้นหลังตามธรรมชาติ ในการพิจารณาตัดสินการปนเปื้อนเฉพาะพื้นที่นั้นๆ
Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-0002

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

Technical Management Nanumon Banchongkit, Supervisor, หมายเลขที่ ว-323-ง-9445
Approved by Dej Changchon, Senior Manager, หมายเลขที่ ว-323-ง-9442

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981842-2

Sample Number 2438929-5
Sampled Date Apr 26, 2024 2:56 PM
Sample Description Underground Water
Location ม.4 บ้านฝั่งหลังใน
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	Not Detected	0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Barium	mg/L	0.0003	0.0005	0.32	160	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	6.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
Lead	mg/L	0.0003	0.0005	0.001	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Manganese	mg/L	0.0003	0.0005	0.06	33	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	0.7	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3112	Bangkok
Nickel	mg/L	0.0003	0.0005	0.007	5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Technical Management Sawitree Noisanglam, Manager, หมายเลขที่ ว-204-ง-0007
Approved by Kanokkorn Anek, Senior Manager, หมายเลขที่ ว-204-ง-0004

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Analysis / Test Report

TESTING
No.0009

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981842-2

Sample Number 2438929-5
Sampled Date Apr 26, 2024 2:56 PM
Sample Description Underground Water
Location ม.4 บ้านฝั่งหลังใน
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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
Metals Testing							
Selenium	mg/L	0.0003	0.0005	0.0006	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Silver	mg/L	0.0003	0.0005	Not Detected	12	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Trivalent Chromium *	mg/L	-	0.01	<0.01	40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.04	10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng หมายเลขที่ ว-323-ง-9448 , Pattarapol Sawangjaitam หมายเลขที่ ว-204-ง-0002

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

Technical Management Sawitree Noisanglam, Manager, หมายเลขที่ ว-204-ง-0007
Approved by Kanokkorn Anek, Senior Manager, หมายเลขที่ ว-204-ง-0004

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981842-3

Sample Number 2438929-5
Sampled Date Apr 26, 2024 2:56 PM
Sample Description Underground Water
Location ม.4 บ้านฝั่งหลังใน
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	<0.005	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.03	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL	-	-	2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	30	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Color	Color unit	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L	-	0.2	<0.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	14.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

Approved by Sawitree Noisanglam, Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981842-3

Sample Number 2438929-5
Sampled Date Apr 26, 2024 2:56 PM
Sample Description Underground Water
Location น.ท.ฐ.นำนศิษย์จำใจ
Date Analysis Commenced Apr 27, 2024
Condition of Sample Contained in 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							
Permanent Hardness as CaCO3	mg/L	-	1	41	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	37.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L	-	1	61	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	254	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L	-	1	102	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU	-	0.1	0.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 22nd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

Approved by Sawitree N.
Sawitree Nolsanglam
Manager

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Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location :

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981843-1

Sample Number 2438929-6
Sampled Date Apr 26, 2024 3:15 PM
Sample Description Underground Water
Location น.10 นำนจำพระนา
Date Analysis Commenced Apr 26, 2024
Condition of Sample Contained in 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							
pH at 25 degree C		-	-	7.3	6.5-9.2 (I)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 H (B)	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
(I): ในกรณีที่มีการปนเปื้อนของกลุ่มสารหนึ่งหรือหลายชนิดในกลุ่มสารดังกล่าวข้างต้นในน้ำใต้ดินที่ใช้ในการอุปโภคบริโภค ให้ถือว่าน้ำใต้ดินนั้นมีการปนเปื้อนของ

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981843-3

Sample Number	2438929-6
Sampled Date	Apr 26, 2024 3:15 PM
Sample Description	Underground Water
Location	ม.10 บ้านจำหระเอา
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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
Metals Testing							
Aluminium	mg/L	0.003	0.005	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Iron	mg/L	0.003	0.005	0.007	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Microbiological Testing							
Escherichia coli	MPN/100mL	-	-	2.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Bangkok
Water Testing							
Chloride as Cl	mg/L	0.5	1	47	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Color	Color unit	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Rayong
Fluoride	mg/L	-	0.2	<0.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-F (C)	Rayong
Nitrate as N	mg/L	0.015	0.05	37.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong

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Approved by
Sawitree Noisangiam
Manager

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Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438929
Date Received : Apr 26, 2024
Date Reported : May 08, 2024
Report Number : 2981843-3

Sample Number	2438929-6
Sampled Date	Apr 26, 2024 3:15 PM
Sample Description	Underground Water
Location	ม.10 บ้านจำหระเอา
Date Analysis Commenced	Apr 27, 2024
Condition of Sample	Contained in 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							
Permanent Hardness as CaCO3	mg/L	-	1	87	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Sulfate	mg/L	0.6	2	21.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-SO4 (E)	Rayong
Total Alkalinity as CaCO3	mg/L	-	1	91	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Bangkok
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	464	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO3	mg/L	-	1	178	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Bangkok
Turbidity	NTU	-	0.1	0.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the Ministry of Industry B.E. 2559 (2016) on Soil and Groundwater Contamination Criteria, Monitoring of Soil and Groundwater Quality, Report Submission and Report Preparation of Soil and Groundwater Quality, and Proposal Report of Soil and Groundwater Controlling and Reduction Measures
Sampling By : Pitthaya Thongtaeng , Pattarapol Sawangjaitam

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

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
Sawitree Noisangiam
Manager

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ภาคผนวก ค-6

ผลการศึกษาทรัพยากรชีวภาพทางน้ำ

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

Client : Rojana Industrial Park Public Co., Ltd.

Address : 168 Moo 4 Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi, Thailand, 20230

Project Name : Chonburi Bowin

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
Division Cyanophyta					
Class Cyanophyceae					
Order Chroococcales					
Family Chroococcaceae					
1. *Chroococcus giganteus*	-	-	-	10,000	-
2. *Chroococcus minutus*	10,000	-	-	10,000	-
3. *Merismopedia* sp	-	-	19,000	38,000	57,000
4. *Microcystis aeruginosa*	-	-	-	29,000	9,000
Order Nostocales					
Family Oscillatoriaceae					
5. *Lyngbya birgei*	-	-	66,000	96,000	19,000
6 *Oscillatoria brevis*	10,000	36,000	85,000	19,000	95,000
7. *Oscillatoria princeps*	10,000	-	-	-	-
8. *Oscillatoria* sp.	358,000	614,000	1,128,000	86,000	13,154,000
9. *Oscillatoria splendida*	-	-	9,000	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567) (ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
10. *Oscillatoria tenuis*	348,000	125,000	489,000	124,000	605,000
Family Nostocaceae					
11. *Anabaena azollae*	249,000	10,000	9,000	29,000	28,000
12. *Cylindrospermum majus*	40,000	-	-	-	-
13. *Pseudanabaena* sp.	40,000	-	-	-	-
Family Scytonemataceae					
14. *Tolypothrix* sp.	-	29,000	-	-	-
Family Rivulariaceae					
15. *Calothrix* sp.	-	10,000	-	48,000	28,000
Division Chlorophyta					
Class Chlorophyceae					
Order Volvocales					
Family Volvocaceae					
16. *Eudorina elegans*	30,000	-	28,000	19,000	-
17. *Pandorina morum*	40,000	-	28,000	29,000	19,000
Family Spondylomoraceae					
18. *Spondylomorum quaternarium*	40,000	-	9,000	19,000	57,000
Order Chlorococcales					
Family Hydrodictyaceae					
19 *Pediastrum duplex*	-	10,000	47,000	57,000	57,000
20 *Pediastrum simplex*	-	-	-	19,000	-
Family Coelastraceae					
21. *Coelastrum microporum*	-	-	-	382,000	38,000
22. *Coelastrum sphaericum*	-	-	-	2,139,000	1,966,000
Family Oocystaceae					
23. *Ankistrodesmus falcatus*	80,000	19,000	-	10,000	19,000
24. *Chlorella vulgaris*	-	-	9,000	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567) (ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
25. *Dictyosphaerium pulchellum*	-	-	-	19,000	19,000
26. *Oocystis rectangularis*	-	-	-	10,000	-
27 *Tetraedron gracile*	-	10,000	-	-	-
28. *Tetraedron trigonum*	-	10,000	9,000	-	-
Family Scenedesmaceae					
29 *Cosmarium nudum*	20,000	-	28,000	29,000	9,000
30 *Crucigenia apiculata*	-	-	-	29,000	-
31. *Crucigenia rectangularis*	-	-	-	10,000	-
32. *Scenedesmus armatus*	-	-	113,000	19,000	28,000
33. *Scenedesmus dimorphus*	-	-	-	-	38,000
34. *Scenedesmus opoliensis*	-	10,000	367,000	573,000	491,000
35. *Scenedesmus* sp.	-	-	9,000	29,000	19,000
Order Zygematales					
Family Zygnemataceae					
36. *Spirogyra* sp	20,000	-	28,000	29,000	28,000
Family Desmidiaceae					
37. *Closterium acerosum*	-	-	47,000	10,000	-
38 *Closterium ehrenbergii*	-	-	19,000	-	9,000
39 *Closterium gracile*	-	-	-	10,000	-
40 *Closterium porrectum*	10,000	-	-	-	-
41 *Closterium* sp.	-	-	-	10,000	-
42 *Ihalotheca dissiliens*	-	58,000	-	57,000	47,000
43 *Pleurotaenium* sp	-	10,000	-	-	-
Class Euglenophyceae					
Order Euglenales					
Family Euglenaceae					
44. *Euglena acus*	40,000	29,000	19,000	57,000	28,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567) (ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
45. *Euglena oxyuris*	-	36,000	9,000	29,000	-
46. *Euglena* sp.	80,000	48,000	9,000	10,000	-
47 *Euglena subehrenbergii*	-	-	-	-	9,000
48. *Euglena viridis*	10,000	10,000	9,000	19,000	19,000
49 *Lepocinclis ovum*	119,000	58,000	150,000	382,000	113,000
50. *Phacus angulatus*	-	-	9,000	10,000	19,000
51 *Phacus hamatus*	10,000	19,000	19,000	10,000	-
52. *Phacus longicauda*	-	-	9,000	19,000	-
53. *Phacus myersi*	-	29,000	9,000	-	-
54 *Phacus ranula*	-	10,000	-	-	-
55. *Phacus* sp	60,000	19,000	-	19,000	57,000
56 *Phacus torta*	-	19,000	-	10,000	9,000
57 *Strombomonas* sp	-	-	-	-	9,000
58 *Trachelomonas crebea*	10,000	-	19,000	29,000	19,000
59 *Trachelomonas dangeardiana*	-	-	19,000	-	-
60 *Trachelomonas hispida*	20,000	614,000	66,000	420,000	38,000
61 *Trachelomonas mirabilis*	-	-	-	-	9,000
62. *Trachelomonas superba*	-	-	9,000	-	-
63. *Trachelomonas zingeri*	-	-	19,000	-	-
Division Chromophyta					
Class Bacillariophyceae					
Order Biddulphiales					
Suborder Coscinodiscineae					
Family Thalassiosiraceae					
64. *Cyclotella stelligera*	119,000	-	38,000	-	19,000
Family Aulacoseiraceae					
65 *Aulacoseira granulata*	20,000	-	-	-	9,000

ตารางที่ ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
Suborder Biddulphineae					
Family Biddulphiaceae					
66. *Biddulphia biddulphiana*	-	10,000	-	-	-
Order Bacillariales					
Suborder Fragilariineae					
Family Fragilariaceae					
67. *Fragilaria capucina*	30,000	1,997,000	602,000	955,000	1,663,000
68. *Synedra acus*	70,000	29,000	-	-	9,000
69. *Synedra ulna*	199,000	96,000	207,000	458,000	756,000
Family Tabellariaceae					
70. *Tabellaria fenestrata*	20,000	-	-	-	-
Suborder Bacillariineae					
Family Eunotiaceae					
71. *Eunotia pectinalis*	10,000	19,000	9,000	10,000	66,000
Family Cymbellaceae					
72. *Gomphonema parvulum*	-	-	28,000	-	9,000
Family Naviculaceae					
73. *Amphora exigua*	-	-	28,000	10,000	-
74. *Amphora robusta*	10,000	29,000	-	-	-
75. *Craticula cuspidata*	-	10,000	-	-	-
76. *Gyrosigma attenuatum*	627,000	10,000	9,000	29,000	142,000
77. *Gyrosigma scalproides*	30,000	10,000	-	-	28,000
78. *Gyrosigma* sp.	119,000	10,000	-	10,000	9,000
79. *Hantzschia amphioxys*	-	-	9,000	-	47,000
80. *Navicula cuspidata*	-	-	-	10,000	9,000
81. *Navicula lanceolata*	-	-	-	-	9,000
82. *Navicula* sp.	90,000	36,000	414,000	29,000	9,000

ตารางที่ ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
83. *Pinnularia braunii*	-	-	-	10,000	-
84. *Pinnularia gibba*	-	10,000	28,000	19,000	47,000
Family Bacillariaceae					
85. *Bacillaria paxillifer*	259,000	-	122,000	86,000	123,000
86. *Nitzschia acicularis*	40,000	-	-	-	-
87. *Nitzschia linearis*	10,000	-	-	-	-
88. *Nitzschia lorenziana*	-	-	-	-	9,000
89. *Nitzschia paleacea*	60,000	-	85,000	-	57,000
90. *Nitzschia sigmoidea*	10,000	-	-	-	38,000
91. *Nitzschia* sp.	50,000	-	-	-	-
92. *Tryblionella hungarica*	-	36,000	9,000	-	38,000
93. *Tryblionella victoriae*	-	-	-	10,000	-
Family Surirellaceae					
94. *Surirella elegans*	-	-	9,000	-	9,000
95. *Surirella linearis*	-	10,000	-	-	-
96. *Surirella robusta*	-	-	56,000	-	38,000
Class Dinophyceae					
Order Gonyaulacales					
Family Ceratiaceae					
97. *Ceratium furcoides*	-	-	-	10,000	-
Order Peridiniales					
Family Peridiniaceae					
98. *Peridinium gatunense*	-	-	-	10,000	-
99. *Peridinium* sp.	-	-	38,000	48,000	47,000

ตารางที่ ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
ชนิดแพลงก์ตอนพืช	41	38	50	58	57
ปริมาณแพลงก์ตอนพืช	3,427,000	4,154,000	4,611,000	6,715,000	20,358,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	3.0074	1.9739	2.7933	2.6205	1.5435
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.8098	0.5426	0.7140	0.6454	0.3818

Sample Location :
1. สถานี 2438932-1 : Bio1 : ห้วยมะนาว ก่อนไหลผ่านพื้นที่โครงการ
2. สถานี 2438932-2 : Bio2 : ห้วยสาธารณะ ก่อนไหลผ่านพื้นที่โครงการ
3. สถานี 2438932-3 : Bio3 : ห้วยพันเสถียร ก่อนไหลผ่านพื้นที่โครงการ
4. สถานี 2438932-4 : Bio4 : ห้วยพันเสถียร บริเวณจุดระบายน้ำทิ้งของโครงการ
5. สถานี 2438932-5 : Bio5 : ห้วยพันเสถียร หลังผ่านพื้นที่โครงการ

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

(นางสาวกนกวรรณ ขวาต่อน)
ผู้วิเคราะห์

(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

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

Client : Rojana Industrial Park Public Co., Ltd.

Address : 168 Moo 4 Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi, Thailand, 20230

Project Name : Chonburi Bowin

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตารางที่ ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
Phylum Protozoa					
Subphylum Plasmodroma					
Class Sarcodina					
Subclass Rhizopoda					
Order Testacida					
Family Arcellidae					
1. *Arcella* sp.	-	19,000	28,000	-	9,000
2. *Arcella vulgaris*	-	19,000	66,000	19,000	19,000
Family Difflugiidae					
3. *Difflugia acuminata*	-	-	9,000	-	9,000
Family Euglyphidae					
4 *Euglypha acanthophora*	10,000	19,000	19,000	10,000	28,000
5 *Euglypha rotunda*	-	77,000	38,000	57,000	38,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
Subclass Actinopoda					
Order Heliozoida					
Family Actinophryidae					
6. *Actinophrys sol*	-	-	-	10,000	-
Subphylum Ciliophora					
Class Ciliata					
Subclass Holotricha					
Order Gymnostomatida					
7 *Coleps* sp.	-	10,000	19,000	10,000	47,000
8 *Didinium* sp.	-	29,000	56,000	-	-
Order Hymenostomatida					
9 *Paramecium* sp.	-	10,000	28,000	-	28,000
Subclass Spirotricha					
Order Tintinnida					
Family Codonellidae					
10. *Tintinnopsis fimbriata*	10,000	-	-	-	-
Order Hypotrichida					
11. *Euplotes* sp.	-	-	-	-	47,000
Subclass Peritricha					
Order Peritrichida					
12. *Zoothamnium* sp.	30,000	36,000	66,000	96,000	76,000
Phylum Rotifera					
Class Monogononta					
Order Ploima					
Family Brachionidae					
13. *Brachionus angularis*	10,000	134,000	-	96,000	47,000
14. *Brachionus calyciflorus*	-	-	-	-	38,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
15. *Brachionus caudatus*	-	-	-	-	19,000
16. *Brachionus plicatilis*	-	-	-	10,000	28,000
17. *Brachionus* sp.	-	-	9,000	10,000	-
18. *Colurella obtusa*	-	10,000	-	10,000	-
19. *Dipleuchlanis* sp.	-	-	-	-	9,000
20. *Lepadella acuminata*	-	-	-	-	9,000
21. *Lepadella rhomboides*	-	-	9,000	-	-
Family Lecanidae					
22. *Lecane imbricata*	-	-	-	-	9,000
23. *Lecane* sp.	20,000	-	-	29,000	-
24. *Lecane thienemanni*	10,000	-	-	-	9,000
Family Notommatidae					
25. *Cephalodella forficula*	-	77,000	-	29,000	95,000
26. *Cephalodella gibba*	10,000	-	28,000	19,000	38,000
Family Tricocercidae					
27. *Trichocerca pusilla*	-	-	-	19,000	9,000
Family Asplanchnidae					
28. *Asplanchna priodonta*	-	10,000	38,000	-	28,000
Family Synchaetidae					
29. *Polyarthra dolichoptera*	-	-	-	-	9,000
30. *Polyarthra vulgaris*	-	-	9,000	10,000	19,000
Order Flosculariacea					
Family Testudinellidae					
31 *Filinia cornuta*	-	-	-	-	9,000
32. *Filinia terminalis*	-	691,000	-	19,000	132,000
Family Hexarthridae					
33. *Hexarthra mira*	-	-	-	-	66,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 11 เมษายน 2567)

(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)				
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5
Class Digononta					
Family Philodinidae					
34. *Rotaria rotatoria*	-	10,000	9,000	10,000	9,000
35. *Rotaria* sp.	-	-	-	-	19,000
Phylum Arthropoda					
Class Crustacea					
Subclass Branchiopoda					
Order Diplostraca					
Suborder Cladocera					
Family Bosminidae					
36. *Bosminopsis* sp.	-	-	-	10,000	-
Family Moinidae					
37 *Moina macrocopa*	-	19,000	-	-	-
Subclass Ostracoda					
Order Podocopa					
Family Cypridae					
38. *Candona* sp.	-	-	-	-	9,000
Subclass Copepoda					
39 Copepod nauplii	-	58,000	-	29,000	28,000
ชนิดแพลงก์ตอนสัตว์	**7**	**16**	**15**	**19**	**30**
ปริมาณแพลงก์ตอนสัตว์	**100,000**	**1,228,000**	**431,000**	**502,000**	**939,000**
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	**1.8344**	**1.7026**	**2.4801**	**2.5716**	**3.0661**
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	**0.9427**	**0.6141**	**0.9158**	**0.8734**	**0.9015**

Sample Location : 1 สถานี 2438932-1 Bio1 ห้วยมะนาว ก่อนไหลผ่านพื้นที่โครงการ
2 สถานี 2438932-2 Bio2 ห้วยสาธารณะ ก่อนไหลผ่านพื้นที่โครงการ
3 สถานี 2438932-3 Bio3 ห้วยพันเสตีจ ก่อนไหลผ่านพื้นที่โครงการ
4 สถานี 2438932-4 Bio4 ห้วยพันเสตีจ บริเวณจุดระบายน้ำทิ้งของโครงการ
5 สถานี 2438932-5 Bio5 ห้วยพันเสตีจ หลังผ่านพื้นที่โครงการ

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

(นางสาวกนกวรรณ ขาวต่อม)
ผู้วิเคราะห์

(นายองอาจ อิมทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

Condition of Sample : fishing gear

(นายสาโรจน์ ริ่มคำหิ้ง)
ผู้วิเคราะห์

(นายอองกด อินทรชาติ)
หัวหน้าสถาบันวิจัยประมงศรีราชา

สถาบันวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางทระ อ. ศรีราชา จ. ชลบุรี 20110
โทรศัพท์/โทรสาร. (038) 311379

Client : Rojana Industrial Park Public Co., Ltd.

Address : 168 Moo 4, Satlahip-Chacheongsao Road., Bowin, Sriracha, Chonburi, Thailand, 20230

Project Name : Chonburi Bowin

รายงานผลการวิเคราะห์สัตว์น้ำ

ตารางที่ ผลการวิเคราะห์สัตว์น้ำ (Aquatic animal) (เก็บตัวอย่างเมื่อวันที่ 11 เมษายน 2567)

ชนิดสัตว์น้ำ	ปริมาณสัตว์น้ำ (ตัว)					ช่วงขนาด (ซม.)	น้ำหนักรวม (กรัม)
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5		
Phylum Chordata							
Class Actinopterygii							
Order Cichliformes							
Family Cichlidae							
Oreochromis niloticus (ปลานิล)	-	6	6	1	1	4.20-12.00	195.70

ตารางที่ ผลการวิเคราะห์สัตว์น้ำ (Aquatic animal) (เก็บตัวอย่างเมื่อวันที่ 11 เมษายน 2567) (ต่อ)

ชนิดสัตว์น้ำ	ปริมาณสัตว์น้ำ (ตัว)					ช่วงขนาด (ซม.)	น้ำหนักรวม (กรัม)
	2438932-1	2438932-2	2438932-3	2438932-4	2438932-5		
Order Cypriniformes							
Family Cyprinidae							
Esomus metallicus (ปลาซิวหนวดยาว)	-	-	7	-	-	6.30-7.10	24.00
Puntius brevis (ปลาตะเพียนทราย)	3	2	7	2	2	4.50-12.20	73.30
Rasbora paviana (ปลาซิวควายแถบดำ)	5	-	3	5	7	5.70-7.60	66.30
ชนิดสัตว์น้ำ	2	2	4	3	3	4.20-12.20	359.30
ปริมาณสัตว์น้ำ	8	8	23	8	10		
ดัชนีความหลากหลายสัตว์น้ำ	0.6616	0.5623	1.3403	0.9803	0.8018		

Sample Location :
1. สถานี 2438932-1 : Bio1 : ห้วยมะนาว ก่อนไหลผ่านพื้นที่โครงการ
2. สถานี 2438932-2 : Bio2 : ห้วยสาธารณะ ก่อนไหลผ่านพื้นที่โครงการ
3. สถานี 2438932-3 : Bio3 : ห้วยพันเสลิง ก่อนไหลผ่านพื้นที่โครงการ
4. สถานี 2438932-4 : Bio4 : ห้วยพันเสลิง บริเวณจุดระบายน้ำทิ้งของโครงการ
5. สถานี 2438932-5 : Bio5 : ห้วยพันเสลิง หลังผ่านพื้นที่โครงการ

สถาบันวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางทระ
อ. ศรีราชา จ. ชลบุรี 20110
โทรศัพท์/โทรสาร. (038) 311379

Client : Rojana Industrial Park Public Co., Ltd.

Address : 168 Moo 4, Satlahip-Chacheongsao Road., Bowin, Sriracha, Chonburi, Thailand, 20230

Project Name : Chonburi Bowin

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตารางที่ ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างเมื่อวันที่ 11 เมษายน 2567)

กลุ่มสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัว/ตารางเมตร)				
	2438938-1	2438938-2	2438938-3	2438938-4	2438938-5
Phylum Arthropoda					
Class Insecta					
Order Diptera					
Family Chironomidae					
Chironomus sp. (หนอนแดง)	-	-	104	-	104
Order Ephemeroptera					
Family Ephemeridae					
Ephemera sp. (ตัวอ่อนแมลงชีปะขาว)	-	-	-	-	15
Order Odonata					
Family Gomphidae					
Gomphus sp. (แมลงปอเสือ)	30	-	-	-	-

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (ตั้งแต่วันที่ 11 เมษายน 2567) (ต่อ)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)				
	2438938-1	2438938-2	2438938-3	2438938-4	2438938-5
Phylum Mollusca					
Class Gastropoda					
Order Architaenioglossa					
Family Bithynidae					
Bithynia sp. (หอยไข)	-	30	-	-	-
Family Thiaridae					
Melanoides sp. (หอยเจดีย์)	-	-	104	-	-
Tarebia sp. (หอยเจดีย์)	904	356	-	60	15
Thaira sp. (หอยเจดีย์หนาม)	-	15	-	-	-
สกุลสัตว์หน้าดิน	2	3	2	1	3
ปริมาณสัตว์หน้าดิน	934	401	208	60	134
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	0.1420	0.4226	0.6931	0.0000	0.6870

Sample Location :
1 สถานี 2438938-1 Bio1 ห้วยมะนาว ก่อนไหลผ่านพื้นที่โครงการ
2 สถานี 2438938-2 Bio2 ห้วยสาธารณะ ก่อนไหลผ่านพื้นที่โครงการ
3 สถานี 2438938-3 Bio3 ห้วยหินเสด็จ ก่อนไหลผ่านพื้นที่โครงการ
4 สถานี 2438938-4 Bio4 ห้วยหินเสด็จ บริเวณจุดระบายน้ำทิ้งของโครงการ
5 สถานี 2438938-5 Bio5 ห้วยหินเสด็จ หลังผ่านพื้นที่โครงการ

Condition of Sample : contained in one plastic zip bag

(นายธรรฤดี กันทะวงศ์)
ผู้วิเคราะห์

(นายอลงกต อินทรชาลี)
หัวหน้าสถานีวิจัยประมงกรีราชา

ภาคผนวก ค-7

ผลการตรวจวิเคราะห์โลหะหนักในตะกอนดิน

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438941
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956905-1

Sample Number	2438941-1
Sampled Date	Apr 11, 2024 11:25 AM
Sample Description	ตะกอนดิน
Location	อ่างเก็บน้ำดิบ
Date Analysis Commenced	Apr 12, 2024
Condition of Sample	Packed in one plastic bag and one glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Aluminium	mg/kg	-	1.00	1761	No Standard	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Cadmium	mg/kg	-	0.50	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Copper	mg/kg	-	1.00	1.33	≤21.5	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060 A and 7196 A	Bangkok
Iron	mg/kg	-	1.00	6180	No Standard	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Lead	mg/kg	-	1.00	16.7	≤36	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤0.2	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	<1.00	≤27.5	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Zinc	mg/kg	-	1.00	2.82	≤80	United States Environmental Protection Agency, EPA Method 3050 B and 6010 D	Bangkok
Physical Parameters							
Moisture	%	-	0.1	23.1	No Standard	In-house method based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 G	Bangkok
Soil Testing							

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
Siriluk Bunnak
Section Head

Analysis / Test Report

Client : Rojana Industrial Park Public Co., Ltd.
168 Moo 4, Sattahip-Chachoengsao Road., Bowin, Sriracha, Chonburi Thailand 20230
P/O : RJN-BW009/66
Project Name : Chonburi Bowin
Project Location:

Lot ID: 2438941
Date Received : Apr 11, 2024
Date Reported : Apr 23, 2024
Report Number : 2956905-1

Sample Number	2438941-1
Sampled Date	Apr 11, 2024 11:25 AM
Sample Description	ตะกอนดิน
Location	อ่างเก็บน้ำดิบ
Date Analysis Commenced	Apr 12, 2024
Condition of Sample	Packed in one plastic bag and one glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Soil Testing							
pH aqueous phase 50% (w/v)		-	-	7.8	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพตะกอนดินในแหล่งน้ำผิวดินเพื่อคุ้มครองสัตว์น้ำดิน

Note : Analysis Results expressed on dry basis.

Sampling By : Samart Khumphlee

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

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
Siriluk Bunnak
Section Head

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ใบรับรองการสอบเทียบเครื่องมือ

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รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Ambient	Particulate Matter (PM10)	High volume	RYG_EN0001			On site Calibration
Ambient	Particulate Matter (PM10)	High volume	RYG_EN0002			On site Calibration
Ambient	Particulate Matter (PM10)	High volume	RYG_EN0003			On site Calibration
Ambient	Particulate Matter (PM10)	Digital Balance	RYG_EN0004	22-Feb-24	22-Feb-25	12
Ambient	Total Suspended Particulate	High volume	RYG_EN0173			On site Calibration
Ambient	Total Suspended Particulate	High volume	RYG_EN0174			On site Calibration
Ambient	Total Suspended Particulate	High volume	RYG_EN0175			On site Calibration
Ambient	Total Suspended Particulate	High volume	RYG_EN0176			On site Calibration
Ambient	Total Suspended Particulate	Digital Balance	RYG_EN0005	22-Feb-24	22-Feb-25	12
Ambient	Nitrogen Dioxide	UV/ Analyzer	RYG_EN0007	4-Jun-24	4-Jun-25	12
Ambient	Nitrogen Dioxide	UV/ Analyzer	RYG_EN0008	4-Jun-24	4-Jun-25	12
Ambient	Nitrogen Dioxide	UV/ Analyzer	RYG_EN0047	4-Jun-24	4-Jun-25	12
Ambient	Nitrogen Dioxide	UV/ Analyzer	RYG_EN0059	4-Jun-24	4-Jun-25	12
Ambient	Sulfur Dioxide	UV/ Analyzer	RYG_EN0057	4-Jun-24	4-Jun-25	12
Ambient	Sulfur Dioxide	UV/ Analyzer	RYG_EN0058	4-Jun-24	4-Jun-25	12
Ambient	Sulfur Dioxide	UV/ Analyzer	RYG_EN0060	4-Jun-24	4-Jun-25	12
Ambient	Wind Speed and Direction	Wind Speed and Direction	RYG_EN0010	17-Feb-25	17-Aug-25	18
Noise	Leq (1 hr)	Sound Level Meter	RYG_EN0020	26-Jan-24	26-Jan-25	12
Noise	Leq (1 hr)	Sound Level Meter	RYG_EN0021	31-Aug-23	31-Aug-24	12
Noise	Leq (1 hr)	Sound Level Meter	RYG_EN0022	4-Jun-24	4-Jun-25	12
Noise	Leq (1 hr)	Sound Level Meter	RYG_EN0023	31-Aug-23	31-Aug-24	12
Noise	Leq (1 hr)	Sound Level Meter	RYG_EN0024	26-Jan-24	26-Jan-25	12
Noise	Leq 5 min	Sound Level Meter	RYG_EN0026	26-Jan-24	26-Jan-25	12
Noise	Leq 5 min	Sound Level Meter	RYG_EN0027	31-Aug-23	31-Aug-24	12
Noise	Leq 5 min	Sound Level Meter	RYG_EN0028	4-Jun-24	4-Jun-25	12
Noise	Leq 5 min	Sound Level Meter	RYG_EN0029	31-Aug-23	31-Aug-24	12
Noise	Leq 5 min	Sound Level Meter	RYG_EN0030	26-Jan-24	26-Jan-25	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0031	31-Aug-23	31-Aug-24	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0032	31-Aug-23	31-Aug-24	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0033	4-Jun-24	4-Jun-25	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0034	31-Aug-23	31-Aug-24	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0035	26-Jan-24	26-Jan-25	12
Noise	Noise Annoyance	Sound Level Meter	RYG_EN0036	5-Jun-24	5-Jun-25	12
Polychlorinated	Dioxin	Gas Chromatograph-Mass Spectrometer	RYG_EN0037	18-Sep-23	18-Mar-25	18
Polychlorinated	Dioxin	Air Sampler	RYG_EN0038	18-Sep-23	18-Mar-25	18
Polychlorinated	Dioxin	Temperature Controlling Chamber	RYG_EN0039	19-Jun-23	19-Dec-24	18
Polychlorinated	Dioxin	Gas Chromatograph-Mass Spectrometer	RYG_EN0040	18-Sep-23	18-Mar-25	18
Polychlorinated	Furan	Gas Chromatograph-Mass Spectrometer	RYG_EN0041	18-Sep-23	18-Mar-25	18
Polychlorinated	Furan	Air Sampler	RYG_EN0042	18-Sep-23	18-Mar-25	18
Polychlorinated	Furan	Temperature Controlling Chamber	RYG_EN0043	19-Jun-23	19-Dec-24	18
Polychlorinated	Furan	Gas Chromatograph-Mass Spectrometer	RYG_EN0044	18-Sep-23	18-Mar-25	18
Polychlorinated	Total Dioxin and Furan (TEQ)	Calculation Software	RYG_EN0045	18-Sep-23	18-Mar-25	18
Polychlorinated	Total Dioxin and Furan (TEQ)	Air Sampler	RYG_EN0046	18-Sep-23	18-Mar-25	18
Polychlorinated	Total Suspended Particle	High Volume Air Sampler	RYG_EN0048	18-Mar-24	18-Sep-24	12
Polychlorinated	Total Suspended Particle	Air Sampler	RYG_EN0049	18-Mar-24	18-Sep-24	12
Polychlorinated	Oil & Grease	Separatory Funnel	RYG_EN0050	19-Mar-24	19-Mar-25	12
Polychlorinated	Oil & Grease	Air Sampler	RYG_EN0051	19-Mar-24	19-Mar-25	12
Polychlorinated	Oil & Grease	Water Bath	RYG_EN0052	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Flame Ionization Detector	RYG_EN0053	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Air Sampler	RYG_EN0054	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Suspended Particle	Air Sampler	RYG_EN0055	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Suspended Particle	Digital Balance	RYG_EN0056	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Flame Ionization Detector	RYG_EN0061	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Air Sampler	RYG_EN0062	19-Mar-24	19-Mar-25	12
Polychlorinated	Oil & Grease	Separatory Funnel	RYG_EN0063	19-Mar-24	19-Mar-25	12
Polychlorinated	Oil & Grease	Air Sampler	RYG_EN0064	19-Mar-24	19-Mar-25	12
Polychlorinated	Oil & Grease	Water Bath	RYG_EN0065	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Flame Ionization Detector	RYG_EN0066	19-Mar-24	19-Mar-25	12
Polychlorinated	Total Hydrocarbon (THC)	Air Sampler	RYG_EN0067	19-Mar-24	19-Mar-25	12
Polychlorinated	Chlorobenzene	Gas Chromatograph-Mass Spectrometer	RYG_EN0068	18-Sep-23	18-Mar-25	18
Polychlorinated	Dioxin	Gas Chromatograph-Mass Spectrometer	RYG_EN0069	18-Sep-23	18-Mar-25	18
Polychlorinated	Furan	Gas Chromatograph-Mass Spectrometer	RYG_EN0070	18-Sep-23	18-Mar-25	18

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รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Water Lab	Chloride	Auto Titrator	RYG_EN0152	16-Sep-23	16-Mar-24	12
Water Lab	Residue	Drying Oven	RYG_EN0153	27-Jun-23	27-Jun-24	12
Water Lab	Sulfate	Spectrophotometer	RYG_EN0154	19-Sep-23	19-Mar-24	12
Water Lab	Color	Spectrophotometer	RYG_EN0155	18-Jan-24	18-Jul-24	6
Water Lab	Ammonia Nitrogen	Distillation Unit	RYG_EN0156	18-Sep-23	18-Mar-24	12
Water Lab	Total Nitrogen	Digestion Unit	RYG_EN0157	27-Feb-24	27-Aug-24	12
Water Lab	Total Hardness	Titration	RYG_EN0158	27-Feb-24	27-Aug-24	12
Water Lab	Aluminum	ICP-MS	RYG_EN0159	4-Apr-24	4-Oct-24	12
Water Lab	Aluminum	Hot Block	RYG_EN0160	21-Sep-23	21-Mar-24	12
Water Lab	Aluminum	Digestion Heating Room	RYG_EN0161	4-Dec-23	4-Jun-24	12
Water Lab	Antimony	ICP-MS	RYG_EN0162	4-Apr-24	4-Oct-24	12
Water Lab	Arsenic	Hot Block	RYG_EN0163	21-Sep-23	21-Mar-24	12
Water Lab	Arsenic	Digestion Heating Room	RYG_EN0164	4-Dec-23	4-Jun-24	12
Water Lab	Copper	ICP-MS	RYG_EN0165	4-Apr-24	4-Oct-24	12
Water Lab	Copper	Hot Block	RYG_EN0166	21-Sep-23	21-Mar-24	12
Water Lab	Copper	Digestion Heating Room	RYG_EN0167	4-Dec-23	4-Jun-24	12
Water Lab	Cadmium	ICP-MS	RYG_EN0168	4-Apr-24	4-Oct-24	12
Water Lab	Cadmium	Hot Block	RYG_EN0169	21-Sep-23	21-Mar-24	12
Water Lab	Cadmium	Digestion Heating Room	RYG_EN0170	4-Dec-23	4-Jun-24	12
Water Lab	Hexavalent Chromium	Spectrophotometer	RYG_EN0171	19-Sep-23	19-Mar-24	12
Water Lab	Lead	ICP-MS	RYG_EN0172	4-Apr-24	4-Oct-24	12
Water Lab	Lead	Hot Block	RYG_EN0173	21-Sep-23	21-Mar-24	12
Water Lab	Lead	Digestion Heating Room	RYG_EN0174	4-Dec-23	4-Jun-24	12
Water Lab	Iron	ICP-MS	RYG_EN0175	4-Apr-24	4-Oct-24	12
Water Lab	Iron	Hot Block	RYG_EN0176	21-Sep-23	21-Mar-24	12
Water Lab	Iron	Digestion Heating Room	RYG_EN0177	4-Dec-23	4-Jun-24	12
Water Lab	Mercury	Direct Mercury Analyzer	RYG_EN0178	5-Mar-24	5-Sep-24	12
Water Lab	Nickel	ICP-MS	RYG_EN0179	4-Apr-24	4-Oct-24	12
Water Lab	Nickel	Hot Block	RYG_EN0180	21-Sep-23	21-Mar-24	12
Water Lab	Nickel	Digestion Heating Room	RYG_EN0181	4-Dec-23	4-Jun-24	12
Water Lab	Silver	ICP-MS	RYG_EN0182	4-Apr-24	4-Oct-24	12
Water Lab	Silver	Hot Block	RYG_EN0183	21-Sep-23	21-Mar-24	12
Water Lab	Silver	Digestion Heating Room	RYG_EN0184	4-Dec-23	4-Jun-24	12
Water Lab	Tin	ICP-MS	RYG_EN0185	4-Apr-24	4-Oct-24	12
Water Lab	Tin	Hot Block	RYG_EN0186	21-Sep-23	21-Mar-24	12
Water Lab	Tin	Digestion Heating Room	RYG_EN0187	4-Dec-23	4-Jun-24	12
Water Lab	Total Cadmium	ICP-MS	RYG_EN0188	4-Apr-24	4-Oct-24	12
Water Lab	Total Cadmium	Hot Block	RYG_EN0189	21-Sep-23	21-Mar-24	12
Water Lab	Total Cadmium	Digestion Heating Room	RYG_EN0190	4-Dec-23	4-Jun-24	12
Water Lab	Total Chromium	ICP-MS	RYG_EN0191	4-Apr-24	4-Oct-24	12
Water Lab	Total Chromium	Hot Block	RYG_EN0192	21-Sep-23	21-Mar-24	12
Water Lab	Total Chromium	Digestion Heating Room	RYG_EN0193	4-Dec-23	4-Jun-24	12
Water Lab	Manganese	ICP-MS	RYG_EN0194	4-Apr-24	4-Oct-24	12
Water Lab	Manganese	Hot Block	RYG_EN0195	21-Sep-23	21-Mar-24	12
Water Lab	Manganese	Digestion Heating Room	RYG_EN0196	4-Dec-23	4-Jun-24	12
Water Lab	Selenium	ICP-MS	RYG_EN0197	4-Apr-24	4-Oct-24	12
Water Lab	Selenium	Hot Block	RYG_EN0198	21-Sep-23	21-Mar-24	12
Water Lab	Selenium	Digestion Heating Room	RYG_EN0199	4-Dec-23	4-Jun-24	12
Water Lab	Oil & Grease	Separatory Funnel	RYG_EN0200	4-Apr-24	4-Oct-24	12
Water Lab	Oil & Grease	Water Bath	RYG_EN0201	4-Jun-24	4-Jun-25	12
Water Lab	Fecal coliform	Autoclave	RYG_EN0202	4-Jun-24	4-Jun-25	12
Water Lab	Fecal coliform	Incubator	RYG_EN0203	4-Jun-24	4-Jun-25	12

right solutions.
right partner.

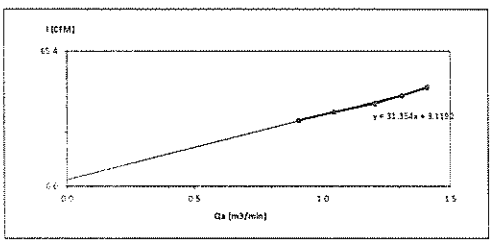
รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Water Lab	Fecal coliform	Air Sampler	RYG_EN0204	4-Jun-24	4-Jun-25	12
Water Lab	Fecal coliform	Water Bath	RYG_EN0205	4-Jun-24	4-Jun-25	12
Noise	Area	Digitizer	RYG_EN0206	21-Mar-24	21-Sep-24	6
Noise	Area	Air Sampler	RYG_EN0207	21-Mar-24	21-Sep-24	6
Noise	Area	Temperature Controlling Room	RYG_EN0208	4-Jun-24	4-Dec-25	18
Noise	Road Traffic	Digitizer	RYG_EN0209	21-Mar-24	21-Sep-24	6
Noise	Road Traffic	Air Sampler	RYG_EN0210	21-Mar-24	21-Sep-24	6
Noise	Road Traffic	Temperature Controlling Room	RYG_EN0211	4-Jun-24	4-Dec-25	18
Noise	Train Traffic	Digitizer	RYG_EN0212	21-Mar-24	21-Sep-24	6
Noise	Train Traffic	Air Sampler	RYG_EN0213	21-Mar-24	21-Sep-24	6
Noise	Train Traffic	Temperature Controlling Room	RYG_EN0214	4-Jun-24	4-Dec-25	18
Noise	Ship Traffic	Digitizer	RYG_EN0215	21-Mar-24	21-Sep-24	6
Noise	Ship Traffic	Air Sampler	RYG_EN0216	21-Mar-24	21-Sep-24	6
Noise	Ship Traffic	Temperature Controlling Room	RYG_EN0217	4-Jun-24	4-Dec-25	18
Noise	Plane Traffic	Digitizer	RYG_EN0218	21-Mar-24	21-Sep-24	6
Noise	Plane Traffic	Air Sampler	RYG_EN0219	21-Mar-24	21-Sep-24	6
Noise	Plane Traffic	Temperature Controlling Room	RYG_EN0220	4-Jun-24	4-Dec-25	18
Noise	Background	Digitizer	RYG_EN0221	21-Mar-24	21-Sep-24	6
Noise	Background	Air Sampler	RYG_EN0222	21-Mar-24	21-Sep-24	6
Noise	Background	Temperature Controlling Room	RYG_EN0223	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0224	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0225	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0226	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0227	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0228	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0229	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0230	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0231	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0232	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0233	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0234	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0235	4-Jun-24	4-Dec-25	18
Noise	Vibration	Vibration Meter	RYG_EN0236	4-Jun-24	4-Jun-25	12
Noise	Vibration	Temperature Controlling Room	RYG_EN0237	4-Jun-24	4-Dec-25	18

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd.	**Barometric Pressure (mm Hg) :**	757
Calibrate Location :	A1 ห้องประชุมรอบ	**Temperature (°C) :**	29
Calibrate Date :	29-May-24	**High Volume ID :**	RYG_FS0666
CalibrationSheet No:	C-290524-RYG_FS0666	**High Volume Model :**	TE-5009X
Calibrator ID:	RYG_FS0205	**High Volume S/N :**	6265
Calibrator Model :	TE-5028A	**Calibrator Slope :**	0.95561
Calibrator S/N :	1166	**Calibrator Intercept :**	-0.02266

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I-Chart (CFM)	Linear Regression	
1	1.8	0.909	32		
2	2.4	1.047	36	Slope :	31.3545
3	3.2	1.205	40	Intercept :	3.1192
4	3.8	1.331	44	Correlation Coefficient :	0.9953
5	4.4	1.409	48		



Calibrated by _____
(Mr Santi Chaichana)
Field Scientist(2)

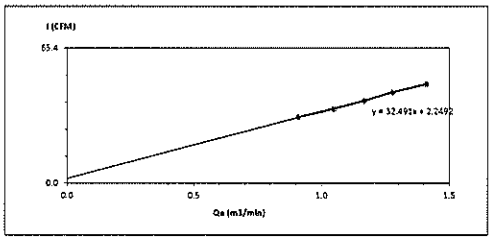
Approved by : _____
(Mr Neppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO. F En-074 REVISION NO.:2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	Barometric Pressure (mm Hg) :	757
Calibrate Location :	A2:อาคาร 9 บ้านรอยต่อเก่า	Temperature (°C) :	29
Calibrate Date :	29-May-24	High Volume ID :	RYG_FS0399
CalibrationSheet No.:	C-290524-RYG_FS0399	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0205	High Volume S/N :	5683
Calibrator Model :	TE-5028A	Calibrator Slope :	0.95561
Calibrator S/N :	1166	Calibrator Intercept :	-0.02266

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.8	0.909	32	Slope :	32.4913
2	2.4	1.047	36	Intercept :	2.2492
3	3.0	1.167	40	Correlation Coefficient :	0.9993
4	3.6	1.277	44		
5	4.4	1.409	48		



Calibrated by _____ Approved by : _____

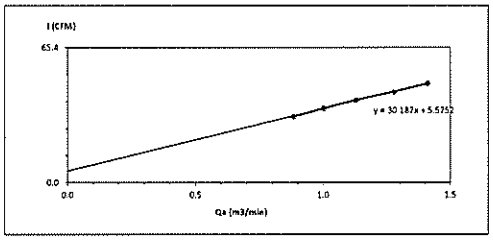
(Mr.Santi Chaichana)
Field Scientist[2]

(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist [3]

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	Barometric Pressure (mm Hg) :	757
Calibrate Location :	A3:ที่ทำการ อบต. บ่อวิน	Temperature (°C) :	29
Calibrate Date :	29-May-24	High Volume ID :	RYG_FS0660
CalibrationSheet No.:	C-290524-RYG_FS0660	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0205	High Volume S/N :	6267
Calibrator Model :	TE-5028A	Calibrator Slope :	0.95561
Calibrator S/N :	1166	Calibrator Intercept :	-0.02266

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.7	0.884	32	Slope :	30.1868
2	2.2	1.003	36	Intercept :	5.5752
3	2.8	1.129	40	Correlation Coefficient :	0.9992
4	3.6	1.277	44		
5	4.4	1.409	48		



Calibrated by _____ Approved by : _____

(Mr.Santi Chaichana)
Field Scientist[2]

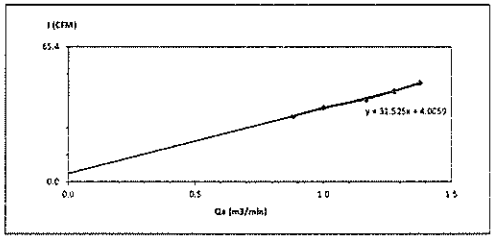
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist [3]

FORM NO. F 06-074 REVISION NO. 2 ISSUE DATE: 20/11/23

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	Barometric Pressure (mm Hg) :	757
Calibrate Location :	A4:โรงงานผลิตไฟ	Temperature (°C) :	29
Calibrate Date :	29-May-24	High Volume ID :	RYG_FS0665
CalibrationSheet No.:	C-290524-RYG_FS0665	High Volume Model :	TE-5009X
Calibrator ID:	RYG_FS0205	High Volume S/N :	6264
Calibrator Model :	TE-5028A	Calibrator Slope :	0.95561
Calibrator S/N :	1166	Calibrator Intercept :	-0.02266

Test No.	Delta H_2O (inch)	Qa (m^3/min)	I : Chart (CFM)	Linear Regression	
1	1.7	0.884	32	Slope :	31.5245
2	2.2	1.003	36	Intercept :	4.0059
3	3.0	1.167	40	Correlation Coefficient :	0.9962
4	3.6	1.277	44		
5	4.2	1.377	48		



Calibrated by _____ Approved by : _____

(Mr.Santi Chaichana)
Field Scientist[2]

(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist [3]

FORM NO. F 06-074 REVISION NO. 2 ISSUE DATE: 20/11/23

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8351-8, e-mail: service.thailand@sartorius.com

ISO-17511-715 17025
CALIBRATION 0426

SARTORIUS

Certificate of Calibration

Model Number :	LA130S-F	Certificate No. :	24BCI0088
Description :	Analytical Balance	Issued Date :	Friday, February 23, 2024
Serial Number :	25409664	Reference No. :	229196
ID No. :	RYG_ENC001		
Manufacturer :	Sartorius	Page No. :	1 Of 2

REVIEW BY Thawipol
APPROVED BY
NEXT CAL. DATE 22/02/2025

Customer Name : ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5 T.Maenam Khu, A.Pluak Daeng, Rayong 21140, Thailand.

Calibrated Place : ALS Laboratory Group (Thailand) Co., Ltd.(Balance Room)
616/10 Moo 5 T.Maenam Khu, A.Pluak Daeng, Rayong 21140, Thailand.

Calibrated By : Mr.Chonchai Inthana
Calibration Date : Thursday, February 22, 2024

Calibration Procedure No. : This calibration was conducted by Using in-house calibration procedure number (WI-003) Based on UKAS LAB 14 : 2019

Metrological data :
Capacity : 150 g Readability : 0.0001 g

Ambients Conditions:
Temperature : 23.6 °C ± 5.0 °C
Humidity : 54.0 % RH ± 10.0 % RH
Pressure ± ____

Reasons for calibration
☐ New Installation ☐ Service / Repaired ☑ Re-calibration/ Maintenance

Equipment Condition: ☑ Good Operate ☐ Fair

Measurement Method UKAS Publication Ref :Lab 14

The measurement uncertainty stated is the expended uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM). The calibration certificate documents the traceability to National Standards, which realise the unit of measurement according to the International Standard System of Units (SI). Report of Tolerance came form list of Sartorius Metrological Specifications

Traceability:

Model Number	Description	Traceability	Certificate No.	Due Date
YCS011-522-00	Sartorius weight set 1mg - 5000g E2,YCS011-522-00	TCS	M2308197S	23-Aug-2025
MHB-382SD	Humidity/Barometer/Temp Lutron MHB-382SD	DKSH	C19231845	23-Aug-2024

This certificate relate and apply this equipment only.
This certificate may not be reproduced other than in full except with the prior written approval of the Verification Operation Division Sartorius (Thailand) Co., Ltd.

Mr.chonchai Inthana(Technical Manager)

STAMP

SARTORIUS ISO/IEC 17025:2017

SOP FM 33 03 February 2022

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8351-6 Fax: +66 2643-8357, e-mail: service.thailand@sartorius.com

SARTORIUS

Certificate of Calibration

Model Number : LA130S-F
Description : Analytical Balance
Serial Number : 25409664
ID No. : RYG_EN0001
Manufacturer : Sartorius

Certificate No. : 24BCI0068
Issued Date : Friday, February 23, 2024
Reference No. : 229196

Calibration Results : Without Adjustment

Repeatability

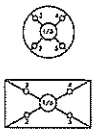
The reproducibility is the ability of a weighing instrument to display nearly identical readouts under constant test conditions when the same load within a measurement series is placed repeatedly on the weighing pan in the same manner. The standard deviation is used to express reproducibility quantitatively.

Nominal Value : (Low Load)	10.0000	99.9999
10 g	10.0000	100.0000
Tolerance	10.0000	100.0001
0.0001 g	10.0000	100.0001
	9.9999	100.0000
Nominal Value : (High Load)	10.0000	100.0001
100 g	10.0000	100.0000
Tolerance	10.0000	100.0001
0.0001 g	9.9999	100.0002
	9.9999	100.0001
Standard Deviation	0.00005	0.00008

Eccentricity (Off-center loading error)

The off-center loading error is yielded by the difference between the readout of the load, i.e. 1/3 or 1/4 of maximum capacity, placed in the middle of the weighing pan and between each of four additional measurement points (positions defined according to OIML R76).

Nominal value : 50 g
Tolerance *0.0004* g



	Difference
1	-
2	-0.0001
3	0.0001
4	0.0002
5	0.0000
6	-

Linearity

The linearity, also called linearity error. Describes the deviation of the characteristic curve of a weighing instrument from the linear slope.

Tolerance *0.0002* g

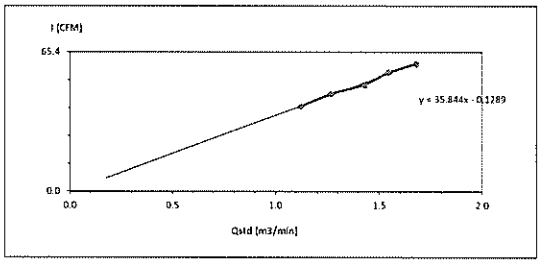
Nominal Value (g)	Conventional Mass Value (g)	Displayed Value (g)	Deviation (g)	Uncertainty (g)
0.01	0.0100	0.0100	0.0000	0.00020
0.05	0.0500	0.0500	0.0000	0.00021
0.1	0.1000	0.1000	0.0000	0.00021
0.5	0.5000	0.5000	0.0000	0.00021
1	1.0000	1.0000	0.0000	0.00021
2	2.0000	2.0000	0.0000	0.00021
5	5.0000	5.0000	0.0000	0.00021
10	10.0000	10.0001	0.0001	0.00024
20	20.0000	20.0001	0.0001	0.00021
100	100.0000	99.9999	-0.0001	0.00024

End of Report

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	**Barometric Pressure (mm Hg) :**	757
Calibrate Location :	A1-โรงจักรสังคม	**Temperature (°C) :**	29
Calibrate Date :	29-May-24	**High Volume ID :**	RYG_FS0176
CalibrationSheet No.:	C-290524-RYG_FS0176	**High Volume Model :**	TE-5170D
Calibrator ID:	RYG_FS0205	**High Volume S/N :**	4802
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.52567
Calibrator S/N :	1166	**Calibrator Intercept :**	-0.03613

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.8	1.1235	40	Slope : 35.8439
2	3.6	1.2690	46	Intercept : -0.1289
3	4.6	1.4298	50	Correlation Coefficient 0.9956
4	5.4	1.5461	56	
5	6.4	1.6800	60	



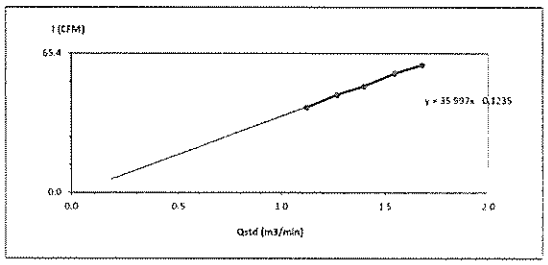
Calibrated by _____
(Mr.Santi Chaichana)
Field Scientist(2)

Approved by _____
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	**Barometric Pressure (mm Hg) :**	757
Calibrate Location :	A2.หน้าที่ 9 ห้างหุ้นส่วนจำกัด	**Temperature (°C) :**	29
Calibrate Date :	29-May-24	**High Volume ID :**	RYG_FS0174
CalibrationSheet No.:	C-290524-RYG_FS0174	**High Volume Model :**	TE-5170D
Calibrator ID:	RYG_FS0205	**High Volume S/N :**	4800
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.52567
Calibrator S/N :	1166	**Calibrator Intercept :**	-0.03613

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.8	1.1235	40	Slope : 35.9965
2	3.6	1.2690	46	Intercept : -0.1235
3	4.4	1.3992	50	Correlation Coefficient : 0.9986
4	5.4	1.5461	56	
5	6.4	1.6800	60	



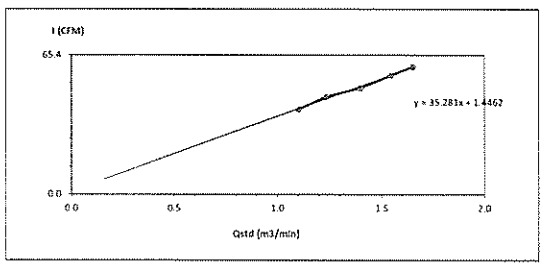
Calibrated by _____
(Mr.Santi Chaichana)
Field Scientist(2)

Approved by _____
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	**Barometric Pressure (mm Hg) :**	757
Calibrate Location :	A3.สำนักงาน อนช. ปูอิน	**Temperature (°C) :**	29
Calibrate Date :	29-May-24	**High Volume ID :**	RYG_FS0292
CalibrationSheet No.:	C-290524-RYG_FS0292	**High Volume Model :**	TE-5170D
Calibrator ID:	RYG_FS0205	**High Volume S/N :**	5497
Calibrator Model :	TE-5028A	**Calibrator Slope :**	1.52567
Calibrator S/N :	1166	**Calibrator Intercept :**	-0.03613

Test No.	Delta H_2O (inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.7	1.1039	40	Slope : 35.2814
2	3.4	1.2343	46	Intercept : 1.4462
3	4.4	1.3992	50	Correlation Coefficient : 0.9963
4	5.4	1.5461	56	
5	6.2	1.6541	60	



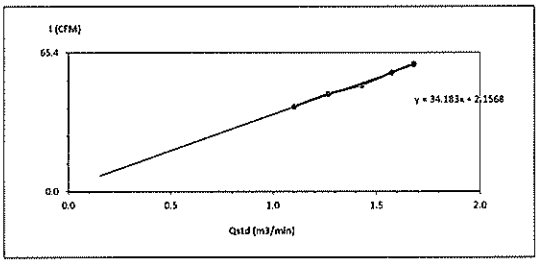
Calibrated by _____
(Mr.Santi Chaichana)
Field Scientist(2)

Approved by _____
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

High Volume Air Sampler Calibration Worksheet

Project Site :	Rojana Industrial Park Public Co.,Ltd	Barometric Pressure (mm Hg) :	757
Calibrate Location :	A4:โกดังA4-1	Temperature (°C) :	29
Calibrate Date :	29-May-24	High Volume ID :	RYG_FS0396
CalibrationSheet No.:	C-290524-RYG_FS0396	High Volume Model :	TE-5170D
Calibrator ID:	RYG_FS0205	High Volume S/N :	5688
Calibrator Model :	TE-5028A	Calibrator Slope :	1.52567
Calibrator S/N :	1166	Calibrator Intercept :	-0.03613

Test No.	Delta H_2O (Inch)	Q_{std} (m^3/min)	I : Chart (CFM)	Linear Regression
1	2.7	1.1039	40	Slope : 34.1831
2	3.6	1.2690	46	Intercept : 2.1568
3	4.6	1.4298	50	Correlation Coefficient : 0.9971
4	5.6	1.5738	56	
5	6.4	1.6800	60	



Calibrated by _____
[Mr.Santi Chaichana]
Field Scientist(2)

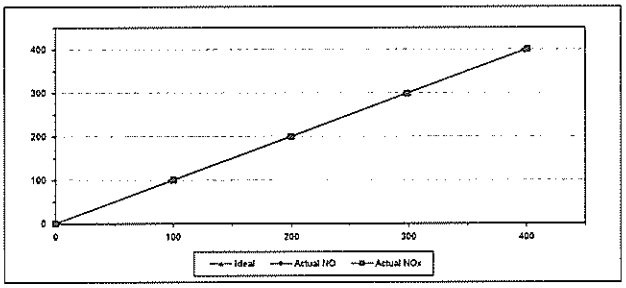
Approved by : _____
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO. F 06-073 REVISION NO.:2 ISSUE DATE: 20/11/23

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	T2T8YRLL	Equipment ID	RYG_FS0457
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.30	-1.70	-1.70	100.20	0.20	0.20
2	200.00	198.40	-1.60	-0.80	199.80	-0.20	-0.10
3	300.00	297.90	-2.10	-0.70	298.50	-1.50	-0.50
4	400.00	398.60	-1.40	-0.35	400.80	0.80	0.20
AVERAGE (%)				-0.69			-0.02



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

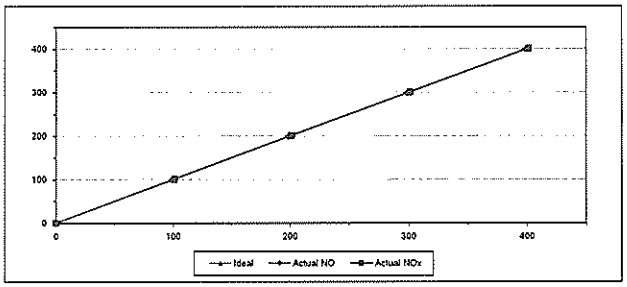
(Mr.Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group
FORM NO F 06-056 REVISION NO. : ISSUE DATE 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	UBAOEAGK	Equipment ID	RYG_FS0551
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Data	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.00	-1.00	-1.00	101.00	1.00	1.00
2	200.00	198.40	-1.60	-0.80	201.30	1.30	0.65
3	300.00	298.40	-1.60	-0.53	301.20	1.20	0.40
4	400.00	398.50	-1.50	-0.38	401.30	1.30	0.33
AVERAGE (%)				-0.52			0.50



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

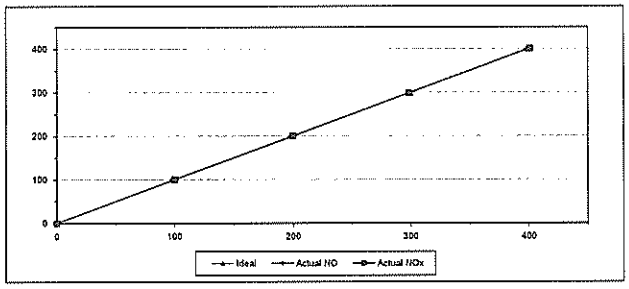
(Mr.Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group
FORM NO F 06-056 REVISION NO. : ISSUE DATE 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	T2T8YRLL	Equipment ID	RYG_FS0457
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.30	-1.70	-1.70	100.20	0.20	0.20
2	200.00	198.40	-1.60	-0.80	199.80	-0.20	-0.10
3	300.00	297.90	-2.10	-0.70	298.50	-1.50	-0.50
4	400.00	398.60	-1.40	-0.35	400.80	0.80	0.20
AVERAGE (%)				-0.69			-0.02



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

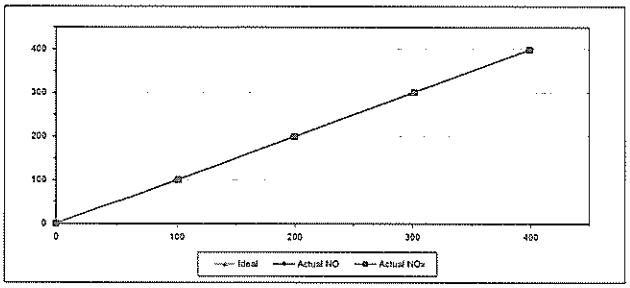
(Mr.Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group
FORM NO F 06-056 REVISION NO. : ISSUE DATE 02/04/12

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	NOx Analyzer
Manufacturer	HORIBA	Model	APNA-370
Serial No.	NV0ER3YH	Equipment ID	RYG_FS0459
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	55.88	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.05	0.05	0.05	0.10	0.10	0.10
1	100.00	99.50	-0.50	-0.50	101.20	1.20	1.20
2	200.00	198.70	-1.30	-0.65	199.70	-0.30	-0.15
3	300.00	301.10	1.10	0.37	301.50	1.50	0.50
4	400.00	400.30	0.30	0.08	398.80	-1.20	-0.30
AVERAGE (%)				-0.13			0.27



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

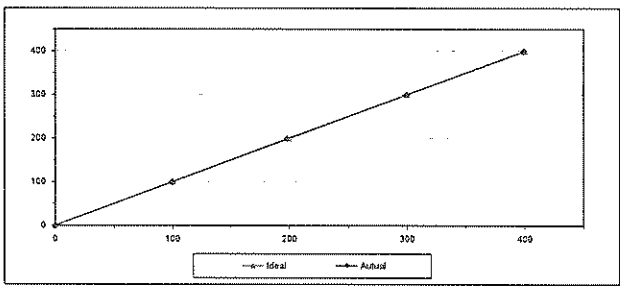
Approved By

(Mr.Sarayuth Jittranont)
Assistant General Manager

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	24PH0IKNA	Equipment ID	RYG_FS0257
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60
2	200.00	198.30	-1.70	-0.85
3	300.00	299.50	-0.50	-0.17
4	400.00	398.90	-1.10	-0.28
AVERAGE (%)				-0.38



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

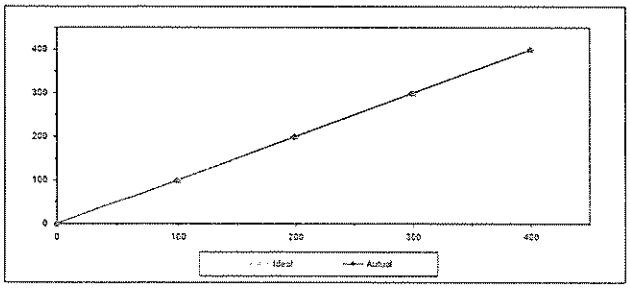
Approved By

(Mr.Sarayuth Jittranont)
Assistant General Manager

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	SO2 Analyzer
Manufacturer	Teledyne API	Model	T100
Serial No.	8060	Equipment ID	RYG_FS0532
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20
2	200.00	198.60	-1.40	-0.70
3	300.00	298.30	-1.70	-0.57
4	400.00	399.60	-0.40	-0.10
AVERAGE (%)				-0.49



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

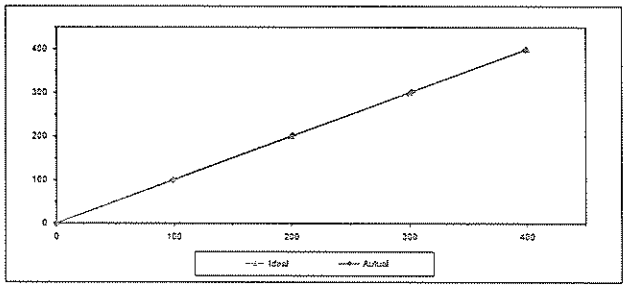
Approved By

(Mr.Sarayuth Jittranont)
Assistant General Manager

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	PAUY0T7A	Equipment ID	RYG_FS0458
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.90	-1.10	-1.10
2	200.00	201.00	1.00	0.50
3	300.00	302.30	2.30	0.77
4	400.00	398.80	-1.20	-0.30
AVERAGE (%)				-0.01



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

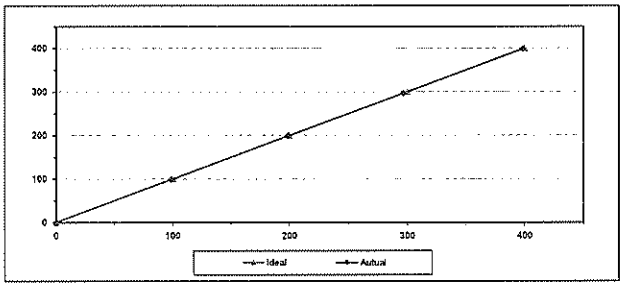
Approved By

(Mr.Sarayuth Jittranont)
Assistant General Manager

MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jan-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	VABF9LSH	Equipment ID	RYG_FS0480
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Airgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.70	-1.30	-1.30
2	200.00	198.80	-1.20	-0.60
3	300.00	296.50	-3.50	-1.17
4	400.00	398.30	-1.70	-0.42
AVERAGE (%)				-0.66



Callbrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr.Sarayuth Jitbranont)
Assistant General Manager

ALS Laboratory Group

FORM NO F 05-056 REVISION NO - ISSUE DATE 02/04/12

JNAC
JIRANATEE ASSOCIATES CO.,LTD

Jiranatee Associates Co.,Ltd
63/14 15, 67/35-36
Petchkasem 7 7/1, Rd. Wattapra, Bangkokyai,
Bangkok 10600(Thailand)
Tel: +6628828812
Mobile: +6686 1999453
E-mail: jnac-calibration@jiranatee.com
Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

ENGINEER Narakan P
APPROVED BY
ISSUE DATE 10/8/24

Certificate Number
CL-018-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 200-WS-25LB
SERIAL NUMBER : Sensor: -
Data logger: AS369
ID NUMBER : RYG_FS0411
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 27 Jan 2023
MEASUREMENT DATE : 10 Feb 2023
ISSUE DATE : 10 Feb 2023

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010 ± 10	hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS : Wind tunnel cross-section area[1] 900 cm²
Win direction frontal area[2] 100 cm²
Diameter of mounting pipe[3] - mm
Blockage ratio of test object[4] 0.111 [-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (23.8) °C, (44.8) %RH and (1010.3) hPa.

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibration procedure:
The cup anemometer was calibrated against Standard air velocity transducer model: 8455IR2 and pitot tube with precision differential pressure meter model: DPM2500 in an close test-section of Eiffel-type wind tunnel with 900 cm² cross test section area. The WI-CL-007 based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:
This certificate provides a traceability of The measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MW-0052-21 and MW-0066-22

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, Which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data - Guide to the expression of uncertainty in measurement'

Calibrated by:
☑ Mr. Sorawit Thachalad
☐ Miss Jittragorn Lertsorphol

JNAC JIRANATEE ASSOCIATES CO., LTD.

Approved signatory: .....
Mr. Parinya Boonsharoen
Calibration Department Manager

Remarks:
[1] Inside cross section area of the wind tunnel
[2] Projected cross-section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CL-018-66

Page 2 of 2 Pages

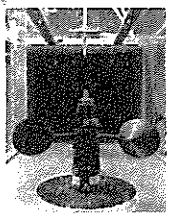
MEASUREMENT RESULTS [5]

The cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle, UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 10 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

v_{ref}[1] (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	v_{uuc}[2] (m/s)	Error (m/s)	U (k=2) (m/s)
0.983	23.60	23.55	0.8	-0.2	0.15
2.038	23.50	23.55	1.8	-0.2	0.16
3.044	23.50	23.55	2.9	-0.2	0.18
4.147	23.58	23.55	3.9	-0.3	0.19
5.00	23.50	23.55	4.9	-0.1	0.18
5.98	23.62	23.55	5.9	-0.1	0.18
7.04	23.28	23.55	7.0	-0.1	0.18
8.16	23.56	23.55	8.0	-0.2	0.19
9.10	23.26	23.55	9.0	-0.1	0.19
10.07	23.50	23.55	10.0	-0.1	0.19
11.13	23.10	23.55	11.0	-0.1	0.20
12.13	23.50	23.55	12.1	-0.1	0.30
13.21	23.12	23.55	13.1	-0.1	0.22
14.25	23.36	23.55	14.8	-0.2	0.27
15.24	23.10	23.55	15.1	-0.7	0.38
16.29	23.20	23.55	16.0	-0.3	0.24

Remark:
[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place
[2] Velocity of standard
[3] Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set- up is not true to scale due to imaging geometry.

End of Certificate of Calibration

JNAC JIRANATEE ASSOCIATES CO., LTD.

JNAC
JIRANATEE ASSOCIATES CO.,LTD

Jiranatee Associates Co.,Ltd
63/14 15, 67/35-36
Petchkasem 7 7/1, Rd. Wattapra, Bangkokyai,
Bangkok 10600(Thailand)
Tel: +6628828812
Mobile: +6686 1999453
E-mail: jnac-calibration@jiranatee.com
Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

Certificate Number
CL-016-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 200-WS-25LB
SERIAL NUMBER : Sensor: -
Data logger: AS369
ID NUMBER : RYG_FS0411
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 27 Jan 2023
MEASUREMENT DATE : 10 Feb 2023
ISSUE DATE : 10 Feb 2023

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follow:

Temperature	: 23.0 ± 3.0	°C
Relative Humidity	: 55.0 ± 15.0	%RH
Atmospheric Pressure	: 1010± 10	hPa

PLACE OF CALIBRATION : Eiffel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION : Wind tunnel cross-section area[1] 900 cm²
Win direction frontal area[2] 129 cm²
Diameter of mounting pipe[3] - mm
Blockage ratio of test object[4] 0.143 [-]

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (23.9)°C, (46.3) %RH and (1011.4) hPa

TABULATION OF RESULTS:
The table on next page give the measured values

Calibration procedure:
The wind direction sensor was calibrated against Standard Rotary Encoder model: AX2003TS-DA704-P2 S-UG in an close test-section of Eiffel-type wind tunnel with 900 cm² cross test section area. The WI-CL-008 based on IEC 61400-12-1, Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:
This certificate provides a traceability of The measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: DA-0043-22

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, Which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data - Guide to the expression of uncertainty in measurement'

Calibrated by:
☑ Mr. Sorawit Thachalad
☐ Miss Jittragorn Lertsorphol

JNAC JIRANATEE ASSOCIATES CO., LTD.

Approved signatory: .....
Mr. Parinya Boonsharoen
Calibration Department Manager

Remarks:
[1] Inside cross section area of the wind tunnel
[2] Projected cross section area of the tested object include mounting pipe
[3] Diameter of mounting pipe
[4] Ratio [2] to [1]

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Jiranatee Associates Co.,Ltd.

Certificate Number
CI-016-65

MEASUREMENT RESULTS[3]

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed	D°_{std}	D°_{UUC}	Error	U (k=2)
m/s	Degree (°)	Degree (°)	Degree (°)	Degree (°)
5.00	0.000	0	0	0.58
	45.000	41	-4	0.58
	90.000	87	-3	0.58
	135.000	135	0	0.68
	180.000	182	2	0.74
	225.000	230	5	0.68
	270.001	275	5	0.58
	315.000	320	5	0.58

Remark:

[1] Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

[2] Direction of standard

[3] Direction of Unit Under Calibration

End of Certificate of Calibration

Nanatee Associates Co., Ltd.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY

451-451/1 Sirinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiporn.com

SITHIPORN associates

NSC TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACC24008
Pages : 1 of 3

Calibration Certificate

Equipment :	SOUND CALIBRATOR
Manufacturer :	RION
Model :	NC-75
Serial No.:	35002736
ID No.:	RYG_FS0496
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.

Location :	-	
Ambient Temperature :	(23.0 ± 3)	°C
Pressure :	(101.3 ± 3)	kPa
Relative Humidity :	(50.0 ± 20)	%

Received Date :	19 JANUARY 2024
Calibration Date :	26 JANUARY 2024
Date of Issue :	29 JANUARY 2024

Nathakorn P
26/1/24

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petchurai
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiporn.com
SITHIPORN associates
NSC TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACC24008
Job No. : VC67AC0058

Calibration Procedure : CP-AC-03

Calibration Method :

This equipment was calibrated by follow on IEC-60942-2003 Standard.
The sound pressure level, frequency and total distortion of the sound calibrator was measured using the reference microphone.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 30/0267	13-FEB-24
Digital Multimeter	33461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KA1	34560495	AA-3002-23	14-FEB-24
Audio Analyzer	AVR-3360A	V744B6069	EF-0012-23	10-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petchurai

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY
451-451/1 Sirinthorn Road, Bangbumru, Bangplad, Bangkok, 10700 Thailand
Tel. +66 2433 8331 Email : calibration@sithiporn.com
SITHIPORN associates
NSC TISI-TIS 17025 CALIBRATION 0394

Cert. No. : ACC24008
Job No. : VC67AC0058

Result of calibration :

1. Sound pressure level

Specified sound pressure level (dB)	Measured value (dB)	Deviated value (dB)	Uncertainty (dB)	Acceptance limit (dB)
94	93.98	-0.02	0.14	0.40

2. Frequency

Specified Frequency (Hz)	Measured value (Hz)	Deviated value (%)	Uncertainty (%)	Acceptance limit (%)
1000	1000.0	0.0	0.1	1.0

3. Total distortion

Measured value (%)	Uncertainty (%)	Acceptance limit (%)
0.83	0.10	3.0

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petchurai

SITHIPORN ASSOCIATES CO.,LTD.
CALIBRATION LABORATORY

451-451/1 Sirinthorn Rd.,Bangbumru, Bangplud Bangkok 10700 THAILAND
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ISC-TISI-TIS 17025
CALIBRATION 0394

Cert. No. : ACL23247
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42/ Microphone UC-52 / Preamplifier NH-24
Serial No.:	00472127 / 169440 / 72461
ID No.:	RYG_FS0302
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD KHWAENG PHATTHANAKAN, KHET SUAN LUANG BANGKOK, 10250 THAILAND.
Location :	-
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	13 JULY 2023
Calibration Date :	10 AUGUST 2023
Date of Issue :	11 AUGUST 2023

REVIEW BY
APPROVED BY
NEXT CAL DATE 10/8/24

Calibrated by : Nathakorn Pisutpaisan

Approved by :

(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by based on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP.30-0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP.29-0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP.31-0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

Summary of Measurement Result :

Parameter	Pass	Fail	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	✓	-	0.2	N/A
2. Self-generated noise	✓	-	0.2	N/A
3. Acoustical signal tests of frequency weightings				
125 Hz	✓	-	0.3	0.6
1000 Hz	✓	-	0.3	0.6
8000 Hz	✓	-	0.3	0.7
4. Electrical signal tests of frequency weightings				
For 10 Hz to 4 kHz	✓	-	0.3	0.6
For > 4 kHz to 10 kHz	✓	-	0.3	0.7
For > 10 kHz to 20 kHz	-	-	-	1.0
5. Frequency and time weightings at 1 kHz	✓	-	0.2	0.2
6. Long - term stability	✓	-	0.1	0.1
7. Level linearity on the reference level range	✓	-	0.2	0.3
8. Level linearity including the level range control	✓	-	0.2	0.3
9. Tone burst response	✓	-	0.2	0.3
10. Peak C sound level	✓	-	0.2	0.35
11. Overload indication	✓	-	0.2	0.25
12. High level stability	✓	-	0.1	0.1

Note : Pass/Fail evaluation for each parameter,
will be considered together from the acceptance limit and the Maximum-permitted uncertainty of measurement.

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
18.0

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	13.8
C - weight	20.3
Flat	25.9

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.1	0.1	0.1	± 1.5
1000	-0.1	-0.1	0.0	± 1.0
8000	-0.4	-0.3	-0.3	±5.0

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	-0.1	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.4
500	0.0	0.0	0.0	±1.4
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.1	0.1	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.1	0.1	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.1	0.1	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.2	0.2	± 1.1
25.0	25.1	0.1	± 1.1

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 - 5.0
	2	8	117.0	117.0	0.0	1.0 - 2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 - 5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 - 5.0
	2	8	108.0	108.0	0.0	1.0 - 2.5
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	136.3	-0.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.6	89.7	0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.5

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor k = 2
or any value following calculation,providing a level of confidence of approximately 95 %.

End of Calibration Certificate

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Cert. No. : ACL24012
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42A / Microphone UC-52 / Preamplifier NH-24
Serial No.:	00623390 / 198637 / 26418
ID No.:	RYG_FS0615
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.
Location :	-
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	19 DECEMBER 2023
Calibration Date :	05-08 JANUARY 2024
Date of Issue :	09 JANUARY 2024

4/1/24

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petchurai

(Thanakul Petchurai)

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Cert. No. : ACL24012
Job No. : VC67AC0044
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch.

SITHIPORN ASSOCIATES CO., LTD.
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Cert. No. : ACL24012
Job No. : VC67AC0044
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch.

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Cert. No. : ACL24012
Job No. : VC67AC0044
Pages : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.6

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	12.6
C - weight	19.2
Flat	24.8

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.3	0.3	0.3	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	1.0	1.1	1.1	±5.0

T. Petch.

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4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

T. Retch.

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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	38.9	-0.1	± 1.1
34.0	34.0	0.0	± 1.1
30.0	29.9	-0.1	± 1.1
29.0	28.9	-0.1	± 1.1
28.0	27.9	-0.1	± 1.1
27.0	26.8	-0.2	± 1.1
26.0	25.9	-0.1	± 1.1
25.0	24.9	-0.1	± 1.1

T. Retch.

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lepeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	136.3	-0.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

T. Retch.

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11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.7	89.5	-0.2	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Retch.

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ISO/IEC 17025 CALIBRATION 0194

Cert. No. : ACL23248
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42/ Microphone UC-52 / Preamplifier NH-24
Serial No.:	00472130 / 169816 / 72464
ID No.:	RYG_FS0303
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.
Location :	-
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	13 JULY 2023
Calibration Date :	10 AUGUST 2023
Date of Issue :	11 AUGUST 2023

REVIEWED BY Nuttakorn P.
APPROVED BY
NEXT CAL DATE 10/8/24

Calibrated by : Nathakorn Pisutpaisan

Approved by :

(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by based on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

Summary of Measurement Result :

Parameter	Pass	Fail	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	✓	-	0.2	N/A
2. Self-generated noise	✓	-	0.2	N/A
3. Acoustical signal tests of frequency weightings				
125 Hz	✓	-	0.3	0.6
1000 Hz	✓	-	0.3	0.6
8000 Hz	✓	-	0.3	0.7
4. Electrical signal tests of frequency weightings				
For 10 Hz to 4 kHz	✓	-	0.3	0.6
For > 4 kHz to 10 kHz	✓	-	0.3	0.7
For > 10 kHz to 20 kHz	-	-	-	1.0
5. Frequency and time weightings at 1 kHz	✓	-	0.2	0.2
6. Long - term stability	✓	-	0.1	0.1
7. Level linearity on the reference level range	✓	-	0.2	0.3
8. Level linearity including the level range control	✓	-	0.2	0.3
9. Tone burst response	✓	-	0.2	0.3
10. Peak C sound level	✓	-	0.2	0.35
11. Overload indication	✓	-	0.2	0.25
12. High level stability	✓	-	0.1	0.1

Note : Pass/Fail evaluation for each parameter,
will be considered together from the acceptance limit and the Maximum-permitted uncertainty of measurement.

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.4

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	12.0
C - weight	17.8
Flat	23.2

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.7	0.7	0.7	± 1.5
1000	-0.1	0.0	0.0	± 1.0
8000	-4.1	-4.0	-4.1	±5.0

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	0.0	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.0	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	63.9	-0.1	± 1.1
59.0	59.0	0.0	± 1.1
54.0	53.9	-0.1	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	38.9	-0.1	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	28.9	-0.1	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.0	0.0	± 1.1
25.0	25.0	0.0	± 1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 - 5.0
	2	8	117.0	117.0	0.0	1.0 - 2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 - 5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 - 5.0
	2	8	108.0	108.0	0.0	1.0 - 2.5
	200	800	128.0	128.1	0.1	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.6	133.6	0.0	±3.0
One	136.4	135.6	-0.8	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

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11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.7	89.7	0.0	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.5

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor k = 2 or any value following calculation,providing a level of confidence of approximately 95 %.

End of Calibration Certificate

T. Petch.

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Cert. No. : ACL24095
Pages : 1 of 9

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-21/ Microphone UC-52 / Preamplifier NH-21
Serial No.:	00376364 / 71486 / 23142
ID No.:	RYG_FS0012
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK. 10250 THAILAND.
Location :	
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	19 JANUARY 2024
Calibration Date :	25 -26 JANUARY 2024
Date of Issue :	29 JANUARY 2024

24/1/24

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petchurai

(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

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Cert. No. : ACL24096
Job No. : VC67AC0058
Pages : 2 of 9

Calibration Procedure : CP-AC-02

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand),
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Cert. No. : ACL24096
Job No. : VC67AC0058
Pages : 3 of 9

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.1	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

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Cert. No. : ACL24096
Job No. : VC67AC0058
Pages : 4 of 9

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
26.2

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	22.9
C - weight	24.2
Flat	27.6

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.2	0.3	0.3	± 1.5
1000	0.1	0.1	0.1	± 1.0
8000	0.5	0.6	0.6	±5.0

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4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	0.0	0.0	±2.0
125	0.0	0.0	-0.1	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.1	0.1	0.0	±2.0
4000	0.1	0.1	0.0	±3.0
8000	0.1	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	38.9	-0.1	± 1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	94.0	94.0	0.0	±1.1
120	94.0	94.0	0.0	±1.1
110	94.0	94.0	0.0	±1.1
100	94.0	94.0	0.0	±1.1
90	94.0	94.0	0.0	±1.1

Level linearity on each level range

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
130	41.6	41.9	0.3	±1.1
120	32.0	31.9	-0.1	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

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10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±3.0
One	133.4	132.8	-0.6	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	130.0	130.0	0.0	±2.0
Positive half cycle	132.4	132.1	-0.3	±2.0
Negative half cycle	132.4	132.1	-0.3	±2.0

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.3	89.3	0.0	±1.5

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Job No. : VC67AC0058
Pages : 9 of 9

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Devisted Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a lavel of confidence of approximately 95 %

End of Calibration Certificate

T. Peter

TISTR

NSC-TISI-TIS 17025 CALIBRATION 0037

THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 MTC No. EEL. BP. 173/0167

CALIBRATION CERTIFICATE

Submitted by : ALS Laboratory Group (Thailand) Co., Ltd.
Address : 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250.
Calibrated at : Electrical and Electronic Standards Laboratory, Industrial Metrology and Testing Service Centre.
Soi 1C, Bangpoo Industrial Estate, Sukhumvit Rd., A.Muang, Samutprakan 10280.

Instrument Calibrated :
Description : Sound Level Meter
Manufacturer : Rion
Model : NL-42
Serial No. : 00296516 (ID: RYG_FS0433)
Microphone : Type UC-52 No.180412
Preamplifier : Type NH-24 No.88182

Ambient Environment
Temperature : (23 ± 3) °C
Relative Humidity : (50 ± 15) %
Ambient Pressure : (101.325±1.5) kPa

REVIEWED BY
APPROVED BY
NEXT CAL DATE 21/2/25

Standards used :
1. Band Pass Filter Wavetek 752A S/N 90010494.
2. Condenser Microphone Brüel&Kjær 4180 S/N 2889871.
3. Decade Attenuator Ando AL-205 S/N 00464602.
4. Function/Arbitrary Waveform Generator Agilent 33220A S/N MY44042668.
5. Digital Function Synthesizer NF Electronic Instruments DF-193A S/N 122037.
6. Digital Multimeter Fluke 8520A S/N 4985007.
7. Pistonphone Rion NC-72 S/N 00402446.
8. Measuring Amplifier Brüel&Kjær 2636 S/N 1537484.

Date of Receipt : 24 Jan. 2024
Date of Calibration : 22-28 Feb. 2024

The results relate only to the items tested/calibrated or value assigned
Advertising the Report's certificate and publicity of the results except in full are prohibited unless written permission is obtained from the governor of TISTR

FM.BL.MTC.002 Rev.4

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Fax. (66) 0 2579 8592
E-mail : sumalee@tistr.or.th

TISTR

NSC-TISI-TIS 17025 CALIBRATION 0037

THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 MTC No. EEL. BP. 173/0167

9. Power Amplifier Brüel&Kjær 2706 S/N 1517650.
10. Speaker Tannoy Limited. Great Britain British Patent No. 215300.
11. Digital Multimeter Agilent 34401A S/N MY44005560.
12. Programmable Attenuator Tamagawa TPA-303A S/N 2212.

Calibration Procedure .

This instrument was calibrated by using calibration procedures no CP-102-02 and CP-102-03, which were based on IEC 61672-3 Electroacoustics - Sound Level Meters - Part 3 : Periodic tests (2013). These calibration procedures were related to the electrical and acoustic signal tests. The electrical signal test was carried out with the direct measurement method. The acoustic signal test was performed in an anechoic room with the comparison measurement method.

This instrument has been calibrated against standards maintained at the Electrical and Electronic Standards Laboratory (EEL), which are traceable to the International System of Units through the National Institute of Metrology (Thailand).

The information on actual reading is attached herewith and the uncertainty limits quoted refer to the measured values only.

The reported expanded uncertainty is based upon a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

Date of Calibration : 22-28 Feb. 2024

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FM.BL.MTC.002 Rev.4

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NSC-TISI-TIS 17025 CALIBRATION 0037

THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 MTC No. EEL. BP. 173/0167

1. Absolute Sensitivity

Reference Acoustic Signal (dB)	Measured value (dB)		Deviation value (dB)	Acceptance limit Class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
	Before adjust	After adjust				
113.96	114.1	113.9	-0.1	1.0	0.30	N/A

Note: The external calibration adjustment was firstly performed. The internal calibration adjustment was then completed at the display of 124.1 dB.

2. Self-generated noise

2.1 Normal test

Measured value (dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
18.9	0.10	N/A

2.2 The microphone of the sound level meter was replaced by electrical signal input device

Frequency Weighting	Measured value (dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
A-Weight	12.3	0.10	N/A
C-Weight	17.7	0.10	N/A
Flat	23.1	0.10	N/A

Date of Calibration : 22-28 Feb. 2024

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3. Acoustical signal test of frequency weightings

Frequency	Deviation from frequency response (dB)			Acceptance limit	Uncertainty	Maximum-permitted uncertainty
(Hz)	A-weight	C-weight	Flat	class 2 (±dB)	(±dB)	of measurement (±dB)
125	0.0	0.2	0.1	1.5	0.45	0.6
1 000	0.0	0.0	0.0	1.0	0.45	0.6
8 000	-0.3	-0.3	-0.3	5.0	0.45	0.7

4. Electrical signal test of frequency weightings

Frequency	Deviation from frequency response (dB)			Acceptance limit	Uncertainty	Maximum-permitted uncertainty
(Hz)	A-weight	C-weight	Flat	class 2 (±dB)	(±dB)	of measurement (±dB)
63	-0.1	0.0	0.0	2.0	0.20	0.6
125	-0.1	0.0	0.0	1.5	0.20	0.6
250	0.0	0.0	0.0	1.5	0.20	0.6
500	0.0	0.0	0.0	1.5	0.20	0.6
1 000	0.0	0.0	0.0	1.0	0.20	0.6
2 000	0.0	0.0	0.0	2.0	0.20	0.6
4 000	0.0	0.0	0.0	3.0	0.20	0.6
8 000	0.0	0.0	0.0	5.0	0.20	0.7

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CALIBRATION 0037

THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 MTC No. EEL. BP. 173/0167

5. Long-term stability

Time	Measured Value	Deviated value	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
	(dB)	(dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
Begin	94.0	0.0	0.3	0.10	0.1
End	94.0				

6. Frequency and time weightings at 1 kHz

6.1 Frequency weightings at 1 kHz

Frequency	Measured Value	Deviated value	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
Weighting	(dB)	(dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
A-weight	94.0	0.0	0.2	0.20	0.2
C-weight	94.0	0.0	0.2	0.20	0.2
Flat	94.1	0.1	0.2	0.20	0.2

6.2 Time weightings at 1 kHz

Frequency	Measured Value	Deviated value	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
Weighting	(dB)	(dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
Fast	94.0	0.0	0.1	0.20	0.2
Slow	94.0	0.0	0.1	0.20	0.2
Leq	94.0	0.0	0.1	0.20	0.2

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7. Level linearity on the reference level range

Anticipated	Measured Value	Deviated value	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
value (dB)	(dB)	(dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
137	137.1	0.1	1.1	0.30	0.3
136	136.1	0.1	1.1	0.30	0.3
135	135.1	0.1	1.1	0.30	0.3
133	133.1	0.1	1.1	0.30	0.3
132	132.1	0.1	1.1	0.30	0.3
131	131.0	0.0	1.1	0.30	0.3
130	130.0	0.0	1.1	0.30	0.3
129	129.0	0.0	1.1	0.30	0.3
124	124.0	0.0	1.1	0.30	0.3
119	119.0	0.0	1.1	0.30	0.3
114	114.0	0.0	1.1	0.30	0.3
109	109.0	0.0	1.1	0.30	0.3
104	104.0	0.0	1.1	0.30	0.3
99	99.0	0.0	1.1	0.30	0.3
94	94.0	0.0	1.1	0.30	0.3
89	89.0	0.0	1.1	0.30	0.3
84	84.1	0.1	1.1	0.30	0.3
79	79.0	0.0	1.1	0.30	0.3
74	74.0	0.0	1.1	0.30	0.3
69	69.0	0.0	1.1	0.30	0.3
64	64.0	0.0	1.1	0.30	0.3
59	59.0	0.0	1.1	0.30	0.3

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7. Level linearity on the reference level range (cont.)

Anticipated	Measured Value	Deviated value	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
value (dB)	(dB)	(dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
54	54.0	0.0	1.1	0.30	0.3
49	48.9	-0.1	1.1	0.30	0.3
44	44.0	0.0	1.1	0.30	0.3
39	38.9	-0.1	1.1	0.30	0.3
34	33.9	-0.1	1.1	0.30	0.3
29	28.8	-0.2	1.1	0.30	0.3
28	27.8	-0.2	1.1	0.30	0.3
27	26.9	-0.1	1.1	0.30	0.3
26	25.9	-0.1	1.1	0.30	0.3
25	24.8	-0.2	1.1	0.30	0.3

8. Level linearity including the level range control

At reference sound level on the reference level range

Range	Anticipated value	Measured value	Deviated	Acceptance limit	Uncertainty	Maximum-permitted uncertainty
	(dB)	(dB)	value (dB)	class 2 (±dB)	(±dB)	of measurement (±dB)
30-130	94.0	94.0	0.0	1.1	0.30	0.3

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8. Level linearity including the level range control

At reference level at 5 dB greater than the under-range on a level range

Range	Anticipated value (dB)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
30-130	25	25.0	0.0	1.1	0.30	0.3

9. Tone burst response

Time Weighting	Toneburst Duration, Tb (ms)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Fast	200	126.0	0.0	±1.0	0.20	0.3
	2	108.9	-0.1	+1.0; -2.5	0.20	0.3
	0.25	100.0	0.0	+1.5; -5.0	0.20	0.3
Slow	200	119.5	-0.1	±1.0	0.20	0.3
	2	100.0	0.0	+1.0; -5.0	0.20	0.3

Date of Calibration : 22-28 Feb. 2024

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Request No. 21-67/0232 MTC No. EEL. BP. 173/0167

10. Peak C sound level

Number of cycles in test signal	Anticipated value (dB)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Complete cycle	125.4	125.5	0.1	3.0	0.20	0.35
Positive half cycle	124.4	124.1	-0.3	2.0	0.20	0.35
Negative half cycle	124.4	124.1	-0.3	2.0	0.20	0.35

11. Overload indication

Measured value (dB)		Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Positive one-half cycle	Negative one-half cycle				
135.4	135.4	0.0	1.5	0.55	0.25

12. High-level stability

Time	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Begin	129.0	0.0	0.3	0.10	0.1
End	129.0				

Calibrated by : (Mr. Pannasit Phasingsri)

Approved by : (Mr. Prawate Khampa)
Director
Electrical and Electronic Standards Laboratory
Industrial Metrology and Testing Service Centre

Date of Calibration : 22-28 Feb. 2024
Date of Issue : 29 Feb. 2024
Ref : 201126701240034700 3

End of Certificate

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THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 MTC No. EEL. BP. 171/0167

CALIBRATION CERTIFICATE

Submitted by : ALS Laboratory Group (Thailand) Co., Ltd.
Address : 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250.
Calibrated at : Electrical and Electronic Standards Laboratory, Industrial Metrology and Testing Service Centre.
Soi 1C, Bangpoo Industrial Estate, Sukhumvit Rd., A.Muang, Samutprakan 10280.

Instrument Calibrated :
Description : Sound Level Meter
Manufacturer : Rion
Model : NL-42
Serial No. : 00296518 (ID: RYG_FS0431)
Microphone : Type UC-52 No.66239
Preamplifier : Type NH-24 No.34375

Ambient Environment
Temperature : (23 ± 3) °C
Relative Humidity : (50 ± 15) %
Ambient Pressure : (101.325±1.5) kPa

RECEIVED Nitaphon P.
APPROVED
DATE 21/2/24

Standards used :
1. Band Pass Filter Wavetek 752A S/N 90010494.
2. Condenser Microphone Brüel&Kjær 4180 S/N 2889871.
3. Decade Attenuator Ando AL-205 S/N 00464602.
4. Function/Arbitrary Waveform Generator Agilent 33220A S/N MY44042668.
5. Digital Function Synthesizer NF Electronic Instruments DF-193A S/N 122037.
6. Digital Multimeter Fluke 8520A S/N 4985007.
7. Pistonphone Rion NC-72 S/N 00402446.
8. Measuring Amplifier Brüel&Kjær 2636 S/N 1537484.

Date of Receipt : 24 Jan. 2024
Date of Calibration : 22-28 Feb. 2024

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Request No. 21-67/0232 MTC No. EEL. BP. 171/0167

9. Power Amplifier Brüel&Kjær 2706 S/N 1517650.
10. Speaker Tannoy Limited, Great Britain British Patent No. 215300.
11. Digital Multimeter Agilent 34401A S/N MY44005560.
12. Programmable Attenuator Tamagawa TPA-303A S/N 2212.

Calibration Procedure .

This instrument was calibrated by using calibration procedures no CP-102-02 and CP-102-03, which were based on IEC 61672-3 Electroacoustics - Sound Level Meters - Part 3 : Periodic tests (2013). These calibration procedures were related to the electrical and acoustic signal tests. The electrical signal test was carried out with the direct measurement method. The acoustic signal test was performed in an anechoic room with the comparison measurement method.

This instrument has been calibrated against standards maintained at the Electrical and Electronic Standards Laboratory (EEL), which are traceable to the International System of Units through the National Institute of Metrology (Thailand).

The information on actual reading is attached herewith and the uncertainty limits quoted refer to the measured values only.

The reported expanded uncertainty is based upon a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

Date of Calibration : 22-28 Feb. 2024

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Request No. 21-67/0232 **MTC No. EEL. BP. 171/0167**

1. Absolute Sensitivity

Reference Acoustic Signal (dB)	Measured value (dB)		Deviation value (dB)	Acceptance limit Class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
	Before adjust	After adjust				
113.96	114.3	113.9	-0.1	1.0	0.30	N/A

Note: The external calibration adjustment was firstly performed. The internal calibration adjustment was then completed at the display of 125.1 dB.

2. Self-generated noise

2.1 Normal test

Measured value (dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
20.2	0.10	N/A

2.2 The microphone of the sound level meter was replaced by electrical signal input device

Frequency Weighting	Measured value (dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
A-Weight	14.4	0.10	N/A
C-Weight	19.9	0.10	N/A
Flat	25.3	0.10	N/A

Date of Calibration 22-28 Feb. 2024 3 / 9

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NSC-TISI-TIS 17025
CALIBRATION 0037

THAILAND INSTITUTE OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH (TISTR)

Request No. 21-67/0232 **MTC No. EEL. BP. 171/0167**

3. Acoustical signal test of frequency weightings

Frequency (Hz)	Deviation from frequency response (dB)			Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
	A-weight	C-weight	Flat			
125	-0.1	0.2	0.1	1.5	0.45	0.6
1 000	0.0	0.0	0.0	1.0	0.45	0.6
8 000	-1.7	-1.7	-1.7	5.0	0.45	0.7

4. Electrical signal test of frequency weightings

Frequency (Hz)	Deviation from frequency response (dB)			Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
	A-weight	C-weight	Flat			
63	-0.1	-0.1	-0.1	2.0	0.20	0.6
125	-0.1	0.0	0.0	1.5	0.20	0.6
250	-0.1	0.0	0.0	1.5	0.20	0.6
500	-0.1	0.0	0.0	1.5	0.20	0.6
1 000	0.0	0.0	0.0	1.0	0.20	0.6
2 000	-0.1	0.0	-0.1	2.0	0.20	0.6
4 000	-0.1	0.0	0.0	3.0	0.20	0.6
8 000	0.0	0.0	0.0	5.0	0.20	0.7

Date of Calibration 22-28 Feb. 2024 4 / 9

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5. Long-term stability

Time	Measured Value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Begin	94.0	0.0	0.3	0.10	0.1
End	94.0				

6. Frequency and time weightings at 1 kHz

6.1 Frequency weightings at 1 kHz

Frequency Weighting	Measured Value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
A-weight	94.0	0.0	0.2	0.20	0.2
C-weight	94.0	0.0	0.2	0.20	0.2
Flat	94.1	0.1	0.2	0.20	0.2

6.2 Time weightings at 1 kHz

Frequency Weighting	Measured Value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Fast	94.0	0.0	0.1	0.20	0.2
Slow	94.0	0.0	0.1	0.20	0.2
Leq	94.0	0.0	0.1	0.20	0.2

Date of Calibration 22-28 Feb. 2024 5 / 9

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7. Level linearity on the reference level range

Anticipated value (dB)	Measured Value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
137	137.0	0.0	1.1	0.30	0.3
136	136.0	0.0	1.1	0.30	0.3
135	135.0	0.0	1.1	0.30	0.3
133	133.0	0.0	1.1	0.30	0.3
132	132.0	0.0	1.1	0.30	0.3
131	131.0	0.0	1.1	0.30	0.3
130	130.0	0.0	1.1	0.30	0.3
129	129.0	0.0	1.1	0.30	0.3
124	124.0	0.0	1.1	0.30	0.3
119	119.0	0.0	1.1	0.30	0.3
114	114.0	0.0	1.1	0.30	0.3
109	109.0	0.0	1.1	0.30	0.3
104	104.0	0.0	1.1	0.30	0.3
99	99.0	0.0	1.1	0.30	0.3
94	94.0	0.0	1.1	0.30	0.3
89	89.0	0.0	1.1	0.30	0.3
84	84.0	0.0	1.1	0.30	0.3
79	79.0	0.0	1.1	0.30	0.3
74	74.0	0.0	1.1	0.30	0.3
69	69.0	0.0	1.1	0.30	0.3
64	63.9	-0.1	1.1	0.30	0.3
59	59.0	0.0	1.1	0.30	0.3

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7. Level linearity on the reference level range (cont.)

Anticipated value (dB)	Measured Value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
54	53.9	-0.1	1.1	0.30	0.3
49	49.0	0.0	1.1	0.30	0.3
44	43.9	-0.1	1.1	0.30	0.3
39	39.0	0.0	1.1	0.30	0.3
34	33.9	-0.1	1.1	0.30	0.3
29	28.9	-0.1	1.1	0.30	0.3
28	27.9	-0.1	1.1	0.30	0.3
27	26.9	-0.1	1.1	0.30	0.3
26	25.9	-0.1	1.1	0.30	0.3
25	24.8	-0.2	1.1	0.30	0.3

8. Level linearity including the level range control

At reference sound level on the reference level range

Range	Anticipated value (dB)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
30-130	94.0	94.0	0.0	1.1	0.30	0.3

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8. Level linearity including the level range control

At reference level at 5 dB greater than the under-range on a level range

Range	Anticipated value (dB)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
30-130	25	25.0	0.0	1.1	0.30	0.3

9. Tone burst response

Time Weighting	Toneburst Duration, Tb (ms)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Fast	200	126.0	0.0	±1.0	0.20	0.3
	2	108.9	-0.1	+1.0; -2.5	0.20	0.3
	0.25	100.0	0.0	+1.5; -5.0	0.20	0.3
Slow	200	119.5	-0.1	±1.0	0.20	0.3
	2	100.0	0.0	+1.0; -5.0	0.20	0.3

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10. Peak C sound level

Number of cycles in test signal	Anticipated value (dB)	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Complete cycle	125.4	125.5	0.1	3.0	0.20	0.35
Positive half cycle	124.4	124.1	-0.3	2.0	0.20	0.35
Negative half cycle	124.4	124.1	-0.3	2.0	0.20	0.35

11. Overload indication

Measured value (dB)		Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Positive one-half cycle	Negative one-half cycle				
135.4	135.4	0.0	1.5	0.55	0.25

12. High-level stability

Time	Measured value (dB)	Deviated value (dB)	Acceptance limit class 2 (±dB)	Uncertainty (±dB)	Maximum-permitted uncertainty of measurement (±dB)
Begin	129.0	0.0	0.3	0.10	0.1
End	129.0				

Calibrated by : (Mr. Pannasit Phasingsri)

Approved by : (Mrs. Pornpen Sunypa)
Deputy Director
Electrical and Electronic Standards Laboratory
Industrial Metrology and Testing Service Centre

Date of Calibration : 22-28 Feb. 2024
Date of Issue : 29 Feb. 2024
Ref : 20112670124003470O1

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Cert. No. : ACL24027
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No.:	00472126 / 158778 / 88180
ID No.:	RYG_FS0301
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.
Location :	-
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	19 DECEMBER 2023
Calibration Date :	12 JANUARY 2024
Date of Issue :	16 JANUARY 2024

Nathakorn P 11/1/24

Callbrated by : Nathakorn Pisutpaisan

Approved by : T. Petchurai
(Thanakul Petchurai)

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Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

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Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
18.8

2.2 The microphone of the sound level meter was replaced by electrical signal input device

Frequency Weighting	Measured value (dB)
A - weight	12.0
C - weight	18.4
Flat	24.2

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.7	0.8	0.9	± 1.5
1000	-0.2	-0.2	-0.2	± 1.0
8000	-2.5	-2.5	-2.5	≤5.0

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4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	0.0	-0.1	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.0	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.1	0.1	± 1.1
84.0	84.1	0.1	± 1.1
79.0	79.1	0.1	± 1.1
74.0	74.1	0.1	± 1.1
69.0	69.1	0.1	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.1	0.1	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.1	0.1	± 1.1
28.0	28.1	0.1	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.1	0.1	± 1.1
25.0	25.1	0.1	± 1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	135.3	-1.1	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

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Cert. No. : ACL24027
Job No. : VC67AC0044
Pages : 8 of 8

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.7	89.6	-0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

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Cert. No. : ACL24013
Pages : 1 of 8

Calibration Certificate

Equipment :	SOUND LEVEL METER
Manufacturer :	RION
Model :	NL-42A / Microphone UC-52 / Preamplifier NH-24
Serial No.:	00623391 / 198638 / 26419
ID No.:	RYG_FS0616
Condition As Found :	GOOD
Customer :	ALS LABORATORY GROUP (THAILAND) CO., LTD. 104 PHATTHANAKAN 40, PHATTHANAKAN ROAD, KHWAENG PHATTHANAKAN, KHET SUAN LUANG, BANGKOK, 10250 THAILAND.
Location :	.
Ambient Temperature :	(23.0 ± 3) °C
Pressure :	(101.3 ± 3) kPa
Relative Humidity :	(50.0 ± 20) %
Received Date :	19 DECEMBER 2023
Calibration Date :	05-08 JANUARY 2024
Date of Issue :	09 JANUARY 2024

Calibrated by : Nathakom Pisutpaisan

Approved by : (Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

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Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instrunents :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL.BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL.BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL.BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.
3. This certificate is traceable to the international system of unit maintained at :
   3.1 National Institute of Metrology (Thailand).
   3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

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Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
15.1

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	13.8
C - weight	20.3
Flat	25.8

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.2	0.2	0.2	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	1.5	1.6	1.6	±5.0

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4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	-0.1	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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NSC-TISI-TIS 17025 CALIBRATION 0194

Cert. No. : ACL24013
Job No. : VC67AC0044
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.1	0.1	± 1.1
84.0	84.1	0.1	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.1	0.1	± 1.1
69.0	69.1	0.1	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.1	0.1	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.1	0.1	± 1.1
30.0	30.1	0.1	± 1.1
29.0	29.1	0.1	± 1.1
28.0	28.1	0.1	± 1.1
27.0	27.2	0.2	± 1.1
26.0	26.2	0.2	± 1.1
25.0	25.3	0.3	± 1.1

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Cert. No. : ACL24013
Job No. : VC67AC0044
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	135.8	-0.6	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.1	0.1	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.3	-0.1	±2.0

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Job No. : VC67AC0044
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11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.8	0.3	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation,providing a level of confidence of approximately 95 %

End of Calibration Certificate

DKSH

Certificate of Calibration

Equipment:	SPECTROPHOTOMETER	Certificate No.:	C06230441
Model:	DR6000	Issued Date:	19 September 2023
Serial No. (or ID.):	1627845 (RYG_EN0037)	Job No.:	WO-00005382
Manufacturer:	HACH	Page:	1 of 3
Condition:	In Condition		

Customer: ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5 T.Maenam Khu,
A.Pluakdaeng, Rayong 21140, Thailand.

REVIEW BY N. Bamrut
APPROVED BY D.
NEXT CAL. DATE 18/3/25

Environment Condition: Temperature 23.9 °C ± 0.2
Humidity 65.3 %RH ± 1.4 %RH

Calibration Place: ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch) (Wet Chemistry)
616/10 Moo 5 T.Maenam Khu,
A.Pluakdaeng, Rayong 21140, Thailand.

Calibration By: Mr.Nattapat Rungrueang
Calibration Date: 18 September 2023
The Method used: In house method, CAL-WI-24, base on ASTM E 275-08 and ASTM E 387-04
Traceability: This certificate is traceable to the CRM maintained by National Institute of Standards and Technology (NIST) through Starna Scientific Limited.
The standard for Wavelength Certificate No. 111583 and 111584
The standard for Photometric Certificate No. 9114984 and 111588
The standard for Stray light Certificate No. 111586 and 111585
The standard for Spectral resolution Certificate No. 111587

(Mr. Nattapat Rungrueang)
Person in charge

(Mr. Nitinun Srihawan)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standard or other recognized national standard laboratories.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
These results may be affected by deviations from specified conditions. The results relate only to the items tested, calibrated or sampled. The report shall not be reproduced except in full without approval of DKSH Technology Limited.

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Calibration Results:

Without Adjustment

Wavelength Accuracy (nm), The spectral bandwidth of Std at 2 nm and UUC at 2 nm

Standard Wavelength	Unit Under Calibration	Correction	Uncertainty
418.61	418.3	0.31	0.13
536.66	536.6	0.06	0.13
637.98	638.3	-0.32	0.13
748.48	748.7	-0.22	0.13
807.03	807.4	-0.37	0.13

Photometric Accuracy (Absorbance)

Wavelength	Standard absorbance	Unit Under Calibration	Correction	Uncertainty
420 nm	0.0000	0.000	0.0000	0.0045
	0.2030	0.200	0.0040	0.0045
	0.5168	0.519	-0.0022	0.0045
	1.0268	1.029	0.0008	0.0045
440 nm	0.0000	0.000	0.0000	0.0045
	0.2567	0.253	0.0037	0.0045
	0.5073	0.509	-0.0017	0.0045
	1.0083	1.007	0.0013	0.0045
465 nm	0.0000	0.000	0.0000	0.0045
	0.2516	0.250	0.0016	0.0045
	0.4595	0.462	-0.0025	0.0045
	0.9334	0.933	0.0004	0.0045
546.1 nm	0.0000	0.000	0.0000	0.0045
	0.2461	0.245	0.0011	0.0045
	0.4652	0.466	-0.0008	0.0045
	0.9468	0.946	0.0008	0.0045
590 nm	0.0000	0.000	0.0000	0.0045
	0.2594	0.259	0.0004	0.0045
	0.5040	0.505	-0.0010	0.0045
	1.0032	1.002	0.0012	0.0045
635 nm	0.0000	0.000	0.0000	0.0045
	0.2579	0.257	0.0009	0.0045
	0.4971	0.497	0.0001	0.0045
	0.9720	0.971	0.0010	0.0045

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DKSH Technology Limited
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Phone: +66 2639 7000 Email: info.calibration@dksh.com Website: www.dksh.com/scientific-thailand

Calibration Results:

Without Adjustment

Photometric Accuracy (Absorbance)

Wavelength	Standard absorbance	Unit Under Calibration	Correction	Uncertainty
235 nm	0.0000	0.000	0.0000	0.0080
	0.7355	0.737	-0.0015	0.0080
257 nm	0.0000	0.000	0.0000	0.0080
	0.8574	0.857	0.0004	0.0080
313 nm	0.0000	0.000	0.0000	0.0080
	0.2864	0.290	-0.0036	0.0080
350 nm	0.0000	0.000	0.0000	0.0080
	0.6374	0.637	0.0004	0.0080

Stray light *

Standard: cut-off	UUC: Wavelength (nm)	UUC: Transmission (%T)	Absorbance (A)
260.62 +/- 0.11 nm	260.6	1.3	1.886
391.44 +/- 0.11 nm	391.4	1.3	1.886

Spectral Resolution *

Nominal Concentration 0.02 % v/v	Peak	Trough	Ratio	SBW
Standard Wavelength (nm)	288.66	288.69	1.38	2.00
UUC: Wavelength (nm)	288.2	288.1		
Std Absorbance (A)	0.4568	0.2780		
Absorbance (A)	0.413	0.300		

* Calibration Marked * Not TISI Accredited * in this Certificate have been included for completeness.

The End of Certificate

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ใบตรวจสอบสภาพเครื่องวัดส่งแวดล้อม

เลขที่ใบงาน: WO-00005382

ชนิดเครื่องมือ: SPECTROPHOTOMETER รุ่น: DR6000 หมายเลขเครื่อง: 1627845

ตรวจสอบ (รับ) 18 Sep 2023 ปกติ	ตรวจสอบ (รับ) 18 Sep 2023 ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 18 Sep 2023 ปกติ	ตรวจสอบ (ส่ง) 18 Sep 2023 ไม่ปกติ	หมายเหตุ
		General			
☑	☐	1. ความสมบูรณ์เครื่อง	☑	☐	
☑	☐	2. ความสะอาด (ช่องใส่ตัวอย่าง, ภายใน-นอกเครื่อง)	☑	☐	
☑	☐	3. สวิทช์ ปิด – เปิด เครื่อง (On-Off Switch)	☑	☐	
☑	☐	4. ปุ่มกด (Keypad)	☑	☐	
☑	☐	5. หน้าจอ (Display, Screen Contrast)	☑	☐	
		Spectrophotometer			
☐	☐	6. แรงดันไฟฟ้า (Battery Backup) >= 2.5 VDC	☐	☐	
☐	☐	7. ตัวหมุนเลือกความยาวคลื่น (Wavelength Control)	☐	☐	
☑	☐	8. ความยาวคลื่น (Wavelength Check)	☑	☐	*
☑	☐	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	☑	☐	9.2 Hours
☑	☐	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	☑	☐	741.5 Hours
☑	☐	11. ช่องวัดหลายตัวอย่าง (Carousel Module)	☑	☐	
		pH Meter and Conductivity Meter			
☐	☐	12. อิเล็คโทรด (Electrode and Connection Cable)	☐	☐	
☐	☐	13. ระดับสารละลายใน Electrode (Level KCl)	☐	☐	
☐	☐	14. ฝาปิดกันปลาย Electrode (Dust Protection Hood)	☐	☐	
☐	☐	15. ขาจับอิเล็คโทรด (Stand)	☐	☐	
		Turbidimeter			
☐	☐	16. ค่าความขุ่นต่ำสุด (No Sample)	☐	☐	
☐	☐	17. ระดับการห่างของแสง (>= 2.5 ไม่เกิน 3.0)	☐	☐	
		Automatic Titrator			
☐	☐	18. สภาพ Piston Burettes	☐	☐	
☐	☐	19. Function Rinsing and Dosing	☐	☐	
☐	☐	20. ระบบท่อสายยางและอุปกรณ์ประกอบ	☐	☐	

เพิ่มเติม/ข้อแนะนำ : *656.1nm=656.1nm

*485.0nm=485.5nm

Mr.Nattapat Rungruseng

Service Engineer

บริษัท ดีเคเอสเอช เทคโนโลยี จำกัด
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TEL. 0 2311 3000-29 FAX. 0 2719 3434

Cert.No.: 24CH96
Page.: 1 of 3

Certificate of Calibration

Equipment :	pH Meter
Manufacturer :	Mettler Toledo
Model :	SevenCompact S220
Serial No. :	C104059460
ID No. :	RYG_EN0183
Condition As-Received:	Used Item
Received Date :	18 January 2024
Calibration Date :	19 January 2024
Reference :	2401-0579DSC-2
Submitted by :	ALS Laboratory Group (Thailand) Co .Ltd (Rayong Branch) 616/10 Moo 5, T Maenam Khu, A.Pluakdaeng, Rayong 21140. Thailand
Ambient Temperature :	(25 ± 2.5) °C
Relative Humidity :	(50 ± 15) %
Calibration Procedure :	In - house method - CP-CH5 by direct measurement with standard voltage calibrator and direct measurement with certified reference material (CRM) - CP-CH8 by comparison with themperature standard
Calibrated by :	Warakorn Lemgagtrakul
Approved by :	Approved Signatory

REVIEW BY N.Bamlit
APPROVED BY
NEXT CAL DATE 19/01/25

(√) Sailhip Meangmai
( ) Warakorn Lemgagtrakul
( ) Ponpan Paipim

Issue Date : 24 January 2024

The Uncertainties are for a confidence probability of approximately 95%

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A 0062854

Condition of this calibration result

1. Reference Standard Instrument

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1) Document Process Calibrator	54030049	130RC116	23E2802	27 Aug 2024
2) Ref. Standard Thermometer	4982054	110RC044	23I908	26 July 2024

This certification is traceable to the International System of Unit maintained through:-
- Technology Promotion Association (Thailand-Japan)

2. Certified Reference Materials : The measurement results are traceable to SI through CPA chem Ltd., ANSI-ASQ National Accreditation Board, Accredited No. AR-1835

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	940102	27 Nov 2025
pH 6.986	CPA chem	940104	02 Nov 2024
pH 9.997	CPA chem	940106	02 Nov 2024

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : mV Measurement

Performing standard curve by Fluke at pH (4,7,10)

Unit Under Calibration	Nominal Value	Standard Voltage Input	Actual Reading		Uncertainty of Measurement	Coverage factor
	pH	mV	mV	pH	(±mV)	k
pH Meter	4.000	177.48	177.4	4.000	0.058	2.00
S/N.: C104059460	7.000	0.00	0.0	7.000	0.058	2.00
	10.000	-177.48	-177.5	10.000	0.058	2.00

Sarithip

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4.01,7.00,10.01)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH Measurement (±)	Coverage factor k
pH Electrode	4.008	4.013	176.0	0.0054	2.07
S/N.: 3225367	6.986	6.983	2.2	0.0084	2.00
	9.997	9.996	-174.1	0.0065	2.00

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;
- Model : InLab®Expert Pro-ISM
- Serial No. : 3225367

Dimension of probe
- Length : 120 mm.
- Diameter : 12 mm.
- Immersion Depth : 100 mm.

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (± °C)	Coverage factor k
25.0	25.001	25.2	0.199	0.13	2.00

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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Sarithip

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
53/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG, BANGKOK 10250
TEL. 0-2719-3000-24 FAX 0-2719-9484

Certificate of Calibration

Certificate No. : 24E289
Page : 1 of 2

Equipment :	pH Meter
Manufacturer:	Mettler Toledo
Model :	SevenCompact S220
Serial No.:	C104059460
ID No.:	RYG_EN0183
Condition As-Received:	Used Item
Received Date:	18 January 2024
Calibration Date:	23 January 2024
Reference:	2401-0576DSC
Ambient Temperature:	(23 ± 2) °C
Relative Humidity:	(50 ± 10) %

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Submitted by: ALS Laboratory Group (Thailand) Co.,Ltd (Rayong Branch)
010/10 Moo 5, T Mairiam Khu, A Pluakdaeng,
Rayong 21140, Thailand

Procedure used: Calibration were conducted using calibration procedure No. CP-E17 According to EURAMET cg-15

Condition of this result of calibration

1.Reference standards instruments :

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Multi-Product Calibrator	5500A	6315011	E2U2300035	29 May 2024

2 This result of calibration was made on requested at the point specified by customer.

3 The certificate is valid only to the item calibrated on date and place of calibration.

4 This Certification is traceable to the International System of Unit maintained through:-
- NA Calltechnologies Co.,Ltd. ANAB Accredited No. Calibration AC-2658

Calibrated by : Wutchareeporn Wongshutkrane
Issue Date : 24 January 2024

Approved Signatory :
[ ] Phalinee Prabpaipat
[✓] Nuntawat Khamchai
[ ] Pongsagorn Boonyaporn

Result of calibration :- (*) Without adjustment ( ) After adjustment

Function: DC voltage measurement **Range:** 2000 mV

Standard Value (mV)	UUC* Reading (mV)	Error (mV)	Uncertainty (± µV)
-200.0000	-200.0	0.0	68
-150.0000	-150.0	0.0	65
-100.0000	-100.0	0.0	63
-50.0000	-50.0	0.0	61
0.0000	0.0	0.0	58
50.0000	50.0	0.0	61
100.0000	99.9	-0.1	63
150.0000	149.9	-0.1	65
200.0000	199.9	-0.1	68

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*=2, providing a level of confidence of approximately 95 %

UUC* = Unit Under Calibration.

-o0o-

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
Saraburi Tel : +66 3627 3095 Fax : +66 3627 3100
Bangkok Tel +668 9205 6851 , +669 8247 2360
Website : www.scieco.co.th E-Mail : calibrate@scg.com
NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T230116

Certificate of Calibration

Equipment	:	Chamber (Cooling Room)
Manufacturer	:	MODULAR
Model	:	IREVCOHCOO
Serial No.	:	C00351459
Customer Code	:	RYG_EN0184
ID No.	:	T1939A5
Customer	:	ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
		616/10 Moo 5 T.Maenam Khu,
		A.Pluakdaeng, Rayong 21140
Customer Location	:	Laboratory
Date of Receipt	:	23 January 2023
Calibrated By	:	Atiphong Rongrat (Technician)
Approved By	:	/ Boonchai Suriyawong (Site Calibration Manager)
Date of Issue	:	07 FEB 2023

REVIEW BY ...
APPROVED BY ...
NEXT CAL DATE 30/07/24

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T230116

Calibration Report

Equipment	:	**Chamber (Cooling Room)**
Date of Calibration	:	**25 January 2023**
Environment	:	**Temperature : 23.4-24.9 °C**
		Line Voltage : 221.4-230.2 V
		Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

1. This equipment was calibrated by insert 16 standard thermocouples type T into its chamber , the other one standard thermocouples type T use for ambient temperature measurement . The calibration was done in according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986).
   All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
TC	TYPE T	TN141-TN150	T222123	5 October 2023
TC	TYPE T	TN151-TN160	T222123	5 October 2023
DATA LOGGER	34970A	T150	T222123	5 October 2023

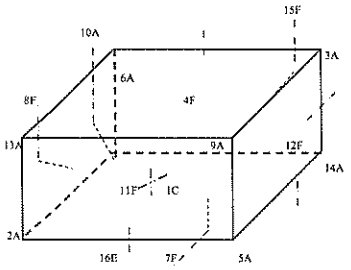
3. This certificate is traceable to :
   National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244)
4. Condition of calibrated item : good
   Equipment Description :
   Time Constant 1 Hour - Minute At 3 °C
   Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
   ☐ Close
   ☒ Not Available
5. Adjustment :
   (X) without adjustment ( ) after adjustment

Approved By. ...

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T230116

Calibration Report



C = Centre , F = Centre of Face , A = Corner , E = Centre of Edge

1C	= TN141	12F	= TN152
2A	= TN142	13A	= TN153
3A	= TN143	14A	= TN154
4F	= TN144	15F	= TN155
5A	= TN145	16E	= TN156
6A	= TN146		
7F	= TN147		
8F	= TN148		
9A	= TN149		
10A	= TN150		
11F	= TN151		

Approved By. ...

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T230116

Calibration Report

Measurement Results

	Average Standard Reading at each position (°C)											
Calibration Point	TN141	TN142	TN143	TN144	TN145	TN146	TN147	TN148	TN149	TN150	TN151	TN152
3.0	3.03	3.16	3.15	3.19	3.45	3.47	3.21	3.35	3.54	3.45	3.24	3.34
	TN153	TN154	TN155	TN156								
	3.28	3.22	3.28	3.21								

Chamber (Cooling Room)			Temperature Distribution			
Setting (°C)	Reading (°C)		Stability (±°C)	Uniformity (°C)	Uncertainty (±°C)	Coverage Factor k
	Min , Max	Average				
3.0	2.8 , 4.1	3.5	1.20	1.20	1.90	2.07

The calibration result apply only the above calibrated item.
The result of test was found accurate as shown on date and place of test only.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 % .

Approved By. ...

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3 : EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717-3000 FAX. 0-2719-9484

Cert.No.: 23TW168
Page.: 1 of 2

Certificate of Testing

Equipment :	DO Meter
Manufacturer :	YSI
Model :	5000-115V
Serial No. :	15E102796
ID No. :	RYG_EN0032
Received Date :	21 July 2023
Test Date :	24 July 2023
Reference :	2307-0713DSC-1
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. Rayong Branch 616/10 Moo 5, T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand
Laboratory Condition :	Temperature (25 ± 5) °C Humidity (50 ± 20) %
Test Procedure :	In - house method : CP-CH9 by Comparison Technique with Azide Modification Method
Tested by :	Wulalak Sirithean
Approved by :	Approved Signatory

REVIEW BY ..... N.Banat
APPROVED BY ..... D.
NEXT CAL. DATE 24/01/25

( ) Malee Butkruea
(✓) Saithip Meangmal
( ) Werakorn Lerngagtrakul

Issue Date : 26 July 2023

B 0320211

Condition of this result of calibration

1. Reference Standard Instruments :
This certification is traceable to the International System of Unit through the reference standards laboratory of Industrial Calibration Center,Technology Promotion Association (Thailand-Japan).

Instruments	Serial No.	ID No.	Certificate No.	Due Date
1) Burette	-	130BU10	23CG1172	22 Mar 2025
2) Balance	1126143764	140RC004	22MM50	20 Sep 2023

2. Standard Material :-

Material	Manufacturer	Lot.No.	Assay
Sodium Thiosulfate pentahydrate	Merck	AM1763316	100.2%

Result : Dissolved Oxygen Meter Adjustment With Air 100 %

Dissolved Oxygen Probe No.: 15E100464

Titration Method (Azide Modification Method) (mg/L)	DO Meter Reading (mg/L)	Standard Deviation (mg/L)
8.18	8.17	0.0055

This report was certified only for the instrument we tested.It is allowable to use for study the system efficiency,The environmental impact control and present to organization it may concerned Intend to use for advertising and referral purpose is prohibited.This report may not be reproduced other in full,without written approval of the laboratory

-o0o-

Saithip

a 1172155

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717-3000 ext 29 FAX. 0-2719-9484

Cert. No.: 23LM125
Page.: 1 of 2

Certificate of Calibration

Equipment :	DO Meter with Sensor
Manufacturer :	YSI
Model :	5000-115V
Serial No. :	15E102796
ID No. :	RYG_EN0032
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. Rayong Branch 616/10 Moo 5 T. Maenam Khu, A. Pluakdaeng, Rayong 21140 Thailand
Location :	TPA On Site Calibration Laboratory
Received Order :	25 July 2023
Calibrated Date :	27 July 2023
Ambient Temperature :	(26 ± 10) °C
Relative Humidity :	(50 ± 30) %
AC Line Voltage :	(220 ± 22) V
Calibrated by :	Preecha Hlahib
Approved by :	Approved Signatory

( ) Pornthippa Temeyakul
( ) Malee Butkruea
(✓) Suwit Imjai

Issue Date : 31 July 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written Approval of the head of Corporate Services 3 - Equipment Calibration and Testing Services

A 0053616

Equipment : DO Meter with Sensor
Condition As-Received : Used Item
Reference : 2307-0713DSC-2

Procedure Used :-
Calibration were conducted using in-house calibration procedure CP-OT01 according to comparison with Industrial Platinum Resistance Thermometer (IPRT) into Temperature Bath.
The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Digital Thermometer	2188080	22I1265	TPA	21 Oct 2023

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.
Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function : Temperature measurement.
This instrument was connected with temperature sensor, S/N.: 1228475367

Calibration Point (°C)	Immersion Depth (mm)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty (± °C)	Coverage Factor k
20.00	100	20.011	19.91	-0.101	0.15	2.00

UUC* : Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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a 1159515

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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TEL. 0-2717-3009-29 FAX 0-2719-9484

Cert. No.: 23TM962
Page : 1 of 3

Certificate of Calibration

Equipment :	Low Temp. Incubator
Manufacturer :	Memmert
Model :	IPP750
Serial No. :	V818.0084
ID No. :	RYG_EN0154

REVIEW BY N.Banmer
APPROVED BY
NEXT CAL. DATE 29/11/24

Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch) 616/10 Moo 5 T. Maenam Khu, A. Pluakdaeng, Rayong 21140 Thailand
Location :	BOD Room
Received Order :	29 May 2023
Calibration Date :	29 May 2023
Ambient Temperature :	(28 ± 10) °C
Relative Humidity :	(50 ± 30) %
Calibrated by :	Man Pattanapongpaiboon
Approved by :	Approved Signatory

( ) Pornthippa Temeyakul
( ) Malee Butkruea
(✓) Suwit Imjai

Issue Date : 7 June 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written Approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services

A 0054967

Equipment : Low Temp. Incubator
Condition As-Received : Used Item
Reference : 2305-0898OC-2

Cert. No.: 23TM962
Page : 2 of 3

Procedure Used :-

Calibration were conducted using calibration procedure CP-OT02 according to direct measurement method with Data Acquisition which connected with Resistance Temperature Detector (RTD).
The temperature scale used was based on ITS-90.

Condition of this result of calibration

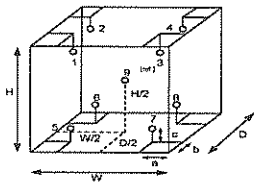
1. Reference standard instrument:-

Instrument	Model	Serial No.	Cert. No.	Due Date
1) Data Acquisition	34972A	MY57013711	22LM93	02 Jul 2023

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Environment during calibration	Beginning	Finished
Temp. (°C)	23	23
REL.Humid. (%)	54	56
AC Supply (Volt)	223	222



Position :	Ref. Std. ID No.:
1	18-18RTD-01
2	18-18RTD-02
3	18-18RTD-03
4	18-18RTD-04
5	18-18RTD-05
6	18-18RTD-10
7	18-18RTD-07
8	22-18RTD-08
9 (ref)	18-18RTD-09

Probe Installation Details :
a = 10 cm
b = 10 cm
c = 10 cm

Dimension of Chamber :
D = 0.60 m
W = 1.0 m
H = 1.2 m
Capacity = 0.75 m³

a 1165130

Equipment : Low Temp. Incubator
Condition As-Received : Used Item
Reference : 2305-0898OC-2

Cert. No.: 23TM962
Page : 3 of 3

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Calibration Point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Temperature stability (± °C)	Temperature uniformity (°C)	Overall Variation (°C)	Coverage Factor k
20.0	20.0	20.0	0.019	0.72	1.0	2

Calibration Point (°C)	Measured Temperature (°C) Position									Uncertainty (± °C)
	1	2	3	4	5	6	7	8	9 (ref.)	
20.0	19.547	19.760	19.487	19.529	19.408	20.139	20.112	20.406	20.116	0.30

Average* : The average of 30 values in each position.
Temperature stability : One-half of the greatest maximum difference of measured temperature at any one sensor.
Temperature uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Overall Variation : The Difference of the maximum and minimum measured temperatures throughout observation.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity .

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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a 1165129

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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53/4-5 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG, BANGKOK 10250
TEL. 0-2717-3009-24 FAX 0-2719-9484

Certificate of Calibration

Certificate No. : 23T1768
Page : 1 of 2

Equipment :	Digital Thermometer
Manufacturer:	Testo
Model :	106
Serial No.:	83517768/0921
ID No.:	RYG_FS0571
Condition As-Received:	Used Item
Received Date:	04 October 2023
Calibration Date:	10 October 2023 to 11 October 2023
Reference:	2310-0110DSC
Ambient Temperature:	(25 ± 3) °C
Relative Humidity:	(50 ± 20) %

This certificate may not be reproduced other than in full, except with the prior written approval of the head of Corporate Services 3: Equipment Calibration and Testing Services.

Submitted by: ALS Laboratory Group (Thailand) Co.,Ltd. Rayong Branch
616/10 Moo 5, T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand

Procedure used: Calibration were conducted using in-house calibration procedure CP-T01 according to comparison with Industrial Platinum Resistance Thermometer (IPRT) into liquid bath temperature controller
The temperature scale used was based on ITS-90.

Condition of this result of calibration

1.Reference standards instruments

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Black Stack Thermometer	1560	8C454	231600	30 May 2024
2) PRT Scanner Module	2562	A01303	231600	30 May 2024
3) Industrial Platinum Resistance Thermometer	5627-12	571871	231600	30 May 2024

2.This certificate is valid only to the item calibrated on date and place of calibration.
3.This Certification is traceable to the International System of Unit maintained through,-
-Technology Promotion Association (Thailand-Japan), NSC-ONSC Accredited No. Calibration 0008

REVIEW BY Pattanapong Th.
APPROVED BY
NEXT CAL. DATE 12/10/24

Calibrated by : Wasinee Sawaidee
Issue Date : 12 October 2023

Approved Signatory :
[ ] Phatinee Prapapipat
[ ] Chatchawan Khunpiluek
[✓] Wanlop Larplerm

B 0326171

Cert. No.: 23T1766
Page.: 2 of 2

Result of Calibration:- Without Adjustment
Function: Temperature measurement
Dimension of probe : Diameter 3 mm., Length 55 mm. Sheath material : Stainless Steel

Immersion Depth (mm.)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of Measurement (±°C)
50	25.0025	24.9	-0.1025	0.12
50	30.0018	29.9	-0.1018	0.12
50	40.0034	40.0	-0.0034	0.12

UUC* : Unit Under Calibration
The reported uncertainty of measurement was based on standard uncertainty multiplied by a coverage factor k = 2, providing a level of confidence of approximately 95%.

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a 1184740

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel.+66 2643 8361-8 , e-mail: service.thailand@sartorius.com

SARTORIUS

Certificate of Calibration

REVIEW BY Thanitak
APPROVED BY D.
NEXT CAL. DATE 02/02/2025

Model Number : MSE224S-100-DU
Description : Analytical Balance
Serial Number : 0026207038
ID No. : RYG_EN0002
Manufacturer : Sartorius

Certificate No. : 24BCI0069
Issued Date : Friday, February 23, 2024
Reference No. : 229196
Page No. : 1 of 2

Customer Name : ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5 T.Maenam Khu, A.Pluak Daeng, Rayong 21140, Thailand.

Calibrated Place : ALS Laboratory Group (Thailand) Co., Ltd.(Balance Room)
616/10 Moo 5 T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand.

Calibrated By : Mr.Chonchai Inthana
Calibration Date : Thursday, February 22, 2024

Calibration Procedure No. : This calibration was conducted by Using in-house calibration procedure number (WI-003) Based on UKAS LAB 14 : 2019

Metrological data :
Capacity : 220 g Readability : 0.0001 g

Ambients Conditions:
Temperature : 24.2 °C ± 5.0 °C
Humidity : 57.0 % RH ± 10.0 % RH
Pressure ±

Reasons for calibration
☐ New Installation ☐ Service / Repaired ☑ Re-calibration/ Maintenance

Equipment Condition: ☑ Good Operate ☐ Fair

Measurement Method UKAS Publication Ref :Lab 14

The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM). The calibration certificate documents the traceability to National Standards, which realise the unit of measurement according to the International Standard System of Units (SI). Report of Tolerance came form list of Sartorius Metrological Specifications.

Traceability:

Model Number	Description	Traceability	Certificate No.	Due Date
YCS011-522-00	Sartorius weight set 1mg - 5000g E2,YCS011-522-00	TCS	M2308197S	23-Aug-2025
MHB-382SD	Humidity/Barometer/Temp Lutron MHB-382SD	DKSH	C16231645	23-Aug-2024

This certificate relate and apply this equipment only.
This certificate may not be reproduced other than in full except with the prior written approval of the Verification Operation Division Sartorius (Thailand) Co., Ltd.

Mr.chonchai Inthana(Technical Manager)

STAMP

SOP FM 33 03 February 2022

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8361-8 Fax: +66 2643-8367, e-mail: service.thailand@sartorius.com

SARTORIUS

Certificate of Calibration

Model Number : MSE224S-100-DU
Description : Analytical Balance
Serial Number : 0026207038
ID No. : RYG_EN0002
Manufacturer : Sartorius

Certificate No. : 24BCI0069
Issued Date : Friday, February 23, 2024
Reference No. : 229196
Page No. : 2 of 2

Calibration Results : Without Adjustment

Repeatability

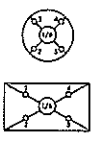
The reproducibility is the ability of a weighing instrument to display nearly identical readouts under constant test conditions when the same load within a measurement series is placed repeatedly on the weighing pan in the same manner. The standard deviation is used to express reproducibility quantitatively.

Nominal Value : (Low Load)	20.0000	199.9999
20 g	20.0000	200.0000
Tolerance	20.0001	200.0000
0.0001 g	20.0000	199.9999
	20.0001	200.0000
Nominal Value : (High Load)	19.9999	200.0000
200 g	20.0000	200.0000
Tolerance	20.0000	199.9999
0.0001 g	19.9999	200.0001
	19.9999	200.0000
Standard Deviation	0.00007	0.00006

Eccentricity (Off-center loading error)

The off-center loading error is yielded by the difference between the readout of the load, i.e. 1/3 or 1/4 of maximum capacity, placed in the middle of the weighing pan and between each of four additional measurement points (positions defined according to OIML R76).

Nominal value : 100 g
Tolerance *0.0004* g



	Difference
1	-
2	-0.0001
3	-0.0001
4	0.0000
5	-0.0001
6	-

Linearity

The linearity, also called linearity error, Describes the deviation of the characteristic curve of a weighing instrument from the linear slope.

Tolerance *0.0002* g

Nominal Value (g)	Conventional Mass Value (g)	Displayed Value (g)	Deviation (g)	Uncertainty (g)
0.01	0.0100	0.0100	0.0000	0.00018
0.05	0.0500	0.0500	0.0000	0.00018
0.1	0.1000	0.1000	0.0000	0.00018
0.5	0.5000	0.5000	0.0000	0.00018
1	1.0000	1.0000	0.0000	0.00018
5	5.0000	5.0000	0.0000	0.00018
10	10.0000	10.0000	0.0000	0.00018
20	20.0000	20.0000	0.0000	0.00024
50	50.0000	49.9999	-0.0001	0.00019
100	100.0000	100.0000	0.0000	0.00023
200	200.0000	199.9999	-0.0001	0.00032

End of Report.

SOP FM 33 03 February 2022

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX.0-2719-9484

Certificate of Calibration

Cert. No.: 24TM632
Page : 1 of 3

REVIEW BY Thanitak
APPROVED BY D.
NEXT CAL. DATE 21/09/25

Equipment : Hot Air Oven
Manufacturer : Memmert
Model : UFE 500
Serial No. : G511.1572
ID No. : RYG_EN0010

Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5 T. Maenam Khu,
A. Pluakdaeng,
Rayong 21140 Thailand

Location : Oven Room

Received Order : 21 March 2024
Calibration Date : 21 March 2024
Ambient Temperature : (26 ± 10) °C
Relative Humidity : (50 ± 30) %

Calibrated by : Man Pattanapongpaiboon

Approved by : Approved Signatory

( ) Pornthippa Tamoyakul
( ) Unnopphol Harachai
(V) Suwit Imjai

Issue Date : 22 March 2024

The Uncertainties are for a confidence probability of approximately 95%

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Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2403-0563OC-1
Cert. No.: 24TM632
Page : 2 of 3

Procedure Used :-

Calibration were conducted using calibration procedure CP-OT02 according to direct measurement method with Data Acquisition which connected with Resistance Temperature Detector (RTD) and Thermocouple Type T.

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

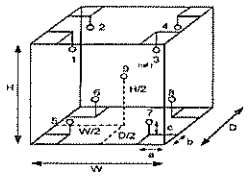
Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013711	23LM115	TPA	11 Jul 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Environment during calibration	Beginning	Finished
Temp. (°C)	27	27
REL.Humid. (%)	57	59
AC Supply (Volt)	222	224



Probe Installation Details :

a =	5.0	cm
b =	5.0	cm
c =	5.0	cm

Dimension of Chamber :

D =	0.40	m
W =	0.56	m
H =	0.48	m
Capacity =	0.11	m³

Position :	Ref. Std. ID No.: @ Calibration Point (180) °C	(104) °C
1	18-18TC-01	18-18RTD-01
2	18-18TC-02	18-18RTD-02
3	18-18TC-03	18-18RTD-03
4	18-18TC-04	18-18RTD-04
5	18-18TC-05	18-18RTD-05
6	18-18TC-06	23-18RTD-06
7	18-18TC-07	18-18RTD-07
8	18-18TC-08	22-18RTD-08
9 (ref.)	18-18TC-09	18-18RTD-09

Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2403-0563OC-1
Cert. No.: 24TM632
Page : 3 of 3

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Calibration Point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Temperature stability (± °C)	Temperature uniformity (°C)	Overall Variation (°C)	Coverage Factor k
104.0	104.0	104.0	0.051	0.59	0.62	2
180.0	180.0	180.0	0.15	1.3	1.7	2

Calibration Point	Measured Temperature (°C) Position									Uncertainty
(°C)	1	2	3	4	5	6	7	8	9 (ref.)	(±°C)
104.0	103.921	103.786	103.757	103.759	103.950	103.817	104.213	103.672	103.673	0.42
180.0	179.614	179.270	179.145	179.599	180.001	180.423	180.293	180.629	179.429	1.1

Average* : The average of 30 values in each position.
Temperature stability : One-half of the greatest maximum difference of measured temperature at any one sensor
Temperature uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Overall Variation : The Difference of the maximum and minimum measured temperatures throughout observation.
UUC* : Unit Under Calibration
Note The reported uncertainty of measurement was included stability and excluded uniformity .

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

-o0o-

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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TEL.0-2717-3000-29 FAX.0-2719-9484

Certificate of Calibration

Cert. No.: 24TM634
Page : 1 of 3

Equipment :	Hot Air Oven
Manufacturer :	Memmert
Model :	UF 110
Serial No. :	B423 0853
ID No. :	RYG_EN0213
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd (Rayong Branch) 616/10 Moo 5 T. Maenam Khu, A. Pluakdaeng, Rayong 21140 Thailand
Location :	Oven Room
Received Order :	21 March 2024
Calibration Date :	21 - 22 March 2024
Ambient Temperature :	(25 ± 10) °C
Relative Humidity :	(50 ± 30) %
Calibrated by :	Man Pattanapongpaiboon
Approved by :	Approved Signatory

REVIEW BY Thanitak.
APPROVED BY
NEXT CAL DATE 21/03/25

( ) Pornthippa Tameyakul
( ) Unnepphol Harachai
(√) Suwit Imjai

Issue Date : 23 March 2024

The Uncertainties are for a confidence probability of approximately 95%

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Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2403-0563OC-3
Cert. No.: 24TM634
Page : 2 of 3

Procedure Used :-

Calibration were conducted using calibration procedure CP-OT02 according to direct measurement method with Data Acquisition which connected with Resistance Temperature Detector (RTD) and Thermocouple Type T.

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

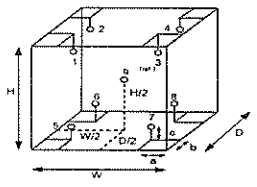
Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013711	23LM115	TPA	11 Jul 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Environment during calibration	Beginning	Finished
Temp. (°C)	27	27
REL Humid. (%)	59	59
AC Supply (Volt)	224	223



Probe Installation Details :

a =	5.0	cm
b =	5.0	cm
c =	5.0	cm

Dimension of Chamber :

D =	0.40	m
W =	0.56	m
H =	0.48	m
Capacity =	0.11	m³

Position :	Ref. Std. ID No.: @ Calibration Point (180) °C	(104) °C
1	18-18TC-01	18-18RTD-01
2	18-18TC-02	18-18RTD-02
3	18-18TC-03	18-18RTD-03
4	18-18TC-04	18-18RTD-04
5	18-18TC-05	18-18RTD-05
6	18-18TC-06	23-18RTD-06
7	18-18TC-07	18-18RTD-07
8	18-18TC-08	22-18RTD-08
9 (ref.)	18-18TC-09	18-18RTD-09

Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2403-0563OC-3
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Cert. No.: 24TM634
Page : 3 of 3

Calibration Point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Temperature stability (± °C)	Temperature uniformity (°C)	Overall Variation (°C)	Coverage Factor k
104.0	104.0	104.0	0.065	0.52	0.90	2
180.0	180.0	180.0	0.20	1.2	2.0	2

Calibration Point	Measured Temperature (°C) Position									Uncertainty
(°C)	1	2	3	4	5	6	7	8	9 (ref.)	(± °C)
104.0	104.169	103.506	103.898	103.712	103.772	103.730	104.269	103.805	103.798	0.42
180.0	180.701	179.239	179.935	179.999	180.127	180.138	180.695	179.313	180.211	1.1

Average* : The average of 30 values in each position.
Temperature stability : One-half of the greatest maximum difference of measured temperature at any one sensor.
Temperature uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Overall Variation : The Difference of the maximum and minimum measured temperatures throughout observation.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity .

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

-o0o-

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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TEL.0-2717-3000-29 FAX.0-2719-9484

Certificate of Calibration

Cert. No.: 24TM635
Page : 1 of 3

REVIEW BY Thanitak.
APPROVED BY
NEXT CAL DATE 21/09/25

Equipment : Water Bath
Manufacturer : Memmert
Model : WNB22
Serial No. : L513.0648
ID No. : RYG_EN0061
Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5, T. Maenam Khu,
A. Pluakdaeng,
Rayong 21140, Thailand
Location : Wet Chemistry Lab

Received Order : 21 March 2024
Calibration Date : 21 March 2024
Ambient Temperature : (26 ± 10) °C
Relative Humidity : (50 ± 30) %

Calibrated by : Man Pattanapongpaiboon
Approved by :
Approved Signatory
( ) Pornthippa Tamoyakul
( ) Unnopphol Hanchai
(✓) Suwit Imjai

Issue Date : 23 March 2024

The Uncertainties are for a confidence probability of approximately 95%

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Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2403-0563OC-4

Cert. No.: 24TM635
Page : 2 of 3

Procedure Used :-

Calibration were conducted using In-house calibration procedure CP-OT04 Based on ASTM E715 according to direct measurement method with Data Acquisition which connected with Industrial Platinum Resistance Thermometer (IPRT).

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

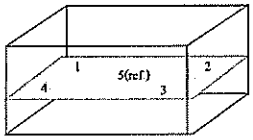
Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013711	23LM115	TPA	11 Jul 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Heat transfer medium used : Water

	Environmental		AC Voltage Supply
	(°C)	(%R.H.)	(Volt)
Beginning of Calibration	25	55	222
Finished of Calibration	25	57	223



Front

Position :	Ref. Std. ID No.:
1	4803988-001
2	4803988-002
3	4803988-003
4	4803988-004
5(ref.)	4803988-005

Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2403-0563OC-4
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source

Cert. No.: 24TM635
Page : 3 of 3

Calibration point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Average* Standard Reading (°C) Position 1	2	3	4	5 (ref.)	Uncertainty (± °C)
85.0	85.0	85.0	84.428	84.424	84.489	84.507	84.477	0.18

Calibration point (°C)	Uniformity (°C)	Stability (± °C)	Coverage Factor k
85.0	0.19	0.11	2

Average* : The average of 30 values in each position.
Uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Stability : One-half of the greatest maximum difference of measured temperature at any one probe.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

-o0o-

Certificate of Calibration

Represent to Certificate of Calibration No. C29240007

Equipment:	Block Digestion Unit	Certificate No.:	C29240011
Model:	KT-20s	Issued Date.	22 March 2024
Serial No. (or ID):	5720210009/5770200073	Job No.:	WO-00020429
Manufacturer:	Gerhardt	Page:	1 of 4
Condition:	In Condition	Digestion Block:	20 holes.

Customer: ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
616/10 Moo 5 T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand.

Environment Condition:

Temperature:	25 °C	±	0.7 °C
Humidity:	54 %RH	±	4.1 %RH
Voltage:	225 VAC	±	1.7 VAC

REVIEW BY N.Bamrat
APPROVED BY
NEXT CAL. DATE 11/09/25

Calibration Place: ALS Laboratory Group (Thailand) Co.,Ltd. (Rayong Branch)
(Wet Chemistry Lab)
616/10 Moo 5 T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand.

Calibration By: Mr. Thanathorn Phunook

Calibration Date: *11 March 2024*

The Method used: In house method, base on by comparison with standard

Traceability: This certificate is traceable to the SI Units maintained by National Institute of Metrology (NIMT), Thailand through N.M. Technical Center Laboratory (NTL) Certificate No : TC22/0080

(Mr. Thanathorn Phunook)
Person in charge

(Mr. Udon Srichana)
Authorized signatory

This certificate is issued the units of measurement according to the International System of Units (SI). It provides traceability of measurement to international or national standard or other recognized national standard laboratories.

The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).

These results may be affected by deviations from specified conditions. The results relate only to the items tested, calibrated or sampled. The report shall not be reproduced except in full without approval of DKSH Technology Limited.

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DKSH Technology Limited
2533 อาคารซิมเพล็กซ์ ถนนสุขุมวิท แขวงพระโขนงเหนือ เขตวัฒนา 10260
2533 Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Phone +66 2639 7000 Email: info.calibration@dksh.com Website: www.dksh.com/scientific-thailand

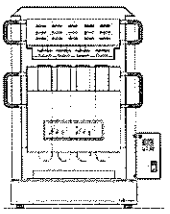
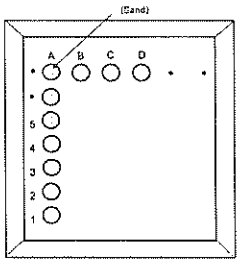


Fig 1.: Front view



Location of standard

Fig 2 : Digestion block

Definitions

Indicating Temperature : The average reading of indicating device which forms the integral part of the Digestion block.

Measured Temperature : The average reading of working standard at any positions or location.

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2533 Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Phone +66 2639 7000 Email: info.calibration@dksh.com Website: www.dksh.com/scientific-thailand

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CAL-FM-C29-07 20 Jul 2022

Calibration Results:

Pre Calibrtion

Locations	Desired (°C)	Setting (°C)	Indicating (°C)	Measured Temperature (°C)	Correction of UUC (°C)	Uncertainty (± °C)
A1	380	380	380	401.5	21.5	1.5
A2				401.2	21.2	1.5
A3				399.1	19.1	1.5
A4				397.6	17.6	1.5
A5				395.1	15.1	1.5
B1				396.6	16.6	1.5
B2				396.1	16.1	1.5
B3				392.9	12.9	1.5
B4				391.6	11.6	1.5
B5				390.7	10.7	1.5
C1				395.3	15.3	1.5
C2				395.6	15.6	1.5
C3				392.8	12.8	1.5
C4				391.7	11.7	1.5
C5				390.3	10.3	1.5
D1				397.6	17.6	1.5
D2				396.6	16.6	1.5
D3				395.0	15.0	1.5
D4				394.2	14.2	1.5
D5				393.6	13.6	1.5

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DKSH Technology Limited
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2533 Sukhumvit Road, Bangchak, Phrakhanong, Bangkok 10260
Phone +66 2639 7000 Email: info.calibration@dksh.com Website: www.dksh.com/scientific-thailand

Delivering Growth - in Asia and Beyond
CAL-FM-C29-07 20 Jul 2022

Calibration Results:

Without adjustment

Locations	Desired (°C)	Setting (°C)	Indicating (°C)	Measured Temperature (°C)	Correction of UUC (°C)	Uncertainty (± °C)
A1	380	385	385	382.5	17.5	1.5
A2				382.4	17.4	1.5
A3				382.1	17.1	1.5
A4				379.7	14.7	1.5
A5				378.3	13.3	1.5
B1				380.1	15.1	1.5
B2				380.1	15.1	1.5
B3				376.5	13.5	1.5
B4				376.3	13.3	1.5
B5				379.1	14.1	1.5
C1				380.1	15.1	1.5
C2				380.1	15.1	1.5
C3				378.9	13.9	1.5
C4				378.2	13.2	1.5
C5				377.3	12.3	1.5
D1				380.5	15.5	1.5
D2				380.6	15.6	1.5
D3				378.1	13.1	1.5
D4				378.7	13.7	1.5
D5				377.7	12.7	1.5

The End of Certificate

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CAL-FM-C29-07 20 Jul 2022

DKSH

ใบตรวจสอบสภาพเครื่องควบคุมอุณหภูมิ

เลขที่ใบงาน: WO-00020429

ชนิดเครื่องมือ: Block Digestion Unit รุ่น: KT-20s

หมายเลขเครื่อง: 5720210009/5770200073

ตรวจสอบ (รับ) 11 Mar 2024 ปกติ	ไม่ปกติ	รายการตรวจเช็ค	ตรวจสอบ (ส่ง) 11 Mar 2024 ปกติ	ไม่ปกติ	หมายเหตุ
		General			
☒	☐	1. สายไฟ	☒	☐	
☒	☐	2. การทำงาน Main Switch	☒	☐	
☒	☐	3. การทำงาน Selector Key	☒	☐	
☒	☐	4. การแสดงผล Display	☒	☐	
☒	☐	5. สภาพ Hole	☒	☐	
☐	☐	6. สภาพหน้าปัด	☐	☐	ไม่มี
☒	☐	7. สภาพตัวเครื่อง	☒	☐	
☒	☐	8. สภาวะแวดล้อม ณ สถานที่ตั้งเครื่อง	☒	☐	

ข้อแนะนำ .

Mr. Thanathorn Phunock

Service Engineer

DKSH Technology Limited

Delivering Growth - in Asia and Beyond

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
53/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG, BANGKOK 10250
TEL. 0-2717-3000-24 FAX. 0-2719-9484

Certificate of Calibration

Certificate No. : 23E3924
Page : 1 of 2

Equipment :	pH Meter
Manufacturer:	Mettler Toledo
Model :	SevenExcellence
Serial No.:	B834291445
ID No.:	RYG_EN0152
Condition As-Received:	Used Item
Received Date:	08 December 2023
Calibration Date:	14 December 2023
Reference:	2312-0151DSC
Ambient Temperature:	(23 ± 2) °C
Relative Humidity:	(50 ± 10) %

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Submitted by: ALS Laboratory Group (Thailand) Co.,Ltd. Rayong Branch
616/10 Moo 5, T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand

Procedure used: Calibration were conducted using calibration procedure No. CP-E17 according to EURAMET cg-15.

Condition of this result of calibration

1.Reference standards instruments :

Instrument	Model	Serial No.	Certificate No.	Due Date
1) Multi-Product Calibrator	5502A	2435602	EE-0041-23	26 Apr 2024

2.This result of calibration was made on requested at the point specified by customer.

3.The certificate is valid only to the item calibrated on date and place of calibration.

4.This Certification is traceable to the International System of Unit maintained through:-
-National Institute of Metrology Thailand (NIMT)

REVIEW BY M. Bennit
APPROVED BY
NEXT CAL. DATE 14/12/24

Calibrated by : Napachanok Prasomsoosiri
Issue Date : 15 December 2023

Approved Signatory :
[ ] Phalinee Prabpaipat
[✓] Nuntawat Khamchai
[ ] Pongsagorn Boonyaporn

ก 0331106

Cert. No.: 23E3924
Page.: 2 of 2

Result of calibration :- (*) Without adjustment ( ) After adjustment

Function: DC voltage measurement Range: 2000 mV

Standard Value (mV)	UUC* Reading (mV)	Error (mV)	Uncertainty (± µV)
-200.0000	-199.9	0.1	68
-150.0000	-150.0	0.0	65
-100.0000	-100.0	0.0	63
-50.0000	-50.0	0.0	61
0.0000	0.0	0.0	58
50.0000	50.0	0.0	61
100.0000	100.0	0.0	63
150.0000	150.0	0.0	65
200.0000	199.9	-0.1	68

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95 %

UUC*= Unit Under Calibration.

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TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
53/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL 0-2717-3000-29 FAX 0-2719-9484

Cert.No.: 23CH1574
Page.: 1 of 3

Certificate of Calibration

Equipment :	pH Meter
Manufacturer :	Mettler Toledo
Model :	SevenExcellence
Serial No. :	B834291445
ID No. :	RYG_EN0152
Condition As-Received:	Used Item
Received Date :	08 December 2023
Calibration Date :	15 December 2023
Reference :	2312-0151DSC-3
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. Rayong Branch 616/10 Moo 5, T.Maenam Khu, A.Pluakdaeng, Rayong 21140, Thailand
Ambient Temperature :	(25 ± 2.5) °C
Relative Humidity :	(50 ± 15) %
Calibration Procedure :	In - house method : - CP-CH5 by direct measurement with standard voltage calibrator and direct measurement with certified reference material (CRM) - CP-CH8 by comparison with standard thermometer
Calibrated by :	Warakorn Lemgagtrakul
Approved by :	Approved Signatory

( ) Saithip Moangmai
( ) Warakorn Lemgagtrakul
(✓) Ponpan Palpim

Issue Date : 19 December 2023

The Uncertainties are for a confidence probability of approximately 95%

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A 0061696

Condition of this calibration result

1. Reference Standard Instrument : -

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1) Document Process Calibrator	54030049	130RC116	23E2802	27 Aug 2024
2) Ref. Standard Thermometer	4982054	110RC044	23I908	26 July 2024

This certification is traceable to the International System of Unit maintained through:-
- Technology Promotion Association (Thailand-Japan)

2. Certified Reference Materials : The measurement results are traceable to SI through CPA chem Ltd., ANSI-ASQ National Accreditation Board, Accredited No. AR-1635

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	913598	14 July 2025
pH 6.986	CPA chem	931959	01 Oct 2024
pH 9.997	CPA chem	940106	02 Nov 2024

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : mV Measurement

Performing standard curve by Fluke at pH (4,7,10)

Unit Under Calibration	Nominal Value	Standard Voltage Input	Actual Reading		Uncertainty of Measurement	Coverage factor
	pH	mV	mV	pH	(±mV)	k
pH Meter	4.000	177.48	177.3	4.000	0.058	2.00
S/N.: B834291445	7.000	0.00	-0.1	7.000	0.058	2.00
	10.000	-177.48	-177.5	10.000	0.058	2.00

a 1193852

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4,7,10)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH measurement (±)	Coverage factor k
pH Electrode	4.008	4.013	184.1	0.0045	2.00
S/N.: 3225368	6.986	6.988	8.7	0.0084	2.00
	9.997	10.002	-164.7	0.0088	2.11

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;
- Model : InLab@Expert Pro-ISM
- Serial No. : 3225368

Dimension of probe;
- Length : 120 mm
- Diameter : 12 mm
- Immersion Depth : 100 mm

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (± °C)	Coverage factor k
25.0	25.003	24.3	-0.703	0.13	2.00

Remark : - UUC* = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k , providing a level of confidence of approximately 95 %.

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a 1193851

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
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534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX.0-2719-9484

ilac-MRA
ISO/IEC 17025:2017
CALIBRATION 0059

Certificate of Calibration

Equipment :	Burette
Capacity :	50 mL
Serial No. :	-
ID. No. :	BKK_EN0171
Manufacturer :	Witeg
Made in :	Germany
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 4D, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Ambient Temperature :	(20 ± 2.5) °C
Relative Humidity :	(50 ± 10) %
Barometric Pressure :	760 mmHg
Calibration Procedure :	ASTM E 542 - 01
Calibrated by :	Natcha Chayyingcheiw
Approved by :	Approved Signatory

REVIEW BY Sirikit P.
APPROVED BY
NEXT CAL DATE 27/08/25

( ) Unnopphol Harachai
(✓) Srisuda Khamha
( ) Sa-ngeunkam Wongsa

Issue Date : 27 February 2024

The Uncertainties are for a confidence probability of approximately 95%

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Equipment : Burette
Received Date : 23 February 2024
Condition As-Received : New Item
Calibration Date : 27 February 2024
Reference : 2402-0757DSC-1

Condition of this result of calibration

1. Reference Standard Instruments :

Instruments	Model	Serial No.	ID. No.	Certificate No.	Traceability	Due date
1) Balance	XP205DR	1126143764	140RC004	23MM538	TPA	15 Sep 2024
2) Thermo-Hygrograph	THDX-CE	00016540	140EC001	23H1275	TPA	09 June 2024
3) Thermometer	-	0834181	140EC005	23I948	TPA	10 Aug 2024

This certification is traceable to SI Unit

2. The certificate is valid only to the item calibrated on date and place of calibration.
3. True value is converted to true volume at the standard temperature of 20 °C

Calibration result :

Nominal capacity (mL)	Reading (mL)	Uncertainty (± mL)	k Factor
50	50.0032	0.010	2.00

Remark mL = cm^3

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k , providing a level of confidence of approximately 95 %.

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Agilent Technologies

Agilent Technologies (Thailand) Limited
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Bangkok 10500 Thailand

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Fax: +662 632 4334
Email: ccc-smt@agilent.com
Website: www.agilent.com/chem

SERVICE REPORT

Customer Contact:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan
TAX ID : 0105540004859
bounced-lmchom.chanattagarn@alsglobal.com
227158760519

Customer Purchase Order Number:	Customer Number: 70371013
Service Request:	Service Request Date:
Service Order: 6006068207	Service Confirmation: 6904837529

Invoice To:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan

REVIEW BY Anchalee K.
APPROVED BY Sawitn N.
NEXT CAL. DATE 05 / 10 / 2024

Delivery Site:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan

Location:
Room
Bldg
Lab
Dept

Direct Inquiries to:
Contact Name: Customer Contact Center
Contact E-mail: ccc-smt@agilent.com
Contact Telephone: +662 837 6363
Contact Fax: +662 632 4334

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Bangkok 10500 Thailand
Tax ID 0105540068219

Citibank N.A. Bangkok Branch
399 Interchange 21 Building, Sukhumvit Road, Klongtoey Nua
Sub-district, Wattana District, Bangkok 10110 Thailand
Acc. No. 012-4452-007,
THB.Krung Thai Bank PCL
Siam Square Br.,416/1-2 Rama I Rd.,Pathumwan, BKK 10330
Thailand

ORIGINAL

Service Confirmation Number: 6904837529
Service Confirmation Date: 06.04.2023

Service Instrument:

Model Number	Model Description	Serial Number	System Handle	Parent Asset
SYS-IM-7900	ICPMS 7900 System			
G8410A	SPS 4 Autosampler	AU15433722	ICP MS 7900	SYS-IM-7900
G8411A	ISIS 3 for Agilent 7850/7900/8900	JP15510227	ICP MS 7900	SYS-IM-7900
G3292A	PSC 6105T Chiller	2U15A1948	ICP MS 7900	SYS-IM-7900
G8403A	Agilent 7900 ICP-MS	JP15471168	ICP MS 7900	SYS-IM-7900

Service Items:

Item	Service/Part #	Description	Qty	Entitlement	Service Start	Service End
1000	EOQ	Enterprise Operational Qualification	1.00	Agreement Entitlement - 100 % covered	06.04.2023	06.04.2023
1010	5185-5850	ICP-MS Checkout Solutions	1.00	Agreement Entitlement - 100 % covered		

Additional Information:

Service Confirmation Number: 6904837529
Service Confirmation Date: 06.04.2023

Service Information:

Problem Description:
WU-S-OQ-ICP MS 7900-5001143313

Service Provided:
Test OQ control of instrument ICPMS = BKK_EL0043. After done all instrument test all Pass.

Service Overview Code:
Reason Code: Scheduled Service
Diagnosis Code: Scheduled Service
Resolution Code: Scheduled Service

Reported Hours: 6.0	Travel Hours: 1.0	
Customer Field Service Representative Name: Panthep Kurasathain	Customer Field Service Representative Signature:	Date: 06 Apr 2023
Customer Name: Anchalee Khamjan	Customer Signature: Anchalee K.	Date: 06 Apr 2023

Additional Comments:

Metrological Center

SCG
CEMENT-BUILDING MATERIALS
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110
Telephone : +66 2 586 5792-4 Fax : +66 2 586 5109
Website : www.scieco.co.th E-Mail : calibrate@scg.co.th

Certificate No. T231676 Page 1 of 6

Certificate of Calibration

Equipment	:	HEATING BLOCK
Manufacturer	:	Environmental Express
Model	:	SC 196
Serial No.	:	6974CECW3285
Customer Code	:	BKK_EL0054
ID No.	:	T5306A3
Customer	:	ALS Laboratory Group (Thailand) Co.,Ltd.
		104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
		Khet Suan Luang, Bangkok 10250
Customer Location	:	Acid Digestion Lab
Date of Receipt	:	13 September 2023
Calibrated By	:	Sanee Musikawan (Site Calibration Manager)
Approved By	:	_____ / Sujjar Naknakred (Site Calibration Manager)
Date of Issue	:	26 SEP 2023

REVIEW BY Jattaporn C.
APPROVED BY Sawitn N.
NEXT CAL. DATE 22/09/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110
Telephone : +66 2 586 5792-4 Fax : +66 2 586 5109
Website : www.scieco.co.th E-Mail : calibrate@scg.co.th

Calibration Report

Equipment : **HEATING BLOCK**
Date of Calibration : **22 September 2023**
Environment : **Temperature : 21.8-23.1 °C**
Line Voltage : 221.6-226.3 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

1. This equipment was calibrated by insert 20 standard thermocouples type T into its chamber , the other one standard thermocouples type T use for ambient temperature measurement . The calibration was done in according to WI-T20.
   All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

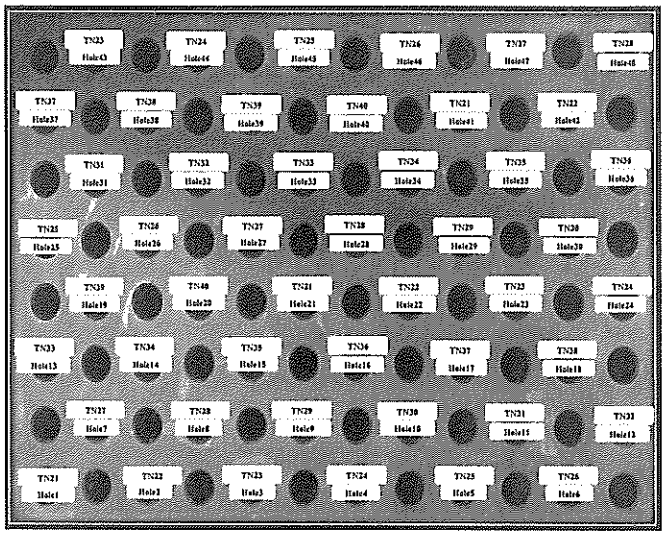
Instrument	Model	Instrument No.	Certificate No.	Due Date
TC	TYPE T	TN21-TN30	T230014	17 January 2024
TC	TYPE T	TN31-TN40	T230014	17 January 2024
DATA LOGGER	34970A	T151	T230014	17 January 2024

3. This certificate is traceable to :
   National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244.)
4. Condition of calibrated item : good
   Equipment Description :
   Time Constant 2 Hour 20 Minute At 95 °C
   Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
   ☐ Close
   ☒ Not Available
5. Adjustment :
   ( ) without adjustment (X) after adjustment

Approved By.

Metrological Center
SCI ECO Services Company Limited
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Calibration Report



FRONT CONTROL

Approved By.

Metrological Center
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Calibration Report

Measurement Results

Calibration Point		Average Standard Reading at each position (°C)					
R1 Hole1-Hole6		TN21	TN22	TN23	TN24	TN25	TN26
CAL POINT	Max	95.01	94.41	95.20	95.41	94.51	95.17
95	Min	94.57	93.95	94.75	94.92	94.00	94.72
	Average	94.79	94.18	94.98	95.17	94.26	94.95
R2 Hole7-Hole12		TN27	TN28	TN29	TN30	TN31	TN32
	Max	95.36	95.43	95.19	95.16	95.35	94.97
	Min	94.94	94.95	94.72	94.71	94.90	94.57
	Average	95.15	95.19	94.96	94.94	95.13	94.77
R3 Hole13-Hole18		TN33	TN34	TN35	TN36	TN37	TN38
	Max	95.37	95.50	95.22	95.21	95.33	95.31
	Min	94.99	95.09	94.78	94.82	94.88	94.96
	Average	95.18	95.30	95.00	95.02	95.11	95.13
R4 Hole19-Hole24		TN39	TN40	TN21	TN22	TN23	TN24
	Max	95.59	94.42	94.52	94.24	94.63	94.67
	Min	95.21	94.06	94.13	93.88	94.28	94.27
	Average	95.40	94.24	94.33	94.06	94.45	94.47
R5 Hole25-Hole30		TN25	TN26	TN27	TN28	TN29	TN30
	Max	95.19	95.38	92.93	95.20	95.14	95.03
	Min	94.83	95.03	92.56	94.95	94.79	94.70
	Average	95.01	95.20	92.75	95.12	94.96	94.87
R6 Hole31-Hole36		TN31	TN32	TN33	TN34	TN35	TN36
	Max	94.63	94.90	94.77	94.31	94.24	93.87
	Min	94.24	94.55	94.45	93.98	93.92	93.59
	Average	94.43	94.72	94.60	94.14	94.08	93.71
R7 Hole37-Hole42		TN37	TN38	TN39	TN40	TN21	TN22
	Max	94.30	94.44	94.04	93.61	94.89	95.35
	Min	93.95	94.05	93.67	93.48	94.39	94.90
	Average	94.13	94.24	93.86	93.65	94.64	95.12
R8 Hole43-Hole48		TN23	TN24	TN25	TN26	TN27	TN28
	Max	95.99	95.63	95.28	95.29	95.45	94.87
	Min	95.57	95.15	94.82	94.84	94.93	94.45
	Average	95.78	95.39	95.05	95.07	95.22	94.68

Approved By.

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Calibration Report

Measurement Results

Calibration Point		Average Standard Reading at each position (°C)					
R1 Hole1-Hole6		TN21	TN22	TN23	TN24	TN25	TN26
CAL POINT	Max	105.23	104.32	105.43	105.25	104.44	105.27
105	Min	104.94	103.95	105.15	105.04	104.11	104.96
	Average	105.09	104.13	105.29	105.15	104.28	105.12
R2 Hole7-Hole12		TN27	TN28	TN29	TN30	TN31	TN32
	Max	105.30	105.12	105.18	105.22	105.12	105.16
	Min	105.11	104.92	104.96	105.00	104.92	104.97
	Average	105.20	105.02	105.07	105.11	105.02	105.06
R3 Hole13-Hole18		TN33	TN34	TN35	TN36	TN37	TN38
	Max	105.37	105.63	105.02	104.80	104.69	105.19
	Min	105.17	105.37	104.75	104.59	104.50	105.00
	Average	105.27	105.50	104.88	104.69	104.60	105.09
R4 Hole19-Hole24		TN39	TN40	TN21	TN22	TN23	TN24
	Max	105.31	104.43	106.41	104.71	105.63	105.82
	Min	105.08	104.22	106.15	104.41	105.37	105.56
	Average	105.19	104.33	106.28	104.56	105.50	105.69
R5 Hole25-Hole30		TN25	TN26	TN27	TN28	TN29	TN30
	Max	104.95	106.26	103.34	105.78	105.59	105.87
	Min	104.67	105.96	103.08	105.56	105.36	105.68
	Average	104.81	106.11	103.21	105.67	105.48	105.77
R6 Hole31-Hole36		TN31	TN32	TN33	TN34	TN35	TN36
	Max	104.75	104.86	104.80	105.20	104.50	104.39
	Min	104.54	104.63	104.59	105.00	104.32	104.18
	Average	104.65	104.75	104.69	105.10	104.41	104.28
R7 Hole37-Hole42		TN37	TN38	TN39	TN40	TN21	TN22
	Max	104.30	104.90	104.85	104.65	104.88	104.85
	Min	104.09	104.72	104.66	104.49	104.63	104.52
	Average	104.19	104.81	104.75	104.57	104.76	104.63
R8 Hole43-Hole48		TN23	TN24	TN25	TN26	TN27	TN28
	Max	105.71	105.85	105.39	105.61	105.42	105.19
	Min	105.45	105.61	105.14	105.27	105.18	104.94
	Average	105.58	105.73	105.27	105.44	105.30	105.07

Approved By.

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Telephone : +66 2 586 5792-4 Fax : +66 2 586 5109
Website : www.scieco.co.th E-Mail : calibrate@scg.co.th

Certificate No. T231676

Calibration Report

Measurement Results:

HEATING BLOCK			Temperature Distribution	
Setting (°C)	Reading (°C)		Stability (±°C)	Uncertainty (±°C)
	Min , Max	Average		
100.0	100.3 , 100.5	100.4	0.26	0.81
107.0	107.0 , 107.1	107.1	0.19	0.78

* The quoted uncertainty exclude " uniformity "

The calibration result apply only the above calibrated item.

The result of test was found accurate as shown on date and place of test only.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 %.

Approved By._____

Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
Saraburi Tel : +66 3627 3099 Fax : +66 3627 3100
Bangkok Tel : +668 9205 6851 , +669 8247 2360
Website : www.scieco.co.th E-Mail : calibrate@scg.com

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T232160

Certificate of Calibration

REVIEW BY Y.n.t. A.L.
APPROVED BY Sinlk P
NEXT CAL. DATE 06/06/25

Equipment : Chamber (Cooling Room)
Manufacturer : KOLDTECH
Model : KM 320
Serial No. : TBN-1012061/05
Customer Code : BKK_EN0167
ID No. : T2463A3
Customer : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
Khet Suan Luang, Bangkok 10250
Customer Location : Laboratory
Date of Receipt : 29 November 2023
Calibrated By : Atiphong Rongrat (Technician)
Approved By : _____ / Boonchai Suriyawong (Site Calibration Manager)
Date of Issue : 09 JAN 2024

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrology.

Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T232160

Calibration Report

Equipment : Chamber (Cooling Room)
Date of Calibration : 6 December 2023
Environment : Temperature : 23.4-24.9 °C
Line Voltage : 221.4-230.2 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

1. Thisequipment was calibrated by insert 16 standard thermocouples type T into its chamber , the other one standard thermocouples type T use for ambient temperature measurement . The calibration was done in according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986).
All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
TC	TYPE T	TN161-TN170	T230773	10 April 2024
TC	TYPE T	TN171-TN180	T230773	10 April 2024
DATA LOGGER	34970A	T149	T230773	10 April 2024

3. This certificate is traceable to :
National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244.)
4. Condition of calibrated item : good
Equipment Description :
Time Constant 1 Hour 30 Minute At 3 °C
Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
☐ Close
☒ Not Available
5. Adjustment :
(X) without adjustment ( ) after adjustment

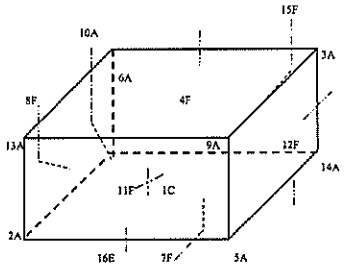
Approved By._____

Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T232160

Calibration Report



C = Centre , F = Centre of Face , A = Corner , E = Centre of Edge

1C	= TN161	12F	= TN172
2A	= TN162	13A	= TN173
3A	= TN163	14A	= TN174
4F	= TN164	15F	= TN175
5A	= TN165	16E	= TN176
6A	= TN166		
7F	= TN167		
8F	= TN168		
9A	= TN169		
10A	= TN170		
11F	= TN171		

Approved By._____

SCG

Metrology

SCI ECO Services Company Limited

33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No. T232160

Calibration Report

Measurement Results

	Average Standard Reading at each position (°C)											
Calibration Point	TN161	TN162	TN163	TN164	TN165	TN166	TN167	TN168	TN169	TN170	TN171	TN172
3.0	2.83	3.34	2.95	3.46	3.45	3.76	3.25	3.46	3.39	3.50	3.58	3.42
	TN173	TN174	TN175	TN176								
	3.33	3.39	3.15	3.43								

Chamber (Cooling Room)			Temperature Distribution				
Setting (°C)	Reading (°C) Min , Max	Reading (°C) Average	Average (°C)	Stability (±°C)	Uniformity (°C)	Uncertainty (±°C)	Coverage Factor k
3.0	2.8 , 4.1	3.5	3.36	1.10	2.00	1.90	2.09

The calibration result apply only the above calibrated item.
The result of test was found accurate as shown on date and place of test only.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor *k* which for a t-distribution, providing a level of confidence of approximately 95 % .

Approved By:

FM-L15 11B/18-08-66

Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Silom Bangrak Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375496-7
www.barascientific.com

Certificate of Calibration

Number of Page(s) 1 of 3

Certificate No.	BSCC-UV-367/23
Equipment	UV/Vis Spectrophotometer
Model	UV-1800
Manufacturer	Shimadzu
Serial No.	A11454908533CD
ID No.	BKK_EN0018
Date of receipt	15 September 2023
Date of calibration	15 September 2023
Date of issue	22 September 2023

REVIEW BY Siriluk P.
APPROVED BY
NEXT CAL DATE 15/9/2024

Customer name	ALS Laboratory Group (Thailand) Co., Ltd
Address	104 Soi Phattanakan 40, Phattanakan Road, Phattanakan, Suan Luang, Bangkok 10250
Temperature	(23.4 - 24.7) °C (On site)
Humidity	(55.5 - 61.2) %RH (On site)
Equipment condition	Good Operation
Calibration Location	Organic Prep
Calibration Procedure	In-house method WI-UV-702-01 based on ASTM E275-01
Traceability	Wavelength Accuracy is traceable to certificate No. 95917 and 95918 Photometric Accuracy is traceable to certificate No. 95937 and 95924 Stray Light is traceable to certificate No. 95908 The above certificate are traceable to SI unit through Stama Scientific Ltd. (UKAS accredited calibration laboratory NO. 0659)
Calibrated by	Mr Wanchana Janloey

Approved by

Mr.Kanchit Choothep
Technical Manager

The above results are valid exclusively for the calibrated item(s) as mentioned in this report / certificate.
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced except in full, without written approval of the Bara Scientific Co., Ltd.

Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Silom Bangrak Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375496-7
www.barascientific.com

Certificate of Calibration

Certificate No. BSCC-UV-367/23 Number of Page(s) 2 of 3

Calibration Results:

1.Wavelength Accuracy

Certified Wavelength (nm)	UUC (nm)	Error (nm)	Uncertainty (±nm)
241.70	241.67	-0.03	0.18
334.02	334.03	0.01	0.18
418.53	418.59	0.06	0.18
572.99	573.14	0.15	0.18
879.41	879.21	-0.20	0.18

2.Photometric Accuracy (UV)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
235	0.0000	0.0000	0.0000	0.0075
	0.7467	0.7460	-0.0007	0.0075
257	0.0000	0.0000	0.0000	0.0075
	0.8062	0.8046	-0.0016	0.0075
313	0.0000	0.0000	0.0000	0.0075
	0.2904	0.2908	0.0004	0.0075
350	0.0000	0.0001	0.0001	0.0075
	0.6429	0.6415	-0.0014	0.0075

*CNR = Customer not request

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Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Silom Bangrak Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375496-7
www.barascientific.com

Certificate of Calibration

Certificate No. BSCC-UV-367/23 Number of Page(s) 3 of 3

Calibration Results:

3.Photometric Accuracy (Visible)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
420.0	0.0000	0.0000	0.0000	0.0042
	0.5783	0.5793	0.0010	0.0042
	0.7628	0.7624	-0.0004	0.0042
	1.0208	1.0218	0.0010	0.0042
440.0	0.0000	0.0000	0.0000	0.0042
	0.5521	0.5525	0.0004	0.0042
	0.7455	0.7452	-0.0003	0.0042
	0.9965	0.9969	0.0004	0.0042
465.0	0.0000	0.0000	0.0000	0.0042
	0.5227	0.5229	0.0002	0.0042
	0.6880	0.6873	-0.0007	0.0042
	0.9487	0.9486	-0.0001	0.0042
546.1	0.0000	0.0000	0.0000	0.0042
	0.5207	0.5211	0.0004	0.0042
	0.6973	0.6960	-0.0013	0.0042
	0.9959	0.9944	-0.0015	0.0042
590.0	0.0000	0.0000	0.0000	0.0042
	0.5544	0.5538	-0.0006	0.0042
	0.7253	0.7236	-0.0017	0.0042
	1.0042	1.0025	-0.0017	0.0042
635.0	0.0000	0.0000	0.0000	0.0042
	0.5616	0.5612	-0.0004	0.0042
	0.6927	0.6909	-0.0018	0.0042
	1.0681	1.0666	-0.0015	0.0042

*CNR = Customer not request

4.Stray Light*

Standard cut-off wavelenght (nm)	Unit Under Calibration(UUC) Wavelength (nm)	Transmission (%T)	Absorbance (A)
200.98±0.11nm	200.55	0.9770	2.0164

The Stray light transmission reference is less than 1.0%T and Stray light absorbance reference is greater than 2.00A
*Stray Light not NSC-ONSC Accredited.

The measurement uncertainty is base on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%

*****End of Certificate*****

The above results are valid exclusively for the calibrated item(s) as mentioned in this report / certificate.
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced except in full, without written approval of the Bara Scientific Co., Ltd.

BKK_EL0023

analytikjena

REVIEW BY Dr.-Ing. T
APPROVED BY Sauth N
NEXT CAL. DATE 23/11/2024

Maintenance Protocol

Atomic Fluorescence Spectrometer

mercur DUO / mercur DUO plus

Serial-No.: K170AD143 Customer-No.:

Date: 24 May 2023 Carried out by: Srichai Fak-on

Maintenance with following Operational Qualification (OQ) ☐
(requires a separate OQ protocol)

Company	บริษัท เอเอ็นเอส แนนอราทอรี กรุ๊ป (ประเทศไทย) จำกัด
User	
Department	ห้องแลบปฏิบัติการ
Street	104 ซอย 40 ถนนพัฒนาการ แขวงสวนหลวง เขตสวนหลวง
Zip Code, City	กรุงเทพมหานคร 10250
Country	ประเทศไทย
Phone	
Fax	
E-mail	

Maintenance works basic unit

tightness visual check inside the Mercur	☑
visual check if gold-traps are broken	☑
visual check if spectrometer is contaminated	☑
visual check of the fluorescence cell	☑
visual check of the absorption cell, incl. window	☑
reactor cleaning	☑
check pump-hose, if necessary change it	☑
check swivel drive (SEV)	☑
check drying-hose, output gas-liquid-separator	☑
test Bubble-Sensor	☑
check gas flows	☑
check volume flows, reagents	☑
recording stray light values	☑
measurement with 30 ng/l	☑

Maintenance works Autosampler Serial No.: 701 739

lubricate the dosing-winding (Teflon-grease-spray)	☑
clean the dosing cylinder, if necessary exchange it	☑
lubricate the winding system of the height drive with some drops of oil	☑
check the toothed belt	☑
check the position of the mechanical stopper (height: 13mm)	☑
check the pump rate of mixing pump (<14s AS52, typ 7s/<20s AS52S, typ 10s)	☑
check the pump rate of washing cup	☑
check the electrical hose connections for good contact	☑
check the connectors of the magnetic valves	☑
check the dosing hose for buckling, if necessary exchange it	☑

Device parameter		nominal value	actual value
visual check general tightness inside the Mercur		o.k.: ☑	changed: ☐
visual check Goldtraps		o.k.: ☑	changed: ☐
visual check spectrometer			
	Fluorescence cell	o.k.: ☑	changed: ☐
	Absorption cell, incl. window	o.k.: ☑	changed: ☐
	lens	o.k.: ☑	changed: ☐
	Swivel drive (SEV)	o.k.: ☑	changed: ☐
check pump hoses		o.k.: ☑	changed: ☐
check hoses and hose connectors		o.k.: ☑	changed: ☐
check and clean reactor		o.k.: ☑	changed: ☐
check drying hose output Gas-liquid-seperator		o.k.: ☑	changed: ☐
check bubble-sensor		o.k.: ☑	not o.k.: ☐
Check gasflow			
	Argon pressure valve 4	1.2 – 1.5 bar	1.5 bar
	Valve 1	10 Nl/h or 0.166 Nl/min	0.163 NL/min
	Valve 2	50 Nl/h or 0.833 Nl/min	0.403 NL/min
	Valve 3	5 Nl/h or 0.083 Nl/min	0.140 NL/min
	Valve 4	10 Nl/h or 0.166 Nl/min	0.108 NL/min
Check liquidflow			
	Acid	2.5ml/min ± 1 ml	2.5 ml/min
	Red.-agent	2.5ml/min ± 1 ml	2.5 ml/min
	Sample	10ml/min ± 2 ml	10 ml/min
Adventitious light - values	**(V)**	**from file**	
	100	0	0
	200	0	0
	300	0	0
	350	0	0
	400	0	0
	450	2	2
	500	5	5
	550	10	10
	575	15	14
	600	20	20

analytikjena

Device parameter	nominal value	actual value
Analytical parameters Fluorescence cell		
Conditions.: max.conc.: 10µg/L PMT-voltage: 360 V		
Blank-solution		Int. 0.00024
without enrichment / FBR 30 ng/L	Int > 0.0015 RSD < 3 %	Int_t 0.00172 RSD 0.45 %
Conditions.: max.conc.: 1.7µg/L PMT-voltage: 352 V		
Blank-solution		Int. 0.00370
with enrichment / FBR 30 ng/L	Int > 0.008 RSD < 3 %	Int_t 0.01090 RSD 2.38 %
Fok.-factor (Int_t / Int_1)	> 3.5	6.16
Analytical parameters Absorption cell		
Blank-solution		Ext. 0.00093
without enrichment / FBR 100 ng/L	Ext. > 0.0012 RSD < 5 %	Ext. 0.00449 RSD 2.58 %
Comments		

Srichan Pakaan
Signature Technician

24 May 2023
Place, Date (DD/MM/YYYY)

Oranan T
Signature Customer

24 May 2023
Place, Date (DD/MM/YYYY)

analytikjena
An Endress+Hauser Company

55 Moo 5, 345 Road, Chiang Khoi, Pak Chet,
Nonthaburi 11120 Thailand
Phone: +66(2) 1052570-72
Fax: +66(2) 1052573
www.analytikjena.com

Service Report

Customer's address | Customer's Ref. No.

With senior equipment, PSU (Chonburi) Co.,Ltd.
PSU Hat Yai Campus (Pharmacy Building)
Hatyai, Songkhla (90112)

☑ Analytik Jena Instruments (Thailand) Ltd.
☐ Analytik Jena Far East (Thailand) Ltd.

E-mail | Phone | Fax

Job No. 8008872 PM | User | Service Engineer Srichan P. | Date 24/5/2023 | Page 1/1

Instrument model Mercur | Serial No. 5.705AC1143 | Software Version No. 4.7.10.0

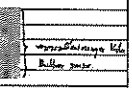
☐ Repair (RE) ☑ Maintenance (PM) ☐ Installation (IN) ☐ Warranty ☐ Application (AP) ☐ Site Prep (SP) ☐ Visit(VI)

Fault / Claim – Annual Maintenance Inspection Report (Ref. No. 8008872) (2023-0237)
– Maintenance PM Contract Year 2023 (1 Time / Year 2023)
☐☐☐ Error Code

Action taken – Maintenance Part Basic Unit
– Check Device parameter
– Check gas flow
– Check liquid flow
– Check Adjustment Light - Valve

Test run Analytical parameter Fluorescence cell
Test run Analytical parameter Absorption cell





Action Pending / Recommendation

☐ Spare Part ☐ Instrument Configuration

Item No.	Name	Quantity	Unit Price
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Herewith the undersigned confirm the time devoted, the work performed, the perfect function of the device and the receipt/delivery of the specified spare parts. *Travelled hours and kilometers can only be entered after the return of the service engineer.

Date / Signature of Customer: Oranan T.

Date / Signature of Service Engineer

Work completed? ☑ Yes ☐ No

Services are subject to the General Terms and Conditions of Analytik Jena AG, which will be sent on request.

Mercur

Report file: C:\WinAAS\TMP\2023\May\Pro_032
Program version: 4.7.10.0 Printed on: 5/24/2023 12:46
Recording started on 5/24/2023 12:35 GMT+7.0
Operator: PSU,OTA
Laboratory: ALS-BKK
Code: II_Hg095_2023

Remarks:
Food,water

Method parameters Hg

Method: Without enrichment / FBR 30ng/L_PM24052023
Created on: 5/24/2023 Time 12:27
Program: ---

Parameters Mercur Technique: Hg fluorescence

Line	253.7 nm		
Lamp type	Hg-LP		
Integr. mode	Peak height	Integr. time	30 s
PMT	360 V		
AZ time	5 s	Peak smoothing	8/5
Delay	0 s		

Working mode	w/o enrich.	System cleaning	Acid
FBR technique	on	Wash time acid	10 s
Pump speed	3	Soaking time	20 s
Sample load time	10 s	Gas load time	5 NL/h
Reaction time	10 s		
Waiting time AZ	5 s		
Delay	0 s		
Purge time1	28 s		
Purge time2	15 s	Gas wash time2	10 NL/h

Autosampler

Autosampler	AS51S/F	Tray type	67/139
Working mode	continuous		
Dilution	---		

QC parameters

QC type	Conc. check		
QC check samp. 1	---	QC check samp. 2	---
Conc.	---	Conc.	---
Error limit	---	Error limit	---
Rep. measurement	off	Reaction	flag + continue
QC std.1 no.	1(30.000 ng/L)	QC std.2 no.	1(30.000 ng/L)
QC std.1 limit	± 50.00%	QC std.2 limit	± 50.00%
QC std. act.	flag + continue		
Expect. blank abs.	0.0100± 0.0100	Reaction	flag + continue
QC precision	off		
		Reaction	off
		QC Recal.factor	Off

Calibration settings

Calib. meth.	Standard calib.	Calibr. unit	ng/L
No. standards	1	Conversion fac.	1000000
Type of standards	---	Standard prep.	Premixed
		Blank correct.	---
		Recalib. std. no.	---
Output unit	µg/L	Conversion fac.	1000
Calib. stat.	Mean	Meas. cycles	3
		Blind cycles	1
Stock sol. 1	---	Stock sol. 2	---
Stock sol. 3	---	Stock sol. 4	---
Type of cal. curve	linear	Intercept	calculated
Weighted cal.	off	Grubbs stat.	off
Check of cal. curve	no outlier test		

Sample statistics

Stat. mode	Mean	Meas. cycles	2
Confid. level	95.4 %	Blind cycles	1
Grubbs stat.	---		

Calibration standards Hg

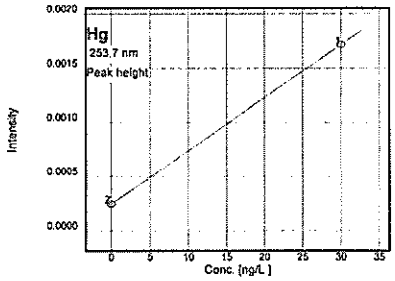
No.	Name	State	Pos.	Conc./ ng/L	Ints.	SD	RSD/%
1	Cal-Zero	(-)	79	0.000	H: 0.000249	0.000132	53.13
					A: 0.004274	0.001698	39.72
2	Cal-Std1	(--)	80	30.000	H: 0.031720	0.000007	0.469
					A: 0.02172	0.000023	0.107

Calibration function : 1 **5/24/2023 12:44 Calibration (Peak height)**

Ints=k1+k2*conc

k1=0.000249 k2=0.000049 Recal. factor: ---

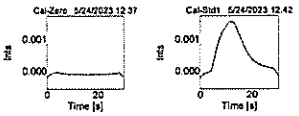
Slope	0.00005 Ints/(ng/L)	R2-adjusted	1.0000
sc0	1.00000 ng/L		
Lower limit	0 ng/L	Upper limit	33.0 ng/L
Detection limit	---	Deter. limit	---



Measurements and events (sorted by time)

Hg	Without enrichment / FER 30ng/L_PM 24052023				5/24/2023	12:35
ID	Conc.	Ints	BG	SD	RSD/%	Int. type	Time
Cal-Zero		0.000143				PkH	12:37
		0.000397					12:38
		0.000207					12:40
	0ng/L	0.000249		0.0001324	53.13		12:40
Cal-Std1		0.001720				PkH	12:42
		0.001712					12:43
		0.001728					12:44
	30.00ng/L	0.001720		0.000007897	0.459		12:44
Calibration	Calibration function: 01						12:44

Peak plots Hg



Mercur

Report file:	C:\WinAAS\TMP\2023\May\Pro_033				
Program version:	4.7.10.0	Printed on:	5/24/2023	14:01	
		Recording started on	5/24/2023	13:37 GMT+7.0	
Operator:	PSU,OTA				
Laboratory:	ALS-BKK				
Code:	II_Hg095_2023				

Remarks:

Food,water

Method parameters Hg

Method	Enrichment / FER 30ng/L PM_24052023
Created on	5/24/2023 Time 13:36
Program	---

Parameters Mercur Technique: Hg fluorescence

Line	253.7 nm		
Lamp type	Hg-LP		
Integr. mode	Peak height	Integr. time	40 s
PMT	352 V		
AZ time	5 s	Peak smoothing	12/11
Delay	0 s		

Working mode	Enr. w/o reload.	System cleaning	Off
FER technique	off	Wash time acid	10 s
Pump speed	3	Soaking time	20 s
Sample load time	10 s	Gas load time	10 NL/h
Reaction time	10 s		
Waiting time AZ	10 s	Gas AZ wait	10 NL/h
Purge time1	30 s		
Purge time2	15 s	Gas wash time2	5 NL/h
Purge time3	20 s		
Heat.time coll.1	20 s	Cool. time coll.1	30 s

QC parameters

QC type	Conc. check		
QC check samp. 1	---	QC check samp. 2	---
Conc.	---	Conc.	---
Error limit	---	Error limit	---
Rep. measurement	off	Reaction	flag + continue
QC std.1 no.	1(30.000 ng/L)	QC std.2 no.	1(30.000 ng/L)
QC std.1 limit	± 50.00%	QC std.2 limit	± 50.00%
QC std. act.	flag + continue		
Expect. blank abs.	0.0100± 0.0100	Reaction	flag + continue
QC precision	off		
		Reaction	off
		QC Recal.factor	Off

Calibration settings

Calib. meth	Standard calib.	Calibr. unit	ng/L
No. standards	1	Conversion fac.	1000000
Type of standards	---	Standard prep.	Premixed
		Blank correct.	---
		Recalib. std. no.	---
Output unit	µg/L	Conversion fac.	1000
Calib. stat.	Mean	Meas. cycles	3
		Blind cycles	1
Stock sol. 1	---	Stock sol. 2	---
Stock sol. 3	---	Stock sol. 4	---
Type of cal. curve	linear	Intercept	calculated
Weighted cal.	off	Grubbs stat.	off
Check of cal. curve	no outlier test		

Sample statistics

Stat. mode	off	Meas. cycles	1
Confid. level	95.4 %	Blind cycles	1
Grubbs stat.	---		

Calibration standards Hg

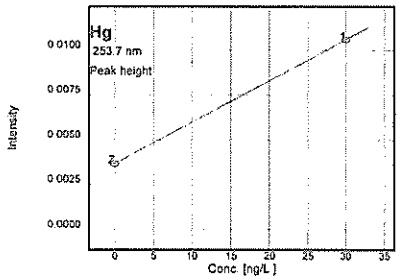
No	Name	State		Conc./ ng/L	Ints	SD	RSD/%
1	Cal-Zero	(--)	##	0.000	H: 0.003700	0.000061	2.182
					A: 0.02531	0.000153	0.607
2	Cal-Std1	(--)	##	30.000	H: 0.01680	0.000253	2.386
					A: 0.06689	0.002766	4.135

Calibration function 1 5/24/2023 14:00 Calibration (Peak height)

Ints=k1+k2*conc

k1=0.003700 k2=0.000230 Recal. factor: ---

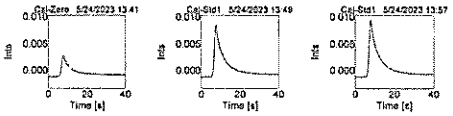
Slope	0.00023 Ints/(ng/L)	R2-adjusted	1.0000
sc0	1.00000 ng/L		
Lower limit	0 ng/L	Upper limit	33.0 ng/L
Detection limit	---	Deter. limit	---



Measurements and events (sorted by time)

Hg	Enrichment / FER 30ng/L PM_24052023				5/24/2023	13:37
ID	Conc.	Ints	BG	SD	RSD/%	Int. type	Time
Cal-Zero		0.003792				PkH	13:41
		0.003868					13:43
		0.003840					13:44
	0ng/L	0.003700		0.0000810	2.192		13:44
Cal-Std1		0.009498				PkH	13:49
		0.009333					13:50
		0.008961					13:52
	30.00ng/L	0.008931		0.0005830	6.528		13:52
Cal-Std1		0.01031				PkH	13:57
		0.01074					13:58
		0.01076					14:00
	30.00ng/L	0.01060		0.0002530	2.388		14:00
Calibration	Calibration function: 01						14:00

Peak plots Hg



Mercur

Report file	C:\WinAAS\TMP\2023\May\Pro_034		
Program version	4.7.10.0	Printed on:	5/24/2023 14:33
		Recording started on	5/24/2023 14:19 GMT+7.0
Operator	PSU,OTA		
Laboratory	ALS-BKK		
Code	II_Hg005_2023		

Remarks

Food,water

Method parameters Hg

Method	Without enrichment / Abs / FBR 100ng/L_PM 24052023
Created on	5/24/2023 Time 14:18
Program	---

Parameters Mercur Technique: Hg absorption

Line	253.7 nm		
Lamp type	Hg-LP		
Integr. mode	Peak height	Integr. time	55 s
PMT	225 V		
AZ time	5 s	Peak smoothing	2/5
Delay	8 s		

Working mode	w/o enrich	System cleaning	Acid
FBR technique	on	Wash time acid	15 s
Pump speed	4	Soaking time	20 s
Sample load time	6 s	Gas load time	5 NL/h
Reaction time	12 s		
Waiting time AZ	15 s		
Delay	10 s		
Purge time1	50 s		
Purge time2	10 s	Gas wash time2	10 NL/h

QC parameters

QC type	Conc. check		
QC check samp. 1	---	QC check samp. 2	---
Conc.	---	Conc.	---
Error limit	---	Error limit	---
Rep. measurement	off	Reaction	flag + continue
QC std.1 no.	1(100.00 ng/L)	QC std 2 no.	1(100.00 ng/L)
QC std.1 limit	± 50.00%	QC std 2 limit	± 0.00%
QC std. act.	flag + continue		
Expect. blank abs	0.0100± 0.0100	Reaction	flag + continue
QC precision	off		
		Reaction	off
		QC Recal factor	Off

Calibration settings

Calib. meth	Standard calib.	Calibr. unit	ng/L
No. standards	1	Conversion fac.	1000000
Type of standards	---	Standard prep.	Premixed
		Blank correct.	---
		Recalib. std. no.	---
Output unit	µg/L	Conversion fac.	1000
Calib. stat.	Mean	Meas. cycles	3
		Blind cycles	1
Stock sol. 1	---	Stock sol. 2	---
Stock sol. 3	---	Stock sol. 4	---
Type of cal. curve	linear	Intercept	calculated
Weighted cal	off	Grubbs stat.	off
Check of cal. curve	no outlier test		

Sample statistics

Stat. mode	Mean	Meas. cycles	2
Confid. level	95.4 %	Blind cycles	1
Grubbs stat.	---		

Calibration standards Hg

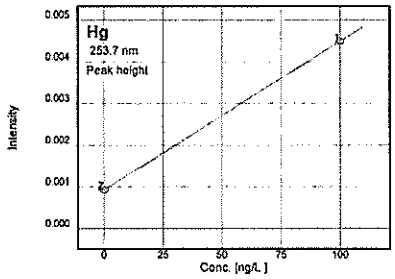
No.	Name	Class	Pos.	Conc./ ng/L	Abs	SD	RSD/%
1	Cal-Zero	(-)	##	0.00	H: 0.000932	0.000138	14.88
					A: 0.035925	0.006268	17.25
2	Cal-Std1	(-)	##	100.00	H: 0.004494	0.000116	2.586
					A: 0.061286	0.001275	2.082

Calibration function 1. . . . 5/24/2023 14:33 Calibration (Peak height)

Abs=k1+k2*conc

k1=0.000932 k2=0.000036 Recal. factor: ---

Slope	0.00004 Abs/(ng/L)	R2-adjusted	1.0000
sc0	1.00000 ng/L	Charact. conc.	122.411 (ng/L)/1%I
Lower limit	0 ng/L	Upper limit	110. ng/L
Detection limit	---	Deter. limit	---

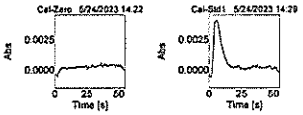


Measurements and events (sorted by time)

Hg	Without enrichment / Abs / FBR 100ng/L_PM 24052023					5/24/2023	14:19
ID	Conc.	Abs	BG	SD	RSD/%	Int. type	Time
Cal-Zero		0.001039				PkH	14:22
		0.000775					14:23
		0.000881					14:25
	0ng/L	0.000932		0.00013872	14.88		14:25
Cal-Std1		0.004528				PkH	14:29
		0.004384					14:31
		0.004589					14:33
	100.ng/L	0.004494		0.00011623	2.586		14:33
Calibration	Calibration function. 01						14:33

Mercur

Peak plots Hg



Mercur

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
333/4 PATTANAKARN ROAD SOI 18, SUAN LUANG, SUAN LUANG BANGKOK 10250
TEL. 0-2717 3000 ต่อ 29 FAX. 0-2719-4384

Cert. No.: 23TM1408
Page : 1 of 4

Certificate of Calibration

Equipment :	Autoclave
Manufacturer :	TOMY
Model :	SX-700
Serial No. :	48134190
ID No. :	BKK_ML0041
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Location .	Media Preparation Room
Received Order :	03 October 2023
Calibration Date :	04 October 2023
Ambient Temperature :	(26 ± 10) °C
Relative Humidity :	(50 ± 30) %
Calibrated by :	Khit Ruttanaprapachai
Approved by :	Approved Signatory

REVIEW BY Sitthichk
APPROVED BY 04/04/23
NEXT CAL DATE 04/04/24

( ) Pornthippa Tanneyakul
(√) Ponpan Paipim
( ) Suwit Imjai

Issue Date : 11 October 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written
Approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services

A 0053272

Equipment : Autoclave
Condition As-Received : Used Item
Reference : 2310-0006CC-6
Procedure Used :-

Cert. No.: 23TM1408
Page : 2 of 4

Calibration were conducted using in-house calibration procedure CP-OT03 according to direct measurement method with Data Acquisition which connected with Thermocouple Type T
The temperature scale used was based on ITS-90.

Condition of this result of calibration

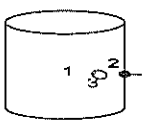
1. Reference standard instrument:-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013823	23LM66	TPA	25 Mar 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.
4. This result of calibration covers laboratory autoclaves for the sterilization of goods and material which could be infected with organisms categorized as Hazard Group 1, 2 and 3**
(** = Categorization of pathogens according to hazard and categories of containment, second edition, 1990)
It does not cover autoclaves for use with material infect with organisms in Hazard Group 4, for which complete containment and sterilization of infected condensate is considered to be essential
This result of calibration does not apply to sterilizers or disinfectors used for medical, dental, pharmaceutical or veterinary purposes which are directly concerned with patient care, or those used for fabrics subjected to sterilization which are required to be dry at the end of cycle.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source



	Environmental		
	(°C)	(%R.H.)	(Volt)
Beginning of Calibration	26	64	221
Finished of Calibration	27	67	222

Position	Description	Ref. Std. ID No.:
1 =	Center of chamber	19-17TC-08
2 =	Temperature sensor	19-17TC-09
3 =	Exhaust port	19-17TC-10

a 1184533

Equipment : Autoclave
Condition As-Received : Used Item
Reference : 2310-0006OC-6
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source

Operating parameter Set : Temperature = 108 °C
Sterilization period = 10 minute

UUC* Setting (°C)	UUC* Reading (°C)	Position	Average* Standard Reading (°C)	Stability (± °C)	Pressure Reading (MPa)	Uncertainty (± °C)	Coverage Factor k
108	108	1	108.352	0.12	0.04	0.90	2
		2	108.263				
		3	108.140				

Operating parameter Set : Temperature = 115 °C
Sterilization period = 20 minute

UUC* Setting (°C)	UUC* Reading (°C)	Position	Average* Standard Reading (°C)	Stability (± °C)	Pressure Reading (MPa)	Uncertainty (± °C)	Coverage Factor k
115	115	1	115.376	0.13	0.09	0.90	2
		2	115.297				
		3	115.157				

Operating parameter Set : Temperature = 118 °C
Sterilization period = 10 minute

UUC* Setting (°C)	UUC* Reading (°C)	Position	Average* Standard Reading (°C)	Stability (± °C)	Pressure Reading (MPa)	Uncertainty (± °C)	Coverage Factor k
118	118	1	118.093	0.11	0.09	0.90	2
		2	118.037				
		3	117.954				

Average* : The average of 30 values in each position
Stability : One-half of the greatest maximum difference of measured temperature at any one probe.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity

a 1184532

Equipment : Autoclave
Condition As-Received : Used Item
Reference : 2310-0006OC-6
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source

Operating parameter Set : Temperature = 121 °C
Sterilization period = 30 minute

UUC* Setting (°C)	UUC* Reading (°C)	Position	Average* Standard Reading (°C)	Stability (± °C)	Pressure Reading (MPa)	Uncertainty (± °C)	Coverage Factor k
121	121	1	121.166	0.17	0.11	0.91	2
		2	121.092				
		3	120.980				

Average* : The average of 30 values in each position.
Stability : One-half of the greatest maximum difference of measured temperature at any one probe.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was excluded stability.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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a 1184531

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
53/4 PATTANAKARN ROAD SOI 18, SUANLUANG SUANLUANG BANGKOK 10250
TEL. 0-2717 3930-29 FAX. 0-2748-9434

Certificate of Calibration

Equipment : Incubator
Manufacturer : SHEL-LAB
Model : 1915A
Serial No. : 0200599
ID No. : BKK_ML0010

REVIEW BY
APPROVED BY
NEXT CAL. DATE 17/7/25

Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthakan Rd.,
Khwaeng Phatthanakan, Khet Suan Luang,
Bangkok 10250 Thailand
Location : Incubation & Micrological Reading

Received Order : 17 July 2023
Calibration Date : 17 July 2023
Ambient Temperature : (25 ± 10) °C
Relative Humidity : (50 ± 30) %

Calibrated by : Man Pattanapongpaiboon

Approved by : Approved Signatory
( ) Pornthippa Tameyakul
( ) Malee Butkruea
( ) Suwit Imjai

Issue Date : 24 July 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written
Approval of the head of Corporate Services 3: Equipment Calibration and Testing Services

A 0056489

Equipment : Incubator
Condition As-Received : Used Item
Reference : 2307-0295OC-1
Procedure Used :-
Calibration were conducted using calibration procedure CP-OT02 according to direct measurement method with Data Acquisition which connected with Resistance Temperature Detector (RTD).
The temperature scale used was based on ITS-90.

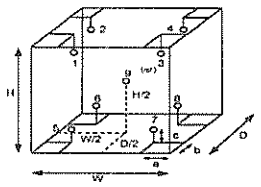
Condition of this result of calibration
1. Reference standard instrument:-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY49001451	23LM27	TPA	25 Feb 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.
Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Environment during calibration	Beginning	Finished
Temp. (°C)	24	24
REL.Humid. (%)	54	56
AC Supply (Volt)	221	223



Position :	Ref. Std. ID No.:
1	19RTD-2/1
2	19RTD-2/2
3	19RTD-2/3
4	19RTD-2/4
5	19RTD-2/5
6	19RTD-2/6
7	19RTD-2/7
8	19RTD-2/8
9 (ref.)	19RTD-2/9

Probe Installation Details :
a = 10 cm
b = 10 cm
c = 10 cm

Dimension of Chamber :
D = 0.50 m
W = 0.75 m
H = 1.2 m
Capacity = 0.45 m³

a 1172189

Equipment : Incubator
Condition As-Received : Used Item
Reference : 2307-0285OC-1
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Cert. No.: 23TM1148
Page : 3 of 3

Calibration Point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Temperature stability (± °C)	Temperature uniformity (°C)	Overall Variation (°C)	Coverage Factor k
35.0	35.0	35.0	0.055	0.30	0.44	2

Calibration Point (°C)	Measured Temperature (°C) Position									Uncertainty
	1	2	3	4	5	6	7	8	9 (ref.)	(±°C)
35.0	34.888	34.933	34.815	34.813	35.064	35.019	35.156	35.141	35.087	0.30

Average* : The average of 30 values in each position.
Temperature stability : One-half of the greatest maximum difference of measured temperature at any one sensor.
Temperature uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Overall Variation : The Difference of the maximum and minimum measured temperatures throughout observation.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity .

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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a 1172188

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX.0-2719-9484

Certificate of Calibration

Cert. No.: 24TM667
Page : 1 of 3

REVIEW BY Sithichok T
APPROVED BY
NEXT CAL DATE 23/10/25

Equipment : Hot Air Oven
Manufacturer : Binder
Model : ED 240/E2
Serial No. : 09-15533
ID No. : BKK_ML0013

Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Phatthanakan, Khet Suan Luang,
Bangkok 10250 Thailand

Location : Media Preparation Room

Received Order : 23 April 2024
Calibration Date : 23 April 2024
Ambient Temperature : (26 ± 10) °C
Relative Humidity : (50 ± 30) %

Calibrated by : Tawatchai Pama

Approved by : Approved Signatory

( ) Ponpan Palpim
(✓) Suwit Imjai
( ) Kunchit Prompral

Issue Date : 26 April 2024

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written Approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services.

Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2404-0439OC-8

Cert. No.: 24TM667
Page : 2 of 3

Procedure Used :-
Calibration were conducted using calibration procedure CP-OT02 based on TLAS G-20 according to direct measurement method with Data Acquisition which connected with Thermocouple Type T.
The temperature scale used was based on ITS-90.

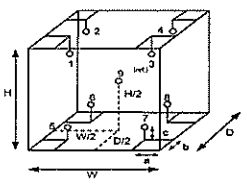
Condition of this result of calibration
1. Reference standard instrument-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY49001451	24LM44	TPA	17 Mar 2025

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.
Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Environment during calibration	Beginning	Finished
Temp. (°C)	24	23
REL.Humid. (%)	65	65
AC Supply (Volt)	223	222



Position :	Ref. Std. ID No.:
1	24-19TC-01
2	24-19TC-02
3	24-19TC-03
4	24-19TC-04
5	24-19TC-05
6	24-19TC-06
7	24-19TC-07
8	24-19TC-08
9 (ref.)	24-19TC-09

Probe Installation Details :
a = 10 cm
b = 10 cm
c = 10 cm

Dimension of Chamber :
D = 0.50 m
W = 0.80 m
H = 0.60 m
Capacity = 0.24 m³

Equipment : Hot Air Oven
Condition As-Received : Used Item
Reference : 2404-0439OC-8
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Fresh air setting : Close

Cert. No.: 24TM667
Page : 3 of 3

Calibration Point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Temperature stability (± °C)	Temperature uniformity (°C)	Overall Variation (°C)	Coverage Factor k
180	180	180	0.64	2.7	3.7	2

Calibration Point (°C)	Measured Temperature (°C) Position									Uncertainty
	1	2	3	4	5	6	7	8	9 (ref.)	(±°C)
180	181.009	181.511	180.922	181.359	181.217	183.659	181.664	181.986	181.474	1.5

Average* : The average of 30 values in each position.
Temperature stability : One-half of the greatest maximum difference of measured temperature at any one sensor.
Temperature uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Overall Variation : The Difference of the maximum and minimum measured temperatures throughout observation.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity .

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

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TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL.0-2717-3000-29 FAX.0-2719-9484

Certificate of Calibration

Cert. No.: 24TM469
Page : 1 of 3

Equipment :	Water Bath
Manufacturer :	Memmert
Model :	WNE 45
Serial No. :	L712.0429
ID No. :	BKK_ML0056

REVIEW BY : SithichokT
APPROVED BY :
NEXT CAL DATE : 01/03/25

Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Location :	Incubation $ Microbiological Reading
Received Order :	01 March 2024
Calibration Date :	01 March 2024
Ambient Temperature :	(25 ± 10) °C
Relative Humidity :	(50 ± 30) %
Calibrated by :	Krisda Malee
Approved by :	Approved Signatory

( ) Pornthippa Tamoyakul
( ) Unnopphol Harachai
(√) Suwit Imjai

Issue Date : 4 March 2024

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written Approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services.

Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2403-0001OC-1

Cert. No.: 24TM469
Page : 2 of 3

Procedure Used :-

Calibration were conducted using in-house calibration procedure CP-OT04 Based on ASTM E715 according to direct measurement method with Data Acquisition which connected with Industrial Platinum Resistance Thermometer (IPRT).

The temperature scale used was based on ITS-90.

Condition of this result of calibration

1. Reference standard instrument:-

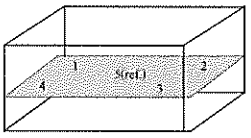
Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Data Acquisition	MY57013711	23LM115	TPA	11 Jul 2024

2. This certificate is valid only to the item calibrated on date and place of calibration.
3. This certification is traceable to the International System of Unit.

Remark : TPA : Technology Promotion Association (Thailand - Japan)

Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source
Heat transfer medium used : Water

	Environmental		AC Voltage Supply
	(°C)	(%R.H.)	(Volt)
Beginning of Calibration	24	55	221
Finished of Calibration	23	55	220



Front

Position :	Ref. Std. ID No.:
1	4803988-001
2	4803988-002
3	4803988-003
4	4803988-004
S(ref.)	4803988-005

Equipment : Water Bath
Condition As-Received : Used Item
Reference : 2403-0001OC-1
Result of Calibration :- (*) Without Adjustment
Function of UUC* : Temperature Source

Cert. No.: 24TM469
Page : 3 of 3

Calibration point (°C)	UUC* Setting (°C)	UUC* Reading (°C)	Average* Standard Reading (°C) Position 1	2	3	4	S (ref.)	Uncertainty (± °C)
44.5	44.5	44.5	44.469	44.462	44.492	44.510	44.496	0.15
45.0	45.0	45.0	44.975	44.974	45.007	45.023	44.999	0.15

Calibration point (°C)	Uniformity (°C)	Stability (± °C)	Coverage Factor k
44.5	0.087	0.029	2
45.0	0.069	0.031	2

Average* : The average of 30 values in each position.
Uniformity : The maximum difference of measured temperatures at any sensors and the measured temperature at the reference location which are observed at the same time or at as close an observation time as possible to determine the temperature pattern or homogeneity within the chamber under steady-state conditions.
Stability : One-half of the greatest maximum difference of measured temperature at any one probe.
UUC* : Unit Under Calibration
Note : The reported uncertainty of measurement was included stability and excluded uniformity.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

-o0o-

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel. +66 2643 8301-6 , e-mail: service.thailand@sartorius.com

NSC-TISI-TIS 17025 CALIBRATION 0425

SARTORIUS

REVIEW BY : Sirituk P.
APPROVED BY :
NEXT CAL DATE : 07/07/24

Certificate of Calibration

Model Number	MSE224S-100-DU	Certificate No.	23BC00310
Description	Analytical Balance	Issued Date	Friday, August 11, 2023
Serial Number	27405555	Reference No.	216011
ID No.	BKK_EN0003		
Manufacturer	Sartorius	Page No :	1 of 2

Customer Name : ALS Laboratory Group (Thailand)Co., Ltd.
104 Phatthanakan 40 Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250.

Calibrated Place : Lab Room

Calibrated By : Mr.Chonchai Inthana
Calibration Date : Wednesday, August 09, 2023

Calibration Procedure No : This calibration was conducted by Using in-house calibration procedure number (WI-003) Based on UKAS LAB 14 : 2019

Metrological data
Capacity 220 g Readability 0.0001 g

Ambients Conditions
Temperature : 22.8 °C ± 5.0 °C
Humidity : 59.0 % RH ± 10.0 % RH
Pressure ± –

Reasons for calibration
☐ New Installation ☐ Service / Repaired ☑ Re-calibration/ Maintenance

Equipment Condition: ☑ Good Operate ☐ Fair

Measurement Method UKAS Publication Ref :Lab 14

The measurement uncertainty stated is the expended uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM). The calibration certificate documents the traceability to National Standards, which realise the unit of measurement according to the International Standard System of Units (SI). Report of Tolerance came form list of Sartorius Metrological Specifications

Traceability:

Model Number	Description	Traceability	Cetificate No	Due Date
YCS011-522-00	Sartorius weight set 1mg - 5000g E2 YCS011-522-00	SPC-RT	C02212585	14-Sep-2023
MHB-382SD	Humidity/Barometer/Temp. Lutron MHB-382SD	DKSH	C19220444	5-Sep-2023

This certificate relate and apply this equipment only
This certificate may not be reproduced other than in full except with the prior written approval of the Verification Operation Division Sartorius (Thailand) Co., Ltd

Mr.chonchai Inthana(Technical Manager)

STAMP

SOP FM 33 02 February 2022

Sartorius (Thailand) Co., Ltd.
129 Rama 9 Road, Huaykwang, Huaykwang, Bangkok 10310
Tel: +66 2643 8351-6 Fax: +66 2643 8357, e-mail: service.thailand@sartorius.com

SARTORIUS

Certificate of Calibration

Model Number : MSE224S-100-DU
Description : Analytical Balance
Serial Number : 27405555
ID No. : BKK_EN0003
Manufacturer : Sartorius

Certificate No. : 23BCI0310
Issued Date : Friday, August 11, 2023
Reference No. : 216011
Page No. : 2 of 2

Calibration Results : Without Adjustment

Repeatability

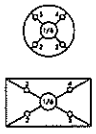
The reproducibility is the ability of a weighing instrument to display nearly identical readouts under constant test conditions when the same load with a measurement series is placed repeatedly on the weighing pan in the same manner. The standard deviation is used to express reproducibility quantitatively.

Nominal Value : (Low Load)	20.0000	200.0000
20 g	20.0000	200.0000
Tolerance	20.0000	200.0000
0.0001 g	20.0000	200.0001
	20.0000	200.0001
Nominal Value : (High Load)	19.9999	200.0001
200 g	20.0000	200.0000
Tolerance	20.0000	200.0001
0.0001 g	20.0000	200.0001
	20.0000	200.0000
Standard Deviation	0.00003	0.00005

Eccentricity (Off-center loading error)

The off-center loading error is yielded by the difference between the readout of the load, i.e. 1/3 or 1/4 of maximum capacity, placed in the middle of the weighing pan and between each of four additional measurement points (positions defined according to OIML R76).

Nominal value : 100 g
Tolerance *0.0004* g



	Difference
1	-
2	0.0001
3	0.0000
4	0.0000
5	0.0001
6	-

Linearity

The linearity, also called linearity error, Describes the deviation of the characteristic curve of a weighing instrument from the linear slope.

Tolerance *0.0002* g

Nominal Value (g)	Conventional Mass Value (g)	Displayed Value (g)	Deviation (g)	Uncertainty (g)
0.01	0.0100	0.0100	0.0000	0.00014
0.1	0.1000	0.1000	0.0000	0.00014
1	1.0000	1.0000	0.0000	0.00014
2	2.0000	2.0000	0.0000	0.00014
5	5.0000	5.0000	0.0000	0.00014
10	10.0000	10.0000	0.0000	0.00014
20	20.0000	20.0000	0.0000	0.00014
50	50.0000	50.0001	0.0001	0.00015
100	100.0000	100.0000	0.0000	0.00019
200	200.0000	200.0001	0.0001	0.00030

End of Report.

SOP FM 33 03 February 2022.

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.
Saraburi Tel : +66 3627 3096 Fax : +66 3627 3100
Bangkok Tel : +668 9205 6851 , +669 8247 2360
Website : www.scieco.co.th E-Mail : calibrate@scg.com

NSC-TISI-TIS 17025 CALIBRATION 0244

Certificate No.T231303 Page 1 of 3

Certificate of Calibration

Equipment : Liquid Bath (Water)
Manufacturer : MEMMERT
Model : WNB29
Serial No. : L611.0135
Customer Code : BKK_EN0148
ID No. : T6455A4
Customer : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
Khet Suan Luang, Bangkok 10250
Customer Location : ORGANIC PREPARATION LAB
Date of Receipt : 27 June 2023
Calibrated By : Sujjar Naknakred (Site Calibration Manager)
Approved By : / Boonchai Suriyawong (Site Calibration Manager)
Date of Issue : 11 JUL 2023

REVIEW BY Sujjar P.
APPROVED BY
NEXT CAL DATE 04/01/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

FM-L14118/31-08-64

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

Certificate No. T231303 Page 2 of 3

Calibration Report

Equipment : Liquid Bath (Water)
Date of Calibration : 4 July 2023
Environment : Temperature : 22.2-22.5 °C
Line Voltage : 221.6-224.8 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

1. This equipment was calibrated by insert five resistance thermometer detectors into its water bath , the other one thermocouple type T use for ambient temperature measurement . The calibration was done in according to WI-T36 (based on ASTM E715-80 (Reapproved 2001)).
All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .
2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
RTD	100 OHM	M18 (CH1,CH6-CH7,CH9-CH10)	T230545	10 April 2024
DATA LOGGER	34970A	T149	T230545	10 April 2024

3. This certificate is traceable to :
National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244.)
4. Condition of calibrated item : good
Equipment Description :
Time Constant 3 Hour 45 Minute At 60 °C
5. Adjustment :
(X) without adjustment ( ) after adjustment

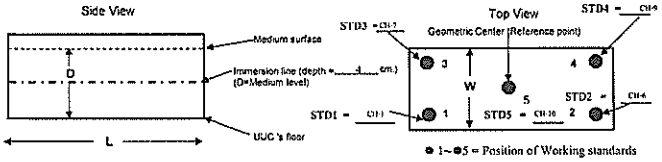
Approved By

FM-L15 117/15-05-63

Metrological Center
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhoi, Saraburi 18110, Thailand.

Certificate No. T231303 Page 3 of 3

Calibration Report



● 1~●5 = Position of Working standards

- D = Medium level : 8 cm. Working space dimension : 40 × 60 × 16 (WxLxH)
- UUC's medium : Water
- Working standards are located at 2.5 cm. away from each coner and walls.

Measurement Results:

	Average Standard Reading at each position (°C)				
Calibration Point	CH-1	CH-6	CH-7	CH-9	CH-10
60	60.03	60.06	60.24	60.11	60.18
85	84.79	84.83	85.42	85.05	85.20
95	93.71	93.83	94.62	94.15	94.42

Liquid Bath (Water)			Temperature Distribution				
Setting (°C)	Reading (°C)		Average (°C)	Stability (±°C)	Uniformity (±°C)	Uncertainty (±°C)	Coverage Factor k
	Min , Max	Average					
61.0	60.9 , 61.1	61.0	60.12	0.13	0.19	0.29	2.04
86.0	85.8 , 86.2	86.0	85.06	0.19	0.47	0.44	2.17
95.0	94.6 , 95	94.9	94.15	0.32	0.65	0.55	2.13

* The quoted uncertainty exclude "uniformity"
The calibration result apply only the above calibrated item.
The result of test was found accurate as shown on date and place of test only.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 % .

Approved By

FM-L15 117/15-05-63

Agilent Technologies

Agilent Technologies (Thailand) Limited
U CHU LIANG BLDG. 22/F UNIT A,D
968 RAMA 4 ROAD, SILOM, BANGRAK
Bangkok 10500 Thailand

Tel. +662 637 6363
Fax: +662 632 4334
Email. ccc-smt@agilent.com
Website. www.agilent.com/chem

Customer Contact:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan
TAX ID : 0105540084859
Chanattagarn.leechom@alsglobal.com
27603068

Invoice To:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan

SERVICE REPORT

Customer Purchase Order Number:	**Customer Number:** 70371013
Service Request:	**Service Request Date:**
Service Order: 6006033911	**Service Confirmation:** 6004800024

REVIEW BY Thitima B.
APPROVED BY
NEXT CAL DATE 14 Apr 2024

Delivery Site:
ALS Laboratory Group (Thailand) Co Ltd
Head Office
104 Phatthanakan 40 Phatthanakan Rd
Khwaeng Phatthanakan Khet Suan

Location:
Room
Bldg
Lab
Dept

Direct Inquiries to:
Contact Name: Customer Contact Center
Contact E-mail: ccc-smt@agilent.com
Contact Telephone: +662 637 6363
Contact Fax: +662 632 4334

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Bangkok 10500 Thailand
Tax ID 0105542058218

Citibank N.A. Bangkok Branch ORIGINAL
399 Interchange 21 Building, Sukhumvit Road, Klongtoey Nua
Sub-district, Wattana District, Bangkok 10110 Thailand
Acc. No. 012-4452-007,
THB Krung Thai Bank PCL
Siam Square Br. 416/1-2 Rama I Rd. Pathumwan, BKK 10330
Thailand

Service Instrument:

Model Number	Model Description	Serial Number	System Handle	Parent Asset
SYS-IO-5100	ICP-OES 5100/5110 System			
G8010A	Agilent 5100 SVDV ICP-OES Spectrometer	MY16010005	ICP OES 5100	SYS-IO-5100
G8410A	SPS 4 Autosampler	AU15440764	ICP OES 5100	SYS-IO-5100

Service Items:

Item	Service/Part #	Description	Qty	Entitlement	Service Start	Service End
1000	EOD	Enterprise Operational Qualification	1.00	Agreement Entitlement - 100 % covered	20.03.2023	20.03.2023

Additional Information:

Service Information:

Problem Description:
WU-S-00-IO-5100-5001143313

Service Provided:
Complete OOHW 5100ICPOES
Equipment ID: BKK_EL0037, all tests passed

Service Overview Code:
Reason Code: Scheduled Service
Diagnosis Code: Scheduled Service
Resolution Code: Scheduled Service

Reported Hours: 4.0	**Travel Hours:** 2.0	
Customer Field Service Representative Name: Kanyakorn Sukpathrajarern	**Customer Field Service Representative Signature:**	**Date:** 20 Mar 2023
Customer Name: Thitima Boocpeng	**Customer Signature:** Thitima B.	**Date:** 20 Mar 2023

Additional Comments:

TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
9/14 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717 [illegible] FAX. 0-2719-0184

Cert.No.: 23CH1369
Page.: 1 of 3

Certificate of Calibration

Equipment :	pH Meter
Manufacturer :	Hach
Model :	HQ411d
Serial No. :	200100031163
ID No. :	BKK_EN0342
Condition As-Received:	Used Item
Received Date :	26 October 2023
Calibration Date :	27 October 2023
Reference :	2310-0865DSC-3
Submitted by :	ALS Laboratory Group (Thailand) Co.,Ltd. 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand
Ambient Temperature :	(25 ± 2.5) °C
Relative Humidity :	(50 ± 15) %
Calibration Procedure :	In - house method : - CP-CH5 by direct measurement with standard voltage calibrator and direct measurement with certified reference material (CRM) - CP-CH8 by comparison with standard thermometer

REVIEW BY Sathit B.
APPROVED BY
NEXT CAL DATE 26/10/24

Calibrated by : Warakorn Lemgagtrakul

Approved by :

(✓) Sathip Moangmai
( ) Warakorn Lemgagtrakul
( ) Ponpen Palpim

Approved Signatory

Issue Date : 31 October 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate is not to be reproduced other than in full, except with the prior written approval of the Issuing Corporate Services 3 : Equipment Calibration and Testing Services

Condition of this calibration result

1. Reference Standard Instrument : -

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1) Ref. Standard Thermometer	4982054	110RC044	231908	26 Jul 2024

This certification is traceable to the International System of Unit maintained through:-
- Technology Promotion Association (Thailand-Japan)

2. Certified Reference Materials : The measurement results are traceable to SI through CPA chem Ltd., ANSI-ASQ National Accreditation Board, Accredited No. AR-1835

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	913598	14 July 2025
pH 6.985	CPA chem	913599	14 July 2024
pH 9.997	CPA chem	931961	30 Sep 2024

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4,7,10)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH measurement (±)	Coverage factor *k*
pH Electrode	4.008	4.002	166.5	0.0044	2.00
S/N.:230473042902	6.985	6.987	-10.4	0.0084	2.00
	9.997	10.005	-189.3	0.0071	2.00

Remark - Can not connect the BNC because the plug does not match with the socket.

Saithip

Calibration Results

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;

- Model : PHC281
- Serial No. : 230473042902

Dimension of probe;

- Length : 103 mm
- Diameter : 12 mm
- Immersion Depth : 90 mm

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (± °C)	Coverage factor *k*
25.0	25.002	25.1	0.098	0.13	2.00

Remark : - UUC* = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor *k*, providing a level of confidence of approximately 95 %.

-oOo-

Saithip

ภาคผนวก จ

สำเนาหนังสืออนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

ที่ อก ๐๓๑๐(๗)/ ๑๖๑๖๘ กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๒๐ พฤศจิกายน ๒๕๖๖

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขอนิดสารมลทิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๔ สิงหาคม ๒๕๖๖

สิ่งที่ส่งมาด้วย ๑. รายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๑ แผ่น
๒. รายชื่อเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๕ แผ่น
๓. ขอบข่ายสารมลทิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๓ แผ่น

ตามหนังสือที่อ้างถึง บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๒๐๔ สถานที่ตั้งเลขที่ ๑๐๔ ซอยพัฒนาการ ๔๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย ตามสิ่งที่ส่งมาด้วย ๑
ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ ๑๔๑ ราย ตามสิ่งที่ส่งมาด้วย ๒
ค. ขอบข่ายสารมลทิษที่ได้รับขึ้นทะเบียนให้วิเคราะห์ใบน้ำเสีย น้ำใต้ดิน อากาศเสีย สิ่งปฏิกูล หรือวัสดุที่ไม่ใช้แล้ว และดิน ตามสิ่งที่ส่งมาด้วย ๓

หนังสือฉบับนี้จะหมดอายุในวันที่ ๒ กันยายน ๒๕๖๙ หากประสงค์จะต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อกรมโรงงานอุตสาหกรรม ภายใน ๓๐ วัน ก่อนวันสิ้นอายุของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ทั้งนี้ สามารถยื่นคำขอผ่านระบบอิเล็กทรอนิกส์ได้ที่หน้าเว็บไซต์กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายกิริยะ จันทร์เอิบ)
นักวิชาการสาธารณสุขชำนาญ รักษาราชการแทน
ผู้อำนวยการกองวิจัยและเฝ้าระวังมลพิษโรงงาน
กองวิจัยและเฝ้าระวังมลพิษโรงงาน ปฏิบัติราชการแทนหัวหน้าศูนย์ปฏิบัติการ
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ
โทร. ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๓๑๓-๕
โทรสาร ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๓๙๙
ไปรษณีย์อิเล็กทรอนิกส์ saraban@diw.mail.go.th

"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

สิ่งที่ส่งมาด้วย ๑

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๒๐๔
ที่ อก ๐๓๑๐(๗)/ ๑๖๑๖๘ ลงวันที่ ๒๐ พฤศจิกายน ๒๕๖๖

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย

๑) นางสาวยุพาพร จันทร์เปล่ง	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๓
๒) นางสาวจันทนัย โกมารกุล ณ นคร	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๒
๓) นายศราพุทธ จิตราบนท์	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๓
๔) นางสาวกนกกร เอนก	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๔
๕) นายสุวิยา สอนแก้ว	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๕
๖) นายวิชาญ ชุณหรัต	ทะเบียนเลขที่ ว-๒๐๔-ค-๐๐๐๖

สิ่งที่ส่งมาด้วย ๒

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๒๐๔
ที่ อก ๐๓๑๐(๗)/ ๑๖๑๖๘ ลงวันที่ ๒๐ พฤศจิกายน ๒๕๖๖

ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๑๔๑ ราย

๑) นายกาจบัณฑิต กิตติคุภวณิชย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๑
๒) นายภัทรพล สว่างใจธรรม์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๒
๓) นายนราธิป เทือกชัยคำ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๓
๔) นายศิริโชค พงษ์ประสม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๔
๕) นายณัฐวุฒิ ด้วงแพง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๕
๖) นางสาวจินดา โชจุลธรรม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๖
๗) นางสาวสาวิตรี น้อยเสงี่ยม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๗
๘) นางสาวชณัฐกาญจน์ อิ่มขม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๘
๙) นางสาวนรินทร์ สายเส็ง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๐๙
๑๐) นางสาวนันทวดี สมบูรณ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๐
๑๑) นางสาวศรัณยา เฉลิมอำรงค์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๑
๑๒) นางสาวธัญญธร มงคลจิรวุฒิ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๒
๑๓) นางสาวศิริลักษณ์ บุบผาค	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๓
๑๔) นายนพพงศ์ จันทรุทัน์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๔
๑๕) นายนรเศรษฐ์ โกมาลย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๕
๑๖) นายอันวา จริยา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๖
๑๗) นางสาวเกศรินทร์ แก้วมั่น	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๗
๑๘) นางสาวสุมิมล ชัยเรืองวุฒิ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๘
๑๙) นางสาวสุธาดา ธรรมถาร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๑๙
๒๐) นางสาวเปมิกา ชัยเดชชนกุล	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๐
๒๑) นางสาวศศิธร หมูสวัสดิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๑
๒๒) นางสาวเสาวลักษณ์ ภู่นภาอำพร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๒
๒๓) นายอภิสิทธิ์ สิงหา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๓
๒๔) นายศักดิ์สิทธิ์ ไพศาลพิสุทธิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๔
๒๕) ว่าที่ร้อยตรีพญิง พรรณิภา บำเจริญ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๕
๒๖) นางจิลดา คำภูแก้ว	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๖
๒๗) นางสาวอารรรยม รักธง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๗
๒๘) นางสาวนพรัตน์ แย้มกรานต์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๘
๒๙) นายจุลเดช วาริยทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๒๙
๓๐) นางสาวดาพุรัตน์ ร้องคำ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๐
๓๑) นายพรมมี ศรีปัดเนตร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๑
๓๒) นายอุทิศ อุ่นสิม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๒
๓๓) ว่าที่ร้อยตรี เฉลิมเกียรติ อมรศรีเกริม	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๓
๓๔) นางสาววริยา สร้างนา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๔
๓๕) นายอนุพงศ์ รัตนศรีประเสริฐ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๕

๓๖) นางสาวจุฑารัตน์...

๓๗) นางสาวจุฑารัตน์ โอนสันเทียะ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๖
๓๘) นางสาวจาวุวรรณ พิมพ์อภิกฤติยา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๗
๓๙) นางสาวปวรงค์พิพย์ กิจโพศาลศักดิ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๘
๓๙) นางสาวเดือนใจ หางกลาง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๓๙
๔๐) นางสาวจิราพร ศิริเวช	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๐
๔๑) นายวรากร ยุกรักษ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๑
๔๒) นายหนง วิชิยะสหกิจ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๒
๔๓) นายธนิต เจนจบ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๓
๔๔) นายคณิศร ชำเพชร	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๔
๔๕) นายภูวิช พรหมสะอาด	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๕
๔๖) นายธนเสฏ โภคาพิพัฒน์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๖
๔๗) นายชวกฤษฎ์ วงษ์จันทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๗
๔๘) นายอาทิตย์ ศรีเสน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๘
๔๙) นายเจษดินทร์ คงศักดิไทย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๔๙
๕๐) นายจรัส บุญยิ่ง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๐
๕๑) นายธนาณัติ เอนก	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๑
๕๒) นายอภิวัฒน์ ทุมหนู	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๒
๕๓) นางสาวสุภาชัญ มาก	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๓
๕๔) นางสาวทิตพร ชวาลสมบูรณ์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๔
๕๕) นางสาวธิดิมา บุญเพ็ง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๕
๕๖) นางสาวภานุมาศ นามวัฒน์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๖
๕๗) นางสาวอุไรรัตน์ พึงสร้างแป้น	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๗
๕๘) นายธีรวัลย์ ปรงสุข	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๘
๕๙) นายอิทธิพล ยะโส	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๕๙
๖๐) นายประพจน์ วรรณชูชัย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๐
๖๑) นายชยธร พวงทิพย์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๑
๖๒) นางสาวกนกวรรณ จันทบาล	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๒
๖๓) นายสิทธิโชค ธงใจ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๓
๖๔) นางศิลาวรรณ ใจบุญ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๔
๖๕) นางสาวพรรณวิลา พุ่มลง	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๕
๖๖) นายนวภัทร ศรีวิริยะ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๖
๖๗) นายสุวิชา ทองอ่อน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๗
๖๘) นายวิญญู บุญคะนัย	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๘
๖๙) นายสมบูรณ์ บุลรจันทร์	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๖๙
๗๐) นายวิรัตน์ ไชยนะรา	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๐
๗๑) นายนฤเบศน์ เพิ่มพูน	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๑
๗๒) นายจิรณัฐ ขาวละออ	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๒
๗๓) นายอัสรี นามบุรี	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๓
๗๔) นายอัศวเรศ จ่อสาว	ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๔

๗๕) นายประเสริฐ...

๗๕) นายประเสริฐ สุระจันธ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๕
๗๖) นายบุกุล จันทร์เนียม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๖
๗๗) นายพีรพงษ์ ทองอุณปรีดา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๗
๗๘) นายนฤทล ทองนุช ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๘
๗๙) นายอนุวัฒน์ ม่วงแหร ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๗๙
๘๐) นายเจตสรารุฒิ ปัตตะนะ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๐
๘๑) นายกฤษณะ สายวรรณ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๑
๘๒) นายพิชัย บุญยงค์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๒
๘๓) นายภานุพงศ์ โยมวงค์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๓
๘๔) นายสามารถ คุ้มปกิ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๔
๘๕) นายสัญชัย โกศรีนาม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๕
๘๖) นายณัฐวุฒิ ศรีประเสริฐ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๖
๘๗) นายขวัลธัช บาคพนม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๗
๘๘) นายพงศธร ขันทิพย์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๘
๘๙) นายสิทธิโชค หาสีดา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๘๙
๙๐) นายธนากร อินสุดา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๐
๙๑) นางสาววรณิชชา ชาติวันชัย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๑
๙๒) นางสาวทิมพ์ตะวัน มีนาฤกุล ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๒
๙๓) นางสาวเพชรัตน์ สิงห์สมบุญ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๓
๙๔) นางสาวชญานิน พรหมจันทร์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๔
๙๕) นายกีรติ ทรีราษ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๕
๙๖) นายจักริน หมั่นวิชา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๖
๙๗) นายฉัตรชัย ชุขเปีย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๗
๙๘) นายณรนนท์ ลีละทองคำ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๘
๙๙) นายดุลยพล สนนอก ทะเบียนเลขที่ ว-๒๐๔-จ-๐๐๙๙
๑๐๐) นายทักษ์ดนัย อุบลศรี ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๐
๑๐๑) นายธนศวร นามะคุณณา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๑
๑๐๒) นายธีทิพงศ์ บัวแดง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๒
๑๐๓) นายนนทพัช อุปถัมภ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๓
๑๐๔) นายนัฐพก คุณสุทธิ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๔
๑๐๕) นายนันทวัฒน์ สาริม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๕
๑๐๖) นายปิยะนัฐ พหมะศรี ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๖
๑๐๗) นายพงศ์สิริ โสมเขียว ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๗
๑๐๘) นายพีรศักดิ์ กำคำ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๘
๑๐๙) นายภานุพงศ์ มานิตย์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๐๙
๑๑๐) นายมงคล ผลาทิพย์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๐
๑๑๑) นายสิรินนท์ ทองอั้น ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๑
๑๑๒) นายอเนชา ทิมสมัย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๒
๑๑๓) นายอดิศักดิ์ ผมไผ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๓

๑๑๔) นายอนันตชัย...

๑๑๔) นายอนันตชัย วีสม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๔
๑๑๕) นายวรวุธ ดีนัก ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๕
๑๑๖) นายแสงตะวัน นะระสัด ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๖
๑๑๗) นายยุทธิพงศ์ รัตนะ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๗
๑๑๘) นายชยันวุฒิ ไชยชนิจ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๘
๑๑๙) นายวิศรุต ศรีธรรมมา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๑๙
๑๒๐) นายนนทกร เมืองผ่อง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๐
๑๒๑) นายกำชัย ยุทธะ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๑
๑๒๒) นางสาวมัฏฐภรณ์ บุญคะนัย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๒
๑๒๓) นางสาวพัชรินทร์ แสนสร้อย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๓
๑๒๔) นายไพรวัลย์ เปรี่ยมทิมาย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๔
๑๒๕) นางสาวศุภมาศ ทองมาก ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๕
๑๒๖) นางสาวลลิตา จิตรสว่าง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๖
๑๒๗) นางสาวไมพร เลิกภูเขียว ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๗
๑๒๘) นางสาวกฤติมาพร คำมีแก่น ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๘
๑๒๙) นางสาวสกุลรัตน์ ภาคภูมิ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๒๙
๑๓๐) นางสาวไพรินทร์ ศรีรูปี ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๐
๑๓๑) นางสาวทิพเนตร ผุยปัญญา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๑
๑๓๒) นางสาวลาลิตา ปานทอง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๒
๑๓๓) นางสาวอริสา ทองนวล ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๓
๑๓๔) นางสาวอรยา ค้าคล่อง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๔
๑๓๕) นางสาวขุดาภรณ์ สุนทรสนาน ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๕
๑๓๖) นางสาวอัญชลี คำจันทร์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๖
๑๓๗) นายบุญฤทธิ์ เอี่ยมเทศ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๗
๑๓๘) นางสาวศุภรดา ปั้นมยุรา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๘
๑๓๙) นางสาวหาฤดี คุณนาม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๓๙
๑๔๐) นางสาวจิราเจต พ่องดา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๐
๑๔๑) นางสาวธารยา มีชัย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๑
๑๔๒) นางสาวรัชชุดา นาคผงญ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๒
๑๔๓) นางสาวนันทิยา จันทะคุน ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๓
๑๔๔) นายกิตติพงศ์ แซ่ลี้ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๔
๑๔๕) นายอนุวัติ ภูกวิล ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๕
๑๔๖) นายธีรพล แสงทอง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๖
๑๔๗) นายศักดิ์ศิพัฒน์ บุญมั่น ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๗
๑๔๘) นายฐิติวัสก์ เอมอุไร ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๘
๑๔๙) นายชัยณรงค์ ศรีบุรินทร์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๔๙
๑๕๐) นางสาวอัจฉราวรรณ สวนสมยง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๐
๑๕๑) นางสาวมัฐฐาพร สิงหา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๑
๑๕๒) นายภีมเรศ แหยมโต ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๒

๑๕๓) นางสาวอุบล...

๑๕๓) นางสาวอุบล เศิกศิริ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๓
๑๕๔) นางสาวมโนรัตน์ ทองบุตร ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๔
๑๕๕) นายภาคภูมิ แหนไทย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๕
๑๕๖) นางสาวสุภาณัฐ เมล์พ่วง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๖
๑๕๗) นางสาวพรทิวา สาตารชนม์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๗
๑๕๘) นายเอกวิทย์ วันทะนา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๘
๑๕๙) นายโครมณฑล ทิพย์วรรณ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๕๙
๑๖๐) นายจิรเมธ ประเสริฐสิริพงศ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๐
๑๖๑) นายจิราบุล เกษมสุข ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๑
๑๖๒) นายจีรศักดิ์ ศรีวิชัย ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๒
๑๖๓) นายณัฐกฤษณ์ สะพานแก้ว ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๓
๑๖๔) นายบูรณศักดิ์ ปะทิ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๔
๑๖๕) นายปัณณวิชญ์ เสมอหรัพย์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๕
๑๖๖) นายพิษณุพงษ์ ไชยา ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๖
๑๖๗) นายภัทรพงษ์ มณฑาทอง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๗
๑๖๘) นายวสันต์ ตรีนกุล ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๘
๑๖๙) นายภาณุเดช เพชรอุด ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๖๙
๑๗๐) นายธนกูล วิละแสง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๐
๑๗๑) นายภัทรพงษ์ มีสุข ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๑
๑๗๒) นางสาวนุชรี ดีละพืป ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๒
๑๗๓) นางสาวสุกาวดี โกศรีนาม ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๓
๑๗๔) นางสาวอรณิช เกียนคำ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๔
๑๗๕) นางสาวพรเพ็ญ ชอบสอน ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๕
๑๗๖) นางสาววันวิสา ขอนพิกุล ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๖
๑๗๗) นางสาวอรวรรณ เถาว์ทอง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๗
๑๗๘) นางสาวอัยย์ลิณ เมอร์วิณณ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๘
๑๗๙) นางสาววริสรา คุ้ยตรอง ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๗๙
๑๘๐) นายวุฒิกร ศิริวรรณ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๘๐
๑๘๑) นางสาวจารุวรรณ กระจ่างพันธุ์ ทะเบียนเลขที่ ว-๒๐๔-จ-๐๑๘๑

สิ่งที่ส่งมาด้วย ๓

เอกสารแนบท้ายหนังสืออนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๒๐๔
ที่ อก ๐๓๑๐(๓)/ ๒๖๓๖๘ ลงวันที่ ๒๐ พฤศจิกายน ๒๕๖๖

ค. ขอบข่ายสารมลทิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๗๔ รายการ

น้ำเสีย จำนวน 60 รายการ

ลำดับที่	สารมลทิษ	วิธีวิเคราะห์
1	Aldicarb	High-Performance Liquid Chromatographic Method[4]
2	Aldicarb Sulfone	High-Performance Liquid Chromatographic Method[4]
3	Aldicarb Sulfoxide	High-Performance Liquid Chromatographic Method[4]
4	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
5	Arsenic	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
6	Barium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
7	α-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
8	β-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
9	δ-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
10	γ-BHC	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
11	Biochemical Oxygen Demand	1) 5-Day BOD Test, Azide Modification Method[4] 2) 5-Day BOD Test, Membrane Electrode Method[4]
12	Carbaryl	High-Performance Liquid Chromatographic Method[4]
13	Carbofuran	High-Performance Liquid Chromatographic Method[4]
14	Cadmium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
15	Chemical Oxygen Demand	1) Closed Reflux, Colorimetric Method[4] 2) Closed Reflux, Titrimetric Method[4]
16	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
17	Chromium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
18	Color	ADMI Weighted-Ordinate Spectrophotometric Method[4]

19 Copper...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
19	Copper	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
20	Cyanide	Distillation, Colorimetric Method[4]
21	2,4´-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
22	4,4´-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
23	2,4´-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
24	4,4´-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
25	2,4´-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
26	4,4´-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
27	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
28	Endosulfan Sulfate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
29	Endosulfan I	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
30	Endosulfan II	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
31	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
32	Endrin Aldehyde	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
33	Formaldehyde	Distillation, Colorimetric Method[3]
34	Free Chlorine	1) DPD Ferrous Titrimetric Method[4] 2) DPD Colorimetric Method[4]
35	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
36	Heptachlor Epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
37	Hexavalent Chromium	Colorimetric Method[4]
38	3-Hydroxycarbofuran	High-Performance Liquid Chromatographic Method[4]
39	Lead	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]

40 Manganese...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
40	Manganese	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
41	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass spectrometric Method[4]
42	Methiocarb	High-Performance Liquid Chromatographic Method[4]
43	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
44	Methomyl	High-Performance Liquid Chromatographic Method[4]
45	Nickel	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
46	Oil & Grease	1) Liquid-Liquid, Partition-Gravimetric Method[4] 2) Soxhlet Extraction Method[4]
47	Oxamyl	High-Performance Liquid Chromatographic Method[4]
48	Propoxur	High-Performance Liquid Chromatographic Method[4]
49	pH	Electrometric Method[4]
50	Phenols	1) Distillation, Chloroform Extraction Method[4] 2) Distillation, Direct Photometric Method[4]
51	Selenium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
52	Sulfide	Iodometric Method[4]
53	Temperature	Laboratory and Field Methods[4]
54	Total Dissolved Solids	Dried at 180 °C[4]
55	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method[4]
56	Total Phosphorous	Digestion, Colorimetric Method[4]
57	Total Suspended Solids	Dried from 103-105 °C[4]
58	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
59	Trivalent Chromium	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation[4]
60	Zinc	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[4]

น้ำใต้ดิน...

น้ำใต้ดิน จำนวน 126 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
2	Acetone	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
3	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
4	Anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
5	Antimony	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
7	Atrazine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
8	Barium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
9	Benz(a)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
11	Benzo(b)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
12	Benzo(k)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
13	Benzoic Acid	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
14	Benzo(a)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
15	Benzo(g,h,i)perylene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
17	Bis(2-chloroethyl)ether	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]

18 Bis(2-ethylhexyl)phthalate...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
18	Bis(2-ethylhexyl)phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
21	Butanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
22	Butyl benzyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
24	Carbazole	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
25	Carbon disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
27	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
28	p-Chloroaniline	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
32	2-Chlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
33	Chromium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation[4]
35	Chromium (VI)	Colorimetric Method[4]

36 Chrysene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
36	Chrysene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
37	Cyanide	Distillation, Colorimetric Method[4]
38	2,4-D	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
39	DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
40	DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
41	DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
42	Dibenz(a,h)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
43	Di-n-Butyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[5]
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[5]
47	3,3-Dichlorobenzidine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
53	2,4-Dichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[5]

56 1,3-Dichloropropene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[5]
57	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
58	Diethyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
59	2,4-Dimethylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
60	2,4-Dinitrophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
61	2,4-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
62	2,6-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
63	Di-n-octyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
64	Endosulfan	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
65	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
67	Fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
68	Fluorene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
69	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
70	Heptachlor epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
71	Hexachlorobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
73	n-Hexane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
74	α-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
75	β-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]

76 γ-HCH...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
76	γ-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
77	Hexachlorocyclopentadiene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
78	Hexachloroethane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
79	Indeno(1,2,3-cd)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
80	Isophorone	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
81	Lead	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
82	Manganese	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
83	Mercury	1) Digestion, Cold Vapor Atomic Absorption Spectrometric Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
84	Methanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
85	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
86	Methyl bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
87	Methylene chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
88	2-Methylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
89	2-Methylnapthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
90	Methyl tert-butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
91	Naphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
92	Nickel	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
93	Nitrobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]

94 N-Nitrosodiphenylamine...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
94	N-Nitrosodiphenylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
95	N-Nitrosodi-n-Propylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[5]
96	Polychlorinated Biphenyls - PCB 1016 - PCB 1221 - PCB 1232 - PCB 1242 - PCB 1248 - PCB 1254 - PCB 1260	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
97	Pentachlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
98	pH	Electrometric Method[4]
99	Phenanthrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
100	Phenol	1) Distillation, Chloroform Extraction Method[4] 2) Distillation, Direct Photometric Method[4] 3) Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
101	Pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
102	Selenium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
103	Silver	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
104	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
105	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[5]
106	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
107	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
108	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
109	TPH (C_5-C_9)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[14,25]

110 TPH (C_{10}-C_{16})...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
110	TPH (C_{6}-C_{16})	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method[6,22]
111	TPH ($C_{>16}$-C_{35})	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method[6,22]
112	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
113	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
114	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
115	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
116	2,4,5-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
117	2,4,6-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method[4]
118	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
119	Vanadium	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]
120	Vinyl acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
121	Vinyl chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
122	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
123	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
124	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
125	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[4]
126	Zinc	1) Digestion, Inductively Coupled Plasma Method[4] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[4]

อากาศเสีย...

อากาศเสีย (ปล่องระบาย) จำนวน 28 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Antimony	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
2	Arsenic	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
3	Beryllium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
4	Cadmium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
5	Carbon Monoxide	1) Instrumental Analyzer Method[5] 2) Sampling Bag Non-Dispersive Infrared Method[5]
6	Chlorine	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method [5]
7	Chromium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
8	Cobalt	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
9	Copper	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
10	Cresol	Adsorption Sampling, Gas Chromatographic Method[5]
11	Dioxins	Isokinetic Sampling[5]
12	Hydrogen Chloride	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method[5]
13	Hydrogen Fluoride	1) Absorption Sampling, Ion Chromatographic Method[5] 2) Isokinetic Sampling, Ion Chromatographic Method[5]
14	Hydrogen Sulfide	Absorption Sampling, Iodometric Method[5]

15 Lead...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
15	Lead	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
16	Manganese	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
17	Mercury	1) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[5] 2) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[5]
18	Nickel	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
19	Opacity	Ringelmann's Method[2]
20	Oxides of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method[5] 2) Absorption Sampling, Alkaline Permanganate/ Colorimetric Method[5] 3) Instrumental Analyzer Method[5]
21	Selenium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
22	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method[5] 2) Instrumental Analyzer Method[5]
23	Sulfuric Acid	Isokinetic Sampling, Barium-Thorin Titrimetric Method[5]
24	Tellurium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
25	Tin	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
26	Total Suspended Particulate	1) Isokinetic Sampling, Gravimetric Method[3] 2) Paired Train, Isokinetic Sampling, Gravimetric Method[3]

27 Vanadium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
27	Vanadium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method[5] 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[5]
28	Xylene	Adsorption Sampling, Gas Chromatographic Method[5]

สิ่งปฏิกูลหรือวัสดุที่ไม่ใช้แล้ว จำนวน 35 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Aldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
2	Antimony	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
3	Arsenic	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
4	Barium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

5 Beryllium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
5	Beryllium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
6	Cadmium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
7	Chlordane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
8	Chromium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
9	Chromium (III)	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method; Waste Extraction, Colorimetric Method; Calculation Method[1,6,16,19] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Waste Extraction, Colorimetric Method; Calculation Method[1,6,17,19] 3) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8,16,19] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8, 17,19]

10 Chromium (VI)...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
10	Chromium (VI)	1) Waste Extraction, Colorimetric Method[1,6,19] 2) Alkaline Digestion, Colorimetric Method[8,19]
11	Cobalt	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
12	Copper	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
13	2,4-D	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
14	DDD	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
15	DDE	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
16	DDT	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26]

2) Soxhlet...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
		2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
17	Dieldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
18	Endrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
19	Heptachlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
20	Lead	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
21	Lindane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

22 Mercury...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
22	Mercury	1) Waste Extraction, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[1,6,20] 2) Waste Extraction, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[1,6,20] 3) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[20] 4) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[20] 5) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method[21]
23	Methoxychlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic /Mass Spectrometric Method[11,26]
24	Mirex	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic /Mass Spectrometric Method[11,26]
25	Molybdenum	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
26	Nickel	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
27	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic Method[11,26]

- 2-Chlorobiphenyl...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
	- 2-Chlorobiphenyl - 2,3-Dichlorobiphenyl - 2,2',5-Trichlorobiphenyl - 2,4',5-Trichlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4',6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	
28	Pentachlorophenol	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
29	pH	Electrometric Method[23,24]
30	Selenium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

31 Silver...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
31	Silver	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
32	Thallium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
33	Toxaphene	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method[1,9,26] 2) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 3) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
34	Vanadium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
35	Zinc	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method[1,6,16] 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method[1,6,17] 3) Digestion, Inductively Coupled Plasma Method[7,16] 4) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

ต่อ...

ต่อ จำนวน 125 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
2	Acetone	1)Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25] 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[12]
3	Aldrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
4	Anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
5	Antimony	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
7	Atrazine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
8	Barium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
9	Benz(a)anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]

11 Benzo(b)fluoranthene

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
11	Benzo(b)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
12	Benzo(k)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
13	Benzoic acid	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
14	Benzo(a)pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
15	Benzo(g,h,i)perylene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
17	Bis(2-chloroethyl)ether	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
18	Bis(2-ethylhexyl)phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
21	Butanol	Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[13,25]
22	Butyl Benzyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

23 Cadmium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
24	Carbazole	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
25	Carbon Disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
27	Chlordane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
28	p-Chloroaniline	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
32	2-Chlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
33	Chromium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8,16,19] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method[7,8,17,19]
35	Chromium (VI)	Alkaline Digestion, Colorimetric Method[8,19]

36 Chrysene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
36	Chrysene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
37	Cyanide	Extraction, Distillation, Colorimetric Method[27,28,29]
38	2,4-D	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
39	DDD	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
40	DDE	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
41	DDT	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
42	Dibenz(a,h)anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
43	Di-n-Butyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
47	3,3-Dichlorobenzidine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]

49 1,2-Dichloroethane...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
53	2,4-Dichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
57	Dieldrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
58	Diethyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
59	2,4-Dimethylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
60	2,4-Dinitrophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
61	2,4-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
62	2,6-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

63 Di-n-Octyl Phthalate...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
63	Di-n-Octyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
64	Endosulfan	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
65	Endrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
67	Fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
68	Fluorene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
69	Heptachlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
70	Heptachlor epoxide	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
71	Hexachlorobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25]
73	n-Hexane	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[13,25] 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[13]

73 n-Hexane...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
74	α-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
75	β-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
76	γ-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
77	Hexachlorocyclopentadiene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
78	Hexachloroethane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
79	Indeno(1,2,3-cd)pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
80	Isophorone	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
81	Lead	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
82	Manganese	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
83	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method[20] 2) Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry[21] 3) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method[30]

84 Methanol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
84	Methanol	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25] 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method[13,25]
85	Methoxychlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
86	Methyl Bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
87	Methylene Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
88	2-methylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
89	2-Methylnaphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
90	Methyl tert-Butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
91	Naphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
92	Nickel	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
93	Nitrobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
94	N-Nitrosodiphenylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
95	N-Nitrosodi-n-propylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

96 Polychlorinated biphenyls (PCBs)

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
96	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4',6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
97	Pentachlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
98	Phenanthrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]

99 Phenol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
99	Phenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
100	Pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
101	Selenium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
102	Silver	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
103	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
104	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
105	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
106	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
107	Toxaphene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
108	TPH (C_5–C_9)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
109	TPH ($C_{>9}$ - C_{16})	1) Automate Extraction, Gas Chromatographic Method[11,22] 2) Solvent Extraction, Gas Chromatographic Method[12,22] 3) Ultrasonic Extraction, Gas Chromatographic Method[22,31]
110	TPH ($C_{>16}$ - C_{35})	1) Automate Extraction, Gas Chromatographic Method[11,22] 2) Solvent Extraction, Gas Chromatographic Method[12,22] 3) Ultrasonic Extraction, Gas Chromatographic Method[22,31]
111	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
112	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
113	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
114	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]

115 2,4,5-Trichlorophenol...

ลำดับที่	สารมลทิษ	วิธีวิเคราะห์
115	2,4,5-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
116	2,4,6-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[10,26] 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method[11,26]
117	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
118	Vanadium	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]
119	Vinyl Acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
120	Vinyl Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
121	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
122	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
123	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
124	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method[15,25]
125	Zinc	1) Digestion, Inductively Coupled Plasma Method[7,16] 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method[7,17]

เอกสารอ้างอิง

1. กระทรวงอุตสาหกรรม. ประกาศกระทรวงอุตสาหกรรม, พ.ศ. 2566. เรื่อง การจัดการสิ่งปฏิกูลหรือวัตถุที่ไม่ใช้แล้ว. ราชกิจจานุเบกษา. 31 พฤษภาคม 2566. เล่มที่ 140 ตอนพิเศษ 126 ง.

2. กระทรวงอุตสาหกรรม. ประกาศกระทรวงอุตสาหกรรม, พ.ศ. 2549. เรื่อง กำหนดค่าปริมาณเขม่าควันที่เจือปนในอากาศที่ระบายออกจากปล่องของหม้อน้ำโรงสีข้าวที่ใช้แกลบเป็นเชื้อเพลิง. ราชกิจจานุเบกษา. 4 ธันวาคม 2549. เล่มที่ 123 ตอนพิเศษ 125ง.

3. สมาคมวิศวกรรมสิ่งแวดล้อมแห่งประเทศไทย. คู่มือวิเคราะห์น้ำเสีย. พิมพ์ครั้งที่ 4. กรุงเทพฯ: เรือนแก้วการพิมพ์, 2547.

4. APHA, AWWA, WEF. Standard Methods for the Examination of Water and Wastewater. 24th ed. Washington, DC: APHA, 2023.

5. United States...

5. United States Environmental Protection Agency. Standards of Performance for New Stationary Sources. 40 CFR 60, Appendix A, 2023.

6. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. SW-846, 2014.

7. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Acid Digestion of Sludges and Sediments and Soils. SW-846 Method 3050B, 1996.

8. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Alkaline Digestion for Hexavalent Chromium. SW-846 Method 3060A, 1996.

9. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Separatory Funnel Liquid-Liquid Extraction. SW-846 Method 3510C, 1996.

10. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Soxhlet Extraction. SW-846 Method 3540C, 1996.

11. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Automated Soxhlet Extraction. SW-846 Method 3541, 1994.

12. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Microscale Solvent Extraction (MSE). SW-846 Method 3570, 2002.

13. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Volatile Organic Compounds (VOCs) in Various Sample Matrices Using Equilibrium Headspace Analysis. SW-846 Method 5021A, 2014.

14. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Purge-and-Trap for Aqueous Samples. SW-846 Method 5030B, 1996.

15. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples. SW-846 Method 5035, 1996.

16. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Inductively Coupled Plasma-Atomic Emission Spectrometry. SW-846 Method 6010B, 1996.

17. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Inductively Coupled Plasma-Mass Spectrometry. SW-846 Method 6020A, 2007.

18. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Antimony and Arsenic (Atomic Absorption, Borohydride Reduction). SW-846 Method 7062, 1994. เพิ่มใหม่

19. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Chromium, Hexavalent (Colorimetric). SW-846 Method 7196A, 1992.

20. United States...

20. United States...

20. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique). SW-846 Method 7471B, 2007.

21. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry. SW-846 Method 7473, 2007.

22. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Nonhalogenated Organics by Gas Chromatography. SW-846 Method 8015C, 2007.

23. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. pH Electrometric Measurement. SW-846 Method 9040C, 2004.

24. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Soil and Waste pH. SW-846 Method 9045D, 2004.

25. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS). SW-846 Method 8260D, 2018.

26. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Semivolatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS). SW-846 Method 8270E, 2018.

27. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Total and Amenable Cyanide: Distillation SW-846 Method 9010B, 1996.

28. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Cyanide Extraction Procedure for Solids and Oil. SW-846 Method 9013A, 1996.

29. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Cyanide in Waters and Extracts Using Titrimetric and Manual Spectrophotometric Procedures. SW-846 Method 9014, 2014.

30. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Mercury in Sediment and Tissue Samples by Atomic Fluorescence Spectrometry. SW-846 Method 7474, 2007.

31. United States Environmental Protection Agency. Test Methods for Evaluating Solid Waste Physical/Chemical Methods. Ultrasonic Extraction. SW-846 Method 3550C, 2007.

ที่ อก ๐๓๓๐(๓)/ ๖๔๗๐

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๒๔ มิถุนายน ๒๕๖๔

เรื่อง ขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และชนิดสารมลทิษของห้องปฏิบัติการวิเคราะห์เอกชน ลงวันที่ ๒๔ เมษายน ๒๕๖๔

สิ่งที่ส่งมาด้วย เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด จำนวน ๒ แผ่น

ตามหนังสือที่อ้างถึง บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน พร้อมรายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ และรายการสารมลทิษที่จะทำการวิเคราะห์ ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอเอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน มีเลขทะเบียน ว-๓๒๓ สถานที่ตั้งเลขที่ ๖๓๖/๑๐ หมู่ที่ ๕ ตำบลแม่น้ำคู้ อำเภอปลวกแดง จังหวัดระยอง โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์

๑) นายเดช ช้างขน	ทะเบียนเลขที่ ว-๓๒๓-ก-๐๔๔๒
๒) นางวิลาวัณย์ บริรักษ์	ทะเบียนเลขที่ ว-๓๒๓-ก-๐๔๔๓
๓) นายสุทธน์ สลามเดิร	ทะเบียนเลขที่ ว-๓๒๓-ก-๐๔๔๔

ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์

๑) นางสาวนฤมล บรรจงกิจ	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๔๕
๒) นางพจนา สีดา	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๔๖
๓) นางสาวธนิตา กุลสุริวงศ์	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๔๗
๔) นายพิทยา ทองแดง	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๔๘
๕) นางชลธิชา หุบงกช	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๔๙
๖) ว่าที่ ร.ต.รณชัย ม่วงมา	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๐
๗) นายวราวุฒิ พับพา	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๑
๘) นายศักดิ์นรินทร์ จรัสกาย	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๒
๙) นายสุรศักดิ์ สาชิน	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๓
๑๐) นางสาวเพชรคุณ ภวภูตานนท์	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๔
๑๑) นายสถาพร ถามถ้อ	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๕
๑๒) นายสุทธิ์ดำรงค์ โชคบิดินันท์	ทะเบียนเลขที่ ว-๓๒๓-จ-๐๔๕๖

๑๓) นายวัลลภ...

๑๓) นายวัลลภ หันไชยเนาว์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๕๗
๑๔) นางสาววนาลี เหรียญตระกูล ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๕๘
๑๕) นางสาวนิตา ผดุงจิตต์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๕๙
๑๖) นายธนะสิทธิ์ วงศ์ษาไชย ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๐
๑๗) นายชัยนุสรณ์ เดิดนันทกุลชัย ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๑
๑๘) นายสัจจา เพียรนสวง ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๒
๑๙) นายกันตภณ มณีสัมพันธ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๓
๒๐) นางสาวจันทนีย์ โกเมนชนะ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๔
๒๑) นายธารินทร์ ยิ้อกจินดา ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๕
๒๒) นายศุภณัฐ ทิสัยพันธ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๖
๒๓) นายศุภชัย วงศ์สุริย์ฉาย ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๗
๒๔) นายปฐมพงศ์ กรสวัสดิ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๘
๒๕) นายไสว ต้นไพธิ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๖๙
๒๖) นางสาวกิตติยา สัญญาธิยาภรณ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๐
๒๗) นางสาวเจษฎาพร ศรีบุญเรือง ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๑
๒๘) นางสาวมธุรินทร์ สิงห์เงา ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๒
๒๙) นางสาวธิดารัตน์ ศิริมัคคโร ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๓
๓๐) นายพัทลัณ นิภัทร์เศรษฐ์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๔
๓๑) นายศิริวิทย์ เรืองสม ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๕
๓๒) นายปาราเมศ สัตยาคุณ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๖
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๓๔) นางสาวลูกรัตน์ ไสจันทร์ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๘
๓๕) นายพรกร อินทรเสนา ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๗๙
๓๖) นายทิวากร เชื้อมาก ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๐
๓๗) นายอนุรักษ์ ทองขจรศักดา ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๓
๓๘) นายอภิชาติ วิลาศ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๖
๓๙) นายจรัสระวี ศรีรักษา ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๓
๔๐) นายประสานมิตร เรือนเพชร ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๔
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๔๒) นายสันติ ชัยชนะ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๖
๔๓) นายสิทธิชัย แก้วเกตุ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๗
๔๔) นายทินกร กุลชาติ ทะเบียนเลขที่ ว-๓๒๓-๑-๔๕๘๘

๓. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนให้วิเคราะห์ในน้ำเสีย จำนวน ๑๔ รายการ อากาศเสีย (ปล่องระบาย) จำนวน ๗ รายการ และน้ำใต้ดิน จำนวน ๓ รายการ รวมทั้งสิ้นจำนวน ๒๔ รายการ ตามสิ่งที่ส่งมาด้วย

หนังสือฉบับนี้มีอายุ ๓ ปี นับจากวันที่กรมโรงงานอุตสาหกรรมออกหนังสือ หากประสงค์จะต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อกรมโรงงานอุตสาหกรรมภายใน ๓๐ วัน ก่อนวันสิ้นอายุของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ซึ่งคำขอต่ออายุดังกล่าวขอรับได้ที่กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นางจินดา เตชะศรินทร์)
ผู้อำนวยการกองวิจัยและเตือนภัยมลพิษโรงงาน
ปฏิบัติราชการแทนอธิบดีกรมโรงงานอุตสาหกรรม

๒๘ มิ.ย. ๒๕๖๕

กองวิจัยและเตือนภัยมลพิษโรงงาน
ศูนย์วิจัยและเตือนภัยมลพิษโรงงานภาคตะวันออก
โทร. ๐ ๓๘๐๕ ๙๒๖๑-๓
โปรดเมล์ย้ำอิเล็กทรอนิกส์ eiw@diw.mail.go.th

เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอเอดเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ว-๓๒๓
ที่ อก ๐๓๑๐(๓)/ ๖๔๗๐ ลงวันที่ ๒๘ มิถุนายน ๒๕๖๔

ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๒๔ รายการ

น้ำเสีย จำนวน 14 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemical Oxygen Demand	1) 5-Day BOD Test, Membrane Electrode Method[2] 2) 5-Day BOD Test, Azide Modification Method[2]
2	Chemical Oxygen Demand	1) Open Reflux, Titrimetric Method[2] 2) Closed Reflux, Colorimetric Method[2] 3) Closed Reflux, Titrimetric Method[2]
3	Color	ADMI Weighted – Ordinate Spectrophotometric Method[2]
4	Cyanide	Distillation, Colorimetric Method[2]
5	Formaldehyde	Distillation, Colorimetric Method[1]
6	Free Chlorine	DPD-Ferrous Titrimetric Method[2]
7	Oil and Grease	Liquid-Liquid Partition-Gravimetric Method[2]
8	pH	Electrometric Method[2]
9	Phenols	1) Distillation, Chloroform Extraction Method[2] 2) Distillation, Direct Photometric Method[2]
10	Sulfide	ZnS Precipitation, Iodometric Method[2]
11	Temperature	Laboratory and Field Method[2]
12	Total Dissolved Solids	Dried at 180 °C[2]
13	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method[2]
14	Total Suspended Solids	Dried at 103-105 °C[2]

อากาศเสีย (ปล่องระบาย) จำนวน 7 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Carbon Monoxide	1) Sampling Bag, Non-Dispersive Infrared Method[3] 2) Instrumental Analyzer Method[3]
2	Hydrogen Sulfide	Absorption Sampling, Iodometric Method[5]
3	Opacity	Ringelmann's Method[3,4]
4	Oxide of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method[3] 2) Instrumental Analyzer Method[9]
5	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method[3] 2) Instrumental Analyzer Method[10]

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Sulfuric Acid...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
6	Sulfuric Acid	Isokinetic Sampling, Barium – Thorin Titrimetric Method[3]
7	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method[7]

น้ำใต้ดิน จำนวน 3 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Cyanide	Distillation, Colorimetric Method[2]
2	pH	Electrometric Method[2]
3	Phenols	Distillation, Direct Photometric Method[2]

เอกสารอ้างอิง

1. ธงชัย พรรณสวัสดิ์ และวิบูลย์ลักษณ์ วิสุทธิลักกี์, บรรณาธิการ. (2547) คู่มือวิเคราะห์น้ำเสีย. พิมพ์ครั้งที่ 4. กรุงเทพฯ: สมาคมวิศวกรรมสิ่งแวดล้อมแห่งประเทศไทย.

2. APHA, AWWA, WEF. Standard Methods for the Examination of Water and Wastewater. 23rd ed. Washington, DC : APHA, 2017

3. กระทรวงอุตสาหกรรม. ประกาศกระทรวงอุตสาหกรรม, พ.ศ. 2549. เรื่อง กำหนดค่าปริมาณเขม่าควันที่เจือปนในอากาศที่ระบายออกจากปล่องของหม้อน้ำโรงสีข้าวที่ใช้แกลบเป็นเชื้อเพลิง. ราชกิจจานุเบกษา. 4 ธันวาคม 2549. เล่มที่ 123 ตอนพิเศษ 125ง.

4. กระทรวงอุตสาหกรรม. ประกาศกระทรวงอุตสาหกรรม, พ.ศ. 2549. เรื่อง กำหนดค่าปริมาณเขม่าควันที่เจือปนในอากาศที่ระบายออกจากปล่องของหม้อน้ำของโรงงาน. ราชกิจจานุเบกษา. 4 ธันวาคม 2549. เล่มที่ 123 ตอนพิเศษ 125ง.

5. United States Environmental Protection. Standards of Performance for New Stationary Sources. 40 CFR 60. Appendix A, 2017.

6. United States Environmental Protection. Standards of Performance for New Stationary Sources. 40 CFR 60. Appendix A, 2019.

7. United States Environmental Protection. Standards of Performance for New Stationary Sources. 40 CFR 60 Appendix A, 2020.

8. United States Environmental Protection Agency. Determination of Carbon Monoxide Emissions from Stationary Sources; Instrumental Analyzer Procedure. 40 CFR 60. Appendix A Method 10, 2017.

9 United States Environmental Protection Agency. Determination of Oxide of Nitrogen Emissions from Stationary Sources; Instrumental Analyzer Procedure. 40 CFR 60. Appendix A Method 7E, 2019.

10.United States Environmental Protection Agency. Determination of Sulfur Dioxide Emissions from Stationary Sources; Instrumental Analyzer Procedure. 40 CFR 60. Appendix A Method 6C, 2017.

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