

ภาคผนวก ค

---

เอกสารประกอบการปฏิบัติตามมาตรการติดตาม  
ผลกระทบสิ่งแวดล้อม



ภาคผนวก ค-1

---

ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม



---

ผลการตรวจวัดระยะดำเนินการ



---

คุณภาพอากาศในบรรยากาศ





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124322

Date Received : Dec 25, 2023

Date Reported : Dec 28, 2023

Report Number: 2816211-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** หมู่ที่ 1 บ้านหนอง 12 ตำบลพนาภิรมย์ (A1) (GPS: 47P 0728843, 1425658)  
**Date Analysis Commenced** Dec 25, 2023  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m <sup>3</sup> )	Particulate Matter (PM-10) (mg/m <sup>3</sup> )	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23124322-1	Dec 17 - Dec 18, 2023	0.080	0.037	753	32
23124322-2	Dec 18 - Dec 19, 2023	0.062	0.037	753	32
23124322-3	Dec 19 - Dec 20, 2023	0.079	0.035	753	31
23124322-4	Dec 20 - Dec 21, 2023	0.073	0.025	753	31
23124322-5	Dec 21 - Dec 22, 2023	0.071	0.023	753	29
23124322-6	Dec 22 - Dec 23, 2023	0.078	0.031	753	27
23124322-7	Dec 23 - Dec 24, 2023	0.096	0.034	753	26
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

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

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

**Sampled By** : Satcha Phetsawaeng

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

ADDRESS 616/19 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-21 / EMA

S:\Reports\Air Ambient\7Days.rpt ( 8:07AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124322

Date Received : Dec 25, 2023

Date Reported : Dec 28, 2023

Report Number: 2816211-2

Page 1 of 1

**Sample Description** Air Quality  
**Location** หมู่ที่ 1 บ้านหนอง 12 ตำบลพนาภิรมย์ (A2) (GPS: 47P 0732028, 1423115)  
**Date Analysis Commenced** Dec 25, 2023  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m <sup>3</sup> )	Particulate Matter (PM-10) (mg/m <sup>3</sup> )	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23124322-8	Dec 17 - Dec 18, 2023	0.110	0.040	753	32
23124322-9	Dec 18 - Dec 19, 2023	0.050	0.026	753	32
23124322-10	Dec 19 - Dec 20, 2023	0.135	0.042	753	31
23124322-11	Dec 20 - Dec 21, 2023	0.076	0.024	753	31
23124322-12	Dec 21 - Dec 22, 2023	0.122	0.031	753	29
23124322-13	Dec 22 - Dec 23, 2023	0.095	0.031	753	27
23124322-14	Dec 23 - Dec 24, 2023	0.116	0.037	753	26
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

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

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

**Sampled By** : Satcha Phetsawaeng

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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

ADDRESS 616/19 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-21 / EMA

S:\Reports\Air Ambient\7Days.rpt ( 8:08AM)





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124322**  
Date Received : Dec 25, 2023  
Date Reported : Dec 28, 2023  
Report Number: 2816211-3

Page 1 of 1

**Sample Description** Air Quality  
**Location** หมู่ที่ 7 บ้านหนองปลา อำเภอบางพลี (A3) (GPS 47P 0731874, 1430331)  
**Date Analysis Commenced** Dec 25, 2023  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23124322-15	Dec 17 - Dec 18, 2023	0.048	0.033	753	32
23124322-16	Dec 18 - Dec 19, 2023	0.051	0.026	753	32
23124322-17	Dec 19 - Dec 20, 2023	0.076	0.031	753	31
23124322-18	Dec 20 - Dec 21, 2023	0.083	0.029	753	31
23124322-19	Dec 21 - Dec 22, 2023	0.083	0.029	753	29
23124322-20	Dec 22 - Dec 23, 2023	0.080	0.039	753	27
23124322-21	Dec 23 - Dec 24, 2023	0.101	0.032	753	26
<b>Guideline</b>		0.33	0.12		

### Reference Method

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

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

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsumwong  
Scientist (4)

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

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21 / ENAL

S:\Reports\_Air Ambient\7Days.rpt ( 8:08AM)



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124322**  
Date Received : Dec 25, 2023  
Date Reported : Dec 28, 2023  
Report Number: 2816211-4

Page 1 of 1

**Sample Description** Air Quality  
**Location** หมู่ที่ 6 บ้านหนองปลา อำเภอบางพลี (A4) (GPS 47P 0733189, 1426937)  
**Date Analysis Commenced** Dec 25, 2023  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
23124322-22	Dec 17 - Dec 18, 2023	0.069	0.027	753	32
23124322-23	Dec 18 - Dec 19, 2023	0.086	0.030	753	32
23124322-24	Dec 19 - Dec 20, 2023	0.091	0.037	753	31
23124322-25	Dec 20 - Dec 21, 2023	0.064	0.026	753	31
23124322-26	Dec 21 - Dec 22, 2023	0.053	0.038	753	29
23124322-27	Dec 22 - Dec 23, 2023	0.105	0.049	753	27
23124322-28	Dec 23 - Dec 24, 2023	0.181	0.043	753	26
<b>Guideline</b>		0.33	0.12		

### Reference Method

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

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

### Remark :

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

Approved by

*Thanita K.*

Thanita Kulsumwong  
Scientist (4)

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

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21 / ENAL

S:\Reports\_Air Ambient\7Days.rpt ( 8:08AM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaed, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124319

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number: 2816209-1

Page 1 of 1

Sample Description Air Quality

Location หมู่ที่ 1 บ้านหนอง 12 ตำบลหนองใหญ่ (A1)

(GPS 47P 0728843, 1425658)

Parameter Nitrogen dioxide (ppm)

Measurement Date Dec 17, 2023 - Dec 24, 2023

Measurement by Satcha Phetsawaeng

Time	23124319-1 Dec 17, 2023	23124319-2 Dec 18, 2023	23124319-3 Dec 19, 2023	23124319-4 Dec 20, 2023	23124319-5 Dec 21, 2023	23124319-6 Dec 22, 2023	23124319-7 Dec 23, 2023
09:00 AM - 10:00 AM	0.019	0.009	0.010	0.011	0.007	0.004	0.005
10:00 AM - 11:00 AM	0.015	0.012	0.009	0.012	0.007	0.005	0.005
11:00 AM - 12:00 PM	0.012	0.013	0.009	0.011	0.007	0.005	0.005
12:00 PM - 01:00 PM	0.011	0.014	0.009	0.011	0.007	0.005	0.006
01:00 PM - 02:00 PM	0.012	0.016	0.010	0.014	0.008	0.005	0.008
02:00 PM - 03:00 PM	0.012	0.018	0.016	0.019	0.009	0.007	0.007
03:00 PM - 04:00 PM	0.012	0.026	0.023	0.018	0.009	0.008	0.009
04:00 PM - 05:00 PM	0.012	0.026	0.022	0.022	0.008	0.010	0.011
05:00 PM - 06:00 PM	0.011	0.025	0.025	0.017	0.008	0.011	0.015
06:00 PM - 07:00 PM	0.010	0.018	0.023	0.013	0.008	0.008	0.014
07:00 PM - 08:00 PM	0.011	0.017	0.020	0.012	0.007	0.006	0.013
08:00 PM - 09:00 PM	0.012	0.024	0.012	0.006	0.006	0.006	0.013
09:00 PM - 10:00 PM	0.014	0.017	0.021	0.012	0.006	0.007	0.012
10:00 PM - 11:00 PM	0.013	0.016	0.021	0.011	0.006	0.008	0.012
11:00 PM - 12:00 AM	0.014	0.016	0.022	0.013	0.009	0.008	0.012
12:00 AM - 01:00 AM	0.018	0.017	0.021	0.012	0.008	0.006	0.013
01:00 AM - 02:00 AM	0.018	0.017	0.018	0.014	0.007	0.005	0.012
02:00 AM - 03:00 AM	0.016	0.015	0.016	0.014	0.007	0.005	0.011
03:00 AM - 04:00 AM	0.017	0.016	0.015	0.012	0.007	0.005	0.012
04:00 AM - 05:00 AM	0.018	0.017	0.016	0.013	0.006	0.007	0.012
05:00 AM - 06:00 AM	0.019	0.016	0.018	0.012	0.005	0.007	0.012
06:00 AM - 07:00 AM	0.018	0.014	0.016	0.008	0.005	0.006	0.014
07:00 AM - 08:00 AM	0.018	0.011	0.012	0.008	0.005	0.006	0.012
08:00 AM - 09:00 AM	0.018	0.009	0.012	0.007	0.005	0.006	0.011
Average	0.015	0.016	0.017	0.013	0.007	0.006	0.011
1hr - Maximum	0.019	0.026	0.025	0.022	0.009	0.011	0.015
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

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

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

*Saranya C.*  
Saranya Chalerthamrong  
Scientist (4)

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PART TEEER

1700421/EMAIL

S:\Reports\_Air SOx\Ox.rpt (4:13PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaed, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124319

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number: 2876994-1

Page 1 of 1

Sample Description Air Quality

Location หมู่ที่ 1 บ้านหนอง 12 ตำบลหนองใหญ่ (A2)

(GPS 47P 0732028, 1423115)

Parameter Nitrogen dioxide (ppm)

Measurement Date Dec 17, 2023 - Dec 24, 2023

Measurement by Satcha Phetsawaeng

Time	23124319-8 Dec 17, 2023	23124319-9 Dec 18, 2023	23124319-10 Dec 19, 2023	23124319-11 Dec 20, 2023	23124319-12 Dec 21, 2023	23124319-13 Dec 22, 2023	23124319-14 Dec 23, 2023
10:00 AM - 11:00 AM	0.006	0.004	0.002	0.002	0.002	0.003	0.002
11:00 AM - 12:00 PM	0.001	0.003	0.005	0.002	0.001	0.003	0.005
12:00 PM - 01:00 PM	0.009	0.001	0.004	0.001	0.001	0.002	0.006
01:00 PM - 02:00 PM	0.002	0.002	0.003	0.005	0.008	0.003	0.002
02:00 PM - 03:00 PM	0.002	0.005	0.003	0.002	0.004	0.003	0.002
03:00 PM - 04:00 PM	0.002	0.007	0.002	0.004	0.007	0.003	0.002
04:00 PM - 05:00 PM	0.002	0.006	0.002	0.004	0.005	0.004	0.002
05:00 PM - 06:00 PM	0.002	0.010	0.003	0.004	0.006	0.006	0.002
06:00 PM - 07:00 PM	0.002	0.009	0.008	0.009	0.004	0.006	0.007
07:00 PM - 08:00 PM	0.012	0.008	0.009	0.019	0.011	0.007	0.011
08:00 PM - 09:00 PM	0.013	0.006	0.010	0.026	0.010	0.011	0.008
09:00 PM - 10:00 PM	0.002	0.010	0.010	0.026	0.012	0.009	0.008
10:00 PM - 11:00 PM	0.003	0.007	0.006	0.004	0.006	0.008	0.010
11:00 PM - 12:00 AM	0.007	0.006	0.006	0.007	0.004	0.005	0.007
12:00 AM - 01:00 AM	0.010	0.004	0.008	0.007	0.003	0.005	0.009
01:00 AM - 02:00 AM	0.012	0.002	0.002	0.006	0.004	0.009	0.006
02:00 AM - 03:00 AM	0.010	0.002	0.005	0.008	0.005	0.009	0.001
03:00 AM - 04:00 AM	0.008	0.002	0.008	0.005	0.003	0.008	0.009
04:00 AM - 05:00 AM	0.008	0.001	0.004	0.005	0.003	0.008	0.011
05:00 AM - 06:00 AM	0.008	0.003	0.001	0.004	0.004	0.008	0.008
06:00 AM - 07:00 AM	0.021	0.002	0.002	0.004	0.008	0.009	0.003
07:00 AM - 08:00 AM	0.016	0.004	0.006	0.014	0.017	0.016	0.008
08:00 AM - 09:00 AM	0.016	0.006	0.006	0.023	0.008	0.008	0.007
09:00 AM - 10:00 AM	0.005	0.004	0.004	0.006	0.003	0.005	0.004
Average	0.007	0.004	0.005	0.008	0.006	0.007	0.006
1hr - Maximum	0.021	0.010	0.010	0.026	0.017	0.016	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 EPA Method Part 50 App. F (Chemiluminescence)

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

Approved by

*Saranya C.*  
Saranya Chalerthamrong  
Scientist (4)

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PART TEEER

1700421/EMAIL

S:\Reports\_Air SOx\Ox.rpt (4:14PM)





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124319**  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 29, 2023  
**Report Number:** 2876995-1

Page 1 of 1

Sample Description	Air Quality						
Location	จุดที่ 7 บ้านฉางกลาง ตำบลหนองปรือ (A3) (GPS 47P 0731874, 1430331)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Dec 17, 2023 - Dec 24, 2023						
Measurement by	Satcha Phetsawaeng						
Time	23124319-15 Dec 17, 2023	23124319-16 Dec 18, 2023	23124319-17 Dec 19, 2023	23124319-18 Dec 20, 2023	23124319-19 Dec 21, 2023	23124319-20 Dec 22, 2023	23124319-21 Dec 23, 2023
11:00 AM - 12:00 PM	<0.001	0.002	0.002	0.003	0.003	0.004	0.005
12:00 PM - 01:00 PM	0.004	0.001	0.002	0.003	0.005	0.003	0.004
01:00 PM - 02:00 PM	<0.001	<0.001	0.002	0.005	0.004	0.003	0.005
02:00 PM - 03:00 PM	<0.001	0.002	0.002	0.005	0.005	0.005	0.003
03:00 PM - 04:00 PM	0.002	0.001	0.002	0.004	0.004	0.004	0.002
04:00 PM - 05:00 PM	0.004	0.002	0.003	0.004	0.004	0.004	0.005
05:00 PM - 06:00 PM	0.004	0.004	0.009	0.009	0.004	0.006	0.010
06:00 PM - 07:00 PM	0.006	0.008	0.017	0.010	0.004	0.007	0.011
07:00 PM - 08:00 PM	0.005	0.008	0.013	0.009	0.004	0.008	0.011
08:00 PM - 09:00 PM	0.007	0.011	0.014	0.010	0.005	0.007	0.010
09:00 PM - 10:00 PM	0.004	0.011	0.014	0.005	0.003	0.004	0.008
10:00 PM - 11:00 PM	0.010	0.008	0.019	0.004	0.002	0.005	0.008
11:00 PM - 12:00 AM	0.011	0.014	0.025	0.005	0.006	0.006	0.007
12:00 AM - 01:00 AM	0.010	0.011	0.022	0.002	0.004	0.005	0.006
01:00 AM - 02:00 AM	0.011	0.012	0.017	0.011	0.005	0.010	0.005
02:00 AM - 03:00 AM	0.006	0.010	0.014	0.003	0.004	0.007	0.004
03:00 AM - 04:00 AM	0.006	0.007	0.015	0.007	0.003	0.004	0.004
04:00 AM - 05:00 AM	0.007	0.008	0.013	0.010	0.004	0.004	0.004
05:00 AM - 06:00 AM	0.010	0.011	0.013	0.010	0.009	0.005	0.005
06:00 AM - 07:00 AM	0.015	0.017	0.024	0.012	0.007	0.007	0.007
07:00 AM - 08:00 AM	0.011	0.016	0.017	0.010	0.003	0.007	0.009
08:00 AM - 09:00 AM	0.010	0.010	0.009	0.004	0.003	0.008	0.003
09:00 AM - 10:00 AM	0.003	0.007	0.004	0.005	0.003	0.008	0.007
10:00 AM - 11:00 AM	0.003	0.002	0.006	0.004	0.003	0.007	0.007
Average	0.006	0.008	0.012	0.006	0.004	0.006	0.006
1hr - Maximum	0.015	0.017	0.025	0.012	0.009	0.010	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 EPA Method Part 50 App. F (Chemiluminescence)

Approved by

*Saranya C.*

Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENAL

S:\Reports\_Air\_SON\0x.rpt ( 4 14PM)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124319**  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 29, 2023  
**Report Number:** 2876998-1

Page 1 of 1

Sample Description	Air Quality						
Location	จุดที่ 6 บ้านหนองปรือ ตำบลหนองปรือ (A4) (GPS 47P 0733189, 1426937)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Dec 17, 2023 - Dec 24, 2023						
Measurement by	Satcha Phetsawaeng						
Time	23124319-22 Dec 17, 2023	23124319-23 Dec 18, 2023	23124319-24 Dec 19, 2023	23124319-25 Dec 20, 2023	23124319-26 Dec 21, 2023	23124319-27 Dec 22, 2023	23124319-28 Dec 23, 2023
12:00 PM - 01:00 PM	0.012	0.003	0.005	0.005	0.004	0.005	0.003
01:00 PM - 02:00 PM	0.012	0.003	0.005	0.004	0.003	0.003	0.004
02:00 PM - 03:00 PM	0.011	0.002	0.007	0.004	0.003	0.004	0.005
03:00 PM - 04:00 PM	0.010	0.003	0.004	0.005	0.004	0.005	0.002
04:00 PM - 05:00 PM	0.007	0.003	0.005	0.006	0.004	0.005	0.005
05:00 PM - 06:00 PM	0.008	0.005	0.002	0.003	0.003	0.004	0.004
06:00 PM - 07:00 PM	0.008	0.002	0.012	0.008	0.005	0.002	0.001
07:00 PM - 08:00 PM	0.008	0.010	0.019	0.008	0.004	0.003	0.004
08:00 PM - 09:00 PM	0.005	0.009	0.014	0.010	0.003	0.009	0.004
09:00 PM - 10:00 PM	0.007	0.009	0.013	0.011	0.005	0.003	0.008
10:00 PM - 11:00 PM	0.009	0.011	0.017	0.009	0.001	0.002	0.005
11:00 PM - 12:00 AM	0.011	0.011	0.020	0.014	0.004	0.004	0.005
12:00 AM - 01:00 AM	0.011	0.011	0.016	0.004	0.005	0.004	0.005
01:00 AM - 02:00 AM	0.009	0.010	0.014	0.003	0.004	0.003	0.006
02:00 AM - 03:00 AM	0.007	0.009	0.014	0.003	0.004	0.006	0.004
03:00 AM - 04:00 AM	0.007	0.008	0.013	0.004	0.005	0.006	0.003
04:00 AM - 05:00 AM	0.006	0.008	0.014	0.002	0.004	0.006	0.006
05:00 AM - 06:00 AM	0.004	0.007	0.012	0.007	0.005	0.005	0.005
06:00 AM - 07:00 AM	0.004	0.008	0.011	0.007	0.004	0.006	0.006
07:00 AM - 08:00 AM	0.003	0.012	0.011	0.006	0.003	0.006	0.006
08:00 AM - 09:00 AM	0.006	0.012	0.009	0.005	0.004	0.007	0.007
09:00 AM - 10:00 AM	0.006	0.006	0.005	0.004	0.003	0.005	0.006
10:00 AM - 11:00 AM	0.022	0.003	0.003	0.002	0.003	0.004	0.006
11:00 AM - 12:00 PM	<0.001	0.004	0.006	0.006	0.006	0.004	0.007
Average	0.008	0.007	0.011	0.006	0.004	0.005	0.005
1hr - Maximum	0.022	0.012	0.020	0.014	0.006	0.009	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 EPA Method Part 50 App. F (Chemiluminescence)

Approved by

*Saranya C.*

Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENAL

S:\Reports\_Air\_SON\0x.rpt ( 4 14PM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124320

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number: 2816210-1

Page 1 of 1

Sample Description Air Quality

Location หมู่ที่ 1 บ้านหนอง 12 ตำบลหนองใหญ่ (A1)

(GPS 47P 0728843, 1425658)  
Parameter Sulfur Dioxide (ppm)

Measurement Date Dec 17, 2023 - Dec 24, 2023

Measurement by Satcha Phetsawaeng

Time	23124320-1 Dec 17, 2023	23124320-2 Dec 18, 2023	23124320-3 Dec 19, 2023	23124320-4 Dec 20, 2023	23124320-5 Dec 21, 2023	23124320-6 Dec 22, 2023	23124320-7 Dec 23, 2023
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
10:00 AM - 11:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
11:00 AM - 12:00 PM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
12:00 PM - 01:00 PM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
01:00 PM - 02:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
02:00 PM - 03:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
04:00 PM - 05:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
05:00 PM - 06:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
07:00 PM - 08:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
08:00 PM - 09:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
09:00 PM - 10:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
10:00 PM - 11:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
11:00 PM - 12:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
12:00 AM - 01:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
01:00 AM - 02:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
02:00 AM - 03:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
03:00 AM - 04:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
04:00 AM - 05:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
05:00 AM - 06:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.004
06:00 AM - 07:00 AM	0.003	0.003	0.003	0.003	0.003	0.004	0.004
07:00 AM - 08:00 AM	0.003	0.003	0.003	0.003	0.003	0.004	0.004
08:00 AM - 09:00 AM	0.003	0.003	0.003	0.003	0.003	0.004	0.004
Average	0.003	0.003	0.003	0.003	0.003	0.003	0.004
1hr - Maximum	0.004	0.003	0.003	0.003	0.003	0.004	0.004
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*  
Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1700421/EMAL

S:\Reports\_Air SOxNOx.rpt (4.14PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124320

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number: 2876996-1

Page 1 of 1

Sample Description Air Quality

Location หมู่ที่ 1 บ้านหนอง 12 ตำบลหนองใหญ่ (A2)

(GPS 47P 0732028, 1423115)  
Parameter Sulfur Dioxide (ppm)

Measurement Date Dec 17, 2023 - Dec 24, 2023

Measurement by Satcha Phetsawaeng

Time	23124320-8 Dec 17, 2023	23124320-9 Dec 18, 2023	23124320-10 Dec 19, 2023	23124320-11 Dec 20, 2023	23124320-12 Dec 21, 2023	23124320-13 Dec 22, 2023	23124320-14 Dec 23, 2023
10:00 AM - 11:00 AM	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 AM - 12:00 PM	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 PM - 01:00 PM	0.002	0.001	<0.001	0.001	<0.001	<0.001	<0.001
01:00 PM - 02:00 PM	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 PM - 03:00 PM	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 PM - 04:00 PM	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 PM - 05:00 PM	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 PM - 06:00 PM	0.002	<0.001	0.001	0.001	<0.001	<0.001	<0.001
06:00 PM - 07:00 PM	0.001	0.002	0.003	0.001	<0.001	<0.001	<0.001
07:00 PM - 08:00 PM	0.001	0.003	0.002	0.001	<0.001	<0.001	<0.001
08:00 PM - 09:00 PM	<0.001	0.003	0.002	0.001	<0.001	<0.001	<0.001
09:00 PM - 10:00 PM	<0.001	0.002	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	0.002	<0.001	<0.001	<0.001	<0.001
03:00 AM - 04:00 AM	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001
04:00 AM - 05:00 AM	<0.001	0.002	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	0.002	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
Average	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
1hr - Maximum	0.002	0.003	0.003	0.001	<0.001	<0.001	<0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Standard : Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

Reference Method : US EPA Method Part 53 and 58

Approved by

*Saranya C.*  
Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1700421/EMAL

S:\Reports\_Air SOxNOx.rpt (4.14PM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124320  
Date Received : Dec 25, 2023  
Date Reported : Dec 29, 2023  
Report Number: 2876997-1

Page 1 of 1

Sample Description	Air Quality						
Location	จุดที่ 7 บ้านโหนด ตำบลพนาภิรมย์ (A3) (GPS 47P 0731874, 1430331)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Dec 17, 2023 - Dec 24, 2023						
Measurement by	Satcha Phetsawaeng						
Time	23124320-15 Dec 17, 2023	23124320-16 Dec 18, 2023	23124320-17 Dec 19, 2023	23124320-18 Dec 20, 2023	23124320-19 Dec 21, 2023	23124320-20 Dec 22, 2023	23124320-21 Dec 23, 2023
11:00 AM - 12:00 PM	0.005	0.004	0.002	0.001	<0.001	0.002	0.002
12:00 PM - 01:00 PM	0.003	0.003	0.006	0.001	<0.001	0.002	0.002
01:00 PM - 02:00 PM	0.003	0.001	0.001	0.002	<0.001	0.002	0.001
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	<0.001	0.005	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.006	0.002	0.002	0.008	0.002
04:00 PM - 05:00 PM	0.003	0.002	0.001	0.002	0.001	0.008	0.002
05:00 PM - 06:00 PM	0.007	0.002	0.002	0.002	<0.001	0.004	<0.001
06:00 PM - 07:00 PM	0.003	0.002	0.002	0.002	0.001	0.002	<0.001
07:00 PM - 08:00 PM	0.003	0.003	0.001	0.002	0.002	0.002	<0.001
08:00 PM - 09:00 PM	0.003	0.003	<0.001	0.002	0.002	<0.001	0.001
09:00 PM - 10:00 PM	0.008	0.002	<0.001	0.003	0.002	<0.001	0.002
10:00 PM - 11:00 PM	0.005	0.002	<0.001	0.007	0.003	<0.001	0.006
11:00 PM - 12:00 AM	0.005	0.002	<0.001	0.003	0.006	<0.001	0.003
12:00 AM - 01:00 AM	0.004	0.001	<0.001	0.002	0.008	<0.001	0.004
01:00 AM - 02:00 AM	0.002	0.001	0.001	0.002	0.008	<0.001	0.003
02:00 AM - 03:00 AM	0.002	0.001	0.005	0.006	0.002	<0.001	0.003
03:00 AM - 04:00 AM	0.002	0.001	0.004	0.004	0.001	0.002	0.007
04:00 AM - 05:00 AM	0.002	0.001	0.002	0.003	0.001	0.003	0.003
05:00 AM - 06:00 AM	0.002	0.002	0.003	0.002	0.001	0.004	0.007
06:00 AM - 07:00 AM	0.002	0.004	0.003	0.002	0.003	0.004	0.002
07:00 AM - 08:00 AM	0.002	0.003	0.002	<0.001	0.002	0.004	0.002
08:00 AM - 09:00 AM	0.003	0.004	0.002	<0.001	0.001	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.006	0.001	<0.001	0.001	0.002	0.002
10:00 AM - 11:00 AM	0.004	0.007	0.004	<0.001	0.001	0.001	0.003
Average	0.003	0.003	0.002	0.002	0.002	0.002	0.003
1hr - Maximum	0.008	0.007	0.006	0.007	0.008	0.008	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

Approved by

*Saranya C.*

Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-29/ENAL

S:\Reports\_Air SOxNOx.rpt (4:14PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124320  
Date Received : Dec 25, 2023  
Date Reported : Dec 29, 2023  
Report Number: 2876999-1

Page 1 of 1

Sample Description	Air Quality						
Location	จุดที่ 6 บ้านโหนด ตำบลพนาภิรมย์ (A4) (GPS 47P 0733189, 1426937)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Dec 17, 2023 - Dec 24, 2023						
Measurement by	Satcha Phetsawaeng						
Time	23124320-22 Dec 17, 2023	23124320-23 Dec 18, 2023	23124320-24 Dec 19, 2023	23124320-25 Dec 20, 2023	23124320-26 Dec 21, 2023	23124320-27 Dec 22, 2023	23124320-28 Dec 23, 2023
12:00 PM - 01:00 PM	0.002	0.004	0.004	0.004	0.003	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.004	0.004	0.004	0.003	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.004	0.004	0.004	0.003	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.004	0.004	0.004	0.003	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.004	0.003	0.003	0.003	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.004	0.003	0.004	0.003	0.002	0.002
06:00 PM - 07:00 PM	0.003	0.004	0.004	0.004	0.003	0.002	0.002
07:00 PM - 08:00 PM	0.003	0.004	0.004	0.004	0.003	0.002	0.002
08:00 PM - 09:00 PM	0.003	0.005	0.005	0.005	0.003	0.002	0.002
09:00 PM - 10:00 PM	0.004	0.005	0.005	0.005	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.005	0.006	0.005	0.005	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.006	0.006	0.005	0.005	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.006	0.006	0.005	0.004	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.006	0.006	0.005	0.004	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.006	0.006	0.005	0.004	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.006	0.006	0.005	0.004	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.006	0.005	0.005	0.003	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.006	0.005	0.005	0.003	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.006	0.005	0.005	0.003	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.006	0.005	0.005	0.003	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.005	0.004	0.005	0.003	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.005	0.004	0.004	0.003	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.004	0.004	0.004	0.003	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.004	0.004	0.004	0.003	0.002	0.002	0.002
Average	0.004	0.005	0.004	0.004	0.002	0.002	0.002
1hr - Maximum	0.006	0.006	0.005	0.005	0.003	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12

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

Approved by

*Saranya C.*

Saranya Chalerthamrong  
Scientist (4)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-29/ENAL

S:\Reports\_Air SOxNOx.rpt (4:15PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 1 of 2

Sample Number : 23124321-1 to 7

Parameter : Wind Speed / Wind Direction

Location : หมู่ที่ 1 ตำบล 12 อำเภอเมือง (A1) (GPS 47P 0728843, 1425658)

Sampling Date : Dec 17 - Dec 24, 2023

Sampling by : Satcha Phetsawaeng

Time	Dec 17 - Dec 18, 2023			Dec 18 - Dec 19, 2023			Dec 19 - Dec 20, 2023			Dec 20 - Dec 21, 2023			Dec 21 - Dec 22, 2023			Dec 22 - Dec 23, 2023			Dec 23 - Dec 24, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	7.5	81.0	E	6.3	135.0	SE	6.0	0.0	N	7.1	106.0	ESE	6.3	28.0	NNE	8.0	44.0	NE	8.5	91.0	E
10:00 AM - 11:00 AM	7.1	107.0	ESE	7.6	53.0	NE	4.7	17.0	NNE	6.4	49.0	NE	6.2	41.0	NE	8.8	9.0	N	9.0	3.0	N
11:00 AM - 12:00 PM	5.8	0.0	N	6.9	56.0	NE	5.6	57.0	ENE	5.1	82.0	E	6.0	15.0	NNE	8.3	0.0	N	9.5	50.0	NE
12:00 PM - 01:00 PM	7.0	69.0	ENE	6.8	106.0	ESE	7.1	240.0	WSW	4.0	114.0	ESE	7.2	19.0	NNE	9.3	69.0	ENE	9.2	95.0	E
01:00 PM - 02:00 PM	3.6	106.0	ESE	7.2	69.0	ENE	6.0	87.0	E	4.0	90.0	E	7.0	56.0	NE	9.4	72.0	ENE	9.3	42.0	NE
02:00 PM - 03:00 PM	2.9	255.0	WSW	4.3	194.0	SSW	3.8	177.0	S	2.9	112.0	ESE	5.4	27.0	NNE	7.7	50.0	NE	8.0	31.0	NNE
03:00 PM - 04:00 PM	0.9	260.0	W	0.7	189.0	S	1.1	231.0	SW	1.5	129.0	SE	6.1	67.0	ENE	5.8	80.0	E	6.9	6.0	N
04:00 PM - 05:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	5.2	34.0	NE	6.0	82.0	E	5.4	30.0	NNE
05:00 PM - 06:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.3	45.0	NE	6.5	14.0	NNE	6.1	79.0	E	4.8	15.0	NNE
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	6.2	8.0	N	8.4	40.0	NE	6.4	47.0	NE
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	2.4	93.0	E	8.0	37.0	NE	6.9	20.0	NNE	6.8	44.0	NE
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	3.5	33.0	NNE	7.0	46.0	NE	7.2	68.0	ENE	6.6	28.0	NNE
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	6.3	47.0	NE	7.0	58.0	ENE	9.1	22.0	NNE	6.8	1.0	N
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	5.6	33.0	NNE	6.0	39.0	NE	5.8	9.0	N	8.0	17.0	NNE
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	4.1	17.0	NNE	6.1	56.0	NE	6.0	41.0	NE	6.2	13.0	NNE
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	4.2	1.0	N	6.0	93.0	E	9.1	25.0	NNE	6.6	17.0	NNE
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.6	65.0	ENE	5.0	75.0	ENE	7.7	359.0	N	7.2	3.0	N
02:00 AM - 03:00 AM	2.8	26.0	NNE	2.5	47.0	NE	0.0	-	-	2.4	25.0	NNE	6.0	54.0	NE	7.4	60.0	ENE	6.8	5.0	N
03:00 AM - 04:00 AM	2.6	41.0	NE	2.9	6.0	N	0.0	-	-	6.3	107.0	ESE	4.0	64.0	ENE	7.3	48.0	NE	8.0	50.0	NE
04:00 AM - 05:00 AM	3.9	20.0	NNE	3.6	11.0	N	1.3	2.0	N	7.9	22.0	NNE	5.0	80.0	E	8.7	7.0	N	6.9	36.0	NE
05:00 AM - 06:00 AM	5.8	90.0	E	4.5	26.0	NNE	4.1	27.0	NNE	8.1	82.0	E	5.0	59.0	ENE	10.5	65.0	ENE	4.0	75.0	ENE
06:00 AM - 07:00 AM	7.0	91.0	E	6.6	31.0	NNE	5.2	39.0	NE	6.6	97.0	E	6.0	103.0	ESE	11.7	22.0	NNE	2.0	80.0	E
07:00 AM - 08:00 AM	6.5	58.0	ENE	7.4	28.0	NNE	6.8	21.0	NNE	7.4	54.0	NE	5.0	76.0	ENE	9.6	19.0	NNE	3.0	53.0	NE
08:00 AM - 09:00 AM	7.8	143.0	SE	7.0	85.0	E	6.5	143.0	SE	7.3	93.0	E	4.0	119.0	ESE	8.2	5.0	N	5.0	85.0	E

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jittrantorn  
Assistant General 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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

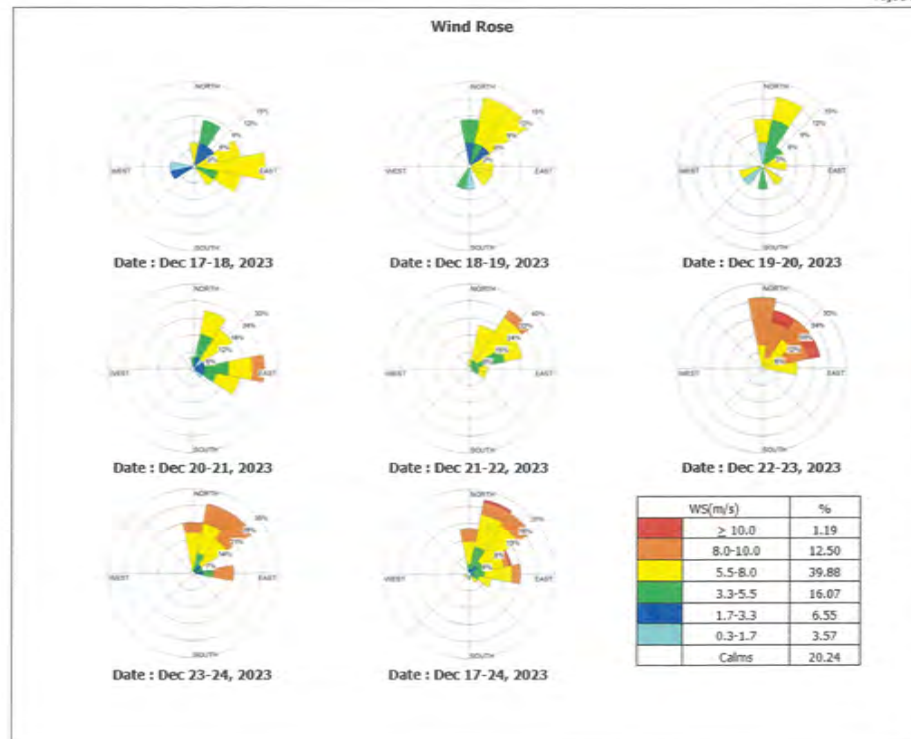
Lot ID: 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 2 of 2



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

Approved by

Sarayuth Jittrantorn  
Assistant General 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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 1 of 2

Sample Number : 23124321-8 to 14

Parameter : Wind Speed / Wind Direction

Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (A2) (GPS 47P 0732028, 1423115)

Sampling Date : Dec 17 - Dec 24, 2023

Sampling by : Sattha Phetsawaeng

Time	Dec 17 - Dec 18, 2023			Dec 18 - Dec 19, 2023			Dec 19 - Dec 20, 2023			Dec 20 - Dec 21, 2023			Dec 21 - Dec 22, 2023			Dec 22 - Dec 23, 2023			Dec 23 - Dec 24, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	6.0	75.0	ENE	7.0	40.0	NE	8.6	55.0	NE	6.8	4.0	N	7.3	60.0	ENE	9.2	18.0	NNE	11.0	287.0	VNW
11:00 AM - 12:00 PM	7.0	100.0	E	8.9	59.0	ENE	7.4	47.0	NE	7.2	294.0	VNW	7.0	80.0	E	10.3	57.0	ENE	10.6	1.0	N
12:00 PM - 01:00 PM	6.0	10.0	N	8.3	69.0	ENE	6.2	193.0	SSW	6.7	0.0	N	7.7	73.0	ENE	10.0	339.0	VNW	9.6	0.0	N
01:00 PM - 02:00 PM	6.0	65.0	ENE	6.6	0.0	N	5.7	0.0	N	5.9	56.0	NE	8.1	99.0	E	10.0	131.0	SE	10.4	48.0	NE
02:00 PM - 03:00 PM	3.0	100.0	E	6.8	43.0	NE	7.3	48.0	NE	5.2	43.0	NE	6.7	99.0	E	11.0	43.0	NE	9.4	0.0	N
03:00 PM - 04:00 PM	4.0	250.0	WSW	7.4	71.0	ENE	5.5	119.0	ESE	4.7	80.0	E	6.0	54.0	NE	10.3	70.0	ENE	9.6	22.0	NNE
04:00 PM - 05:00 PM	0.9	255.0	WSW	5.3	161.0	SSE	4.4	133.0	SE	4.4	162.0	SSE	7.2	12.0	NNE	10.3	34.0	NE	9.7	89.0	E
05:00 PM - 06:00 PM	2.0	240.0	WSW	3.5	188.0	S	3.6	183.0	S	3.2	193.0	SSW	5.6	15.0	NNE	9.4	37.0	NE	8.5	7.0	N
06:00 PM - 07:00 PM	3.0	8.0	N	2.6	112.0	ESE	1.5	117.0	ESE	2.3	178.0	S	5.7	0.0	N	8.2	337.0	VNW	5.7	0.0	N
07:00 PM - 08:00 PM	4.0	2.0	N	1.3	106.0	ESE	0.7	131.0	SE	2.0	12.0	NNE	4.6	20.0	NNE	8.0	0.0	N	5.3	359.0	N
08:00 PM - 09:00 PM	1.0	230.0	SW	0.0	-	-	0.0	-	-	1.3	2.0	N	5.7	5.0	N	8.1	45.0	NE	7.9	42.0	NE
09:00 PM - 10:00 PM	5.0	8.0	N	0.0	-	-	0.5	189.0	S	1.4	1.0	N	4.6	18.0	NNE	5.6	3.0	N	8.8	11.0	N
10:00 PM - 11:00 PM	3.0	9.0	N	0.5	177.0	S	0.0	-	-	2.3	16.0	NNE	7.3	10.0	N	4.6	10.0	N	8.7	355.0	N
11:00 PM - 12:00 AM	1.0	10.0	N	1.6	354.0	N	0.9	359.0	N	3.2	0.0	N	8.1	2.0	N	5.6	357.0	N	7.7	359.0	N
12:00 AM - 01:00 AM	4.0	25.0	NNE	1.4	292.0	VNW	1.4	301.0	VNW	6.0	7.0	N	8.7	30.0	NNE	9.6	344.0	VNW	7.2	304.0	NW
01:00 AM - 02:00 AM	3.0	10.0	N	1.9	261.0	W	0.8	265.0	W	3.0	9.0	N	8.4	4.0	N	6.1	359.0	N	7.1	356.0	N
02:00 AM - 03:00 AM	2.0	30.0	NNE	1.2	324.0	VW	0.7	350.0	N	4.2	359.0	N	7.7	36.0	NE	7.2	13.0	NNE	6.4	302.0	VNW
03:00 AM - 04:00 AM	2.8	25.0	NNE	0.9	266.0	W	0.9	352.0	N	5.3	20.0	NNE	6.9	19.0	NNE	9.4	5.0	N	6.5	297.0	VNW
04:00 AM - 05:00 AM	2.6	40.0	NE	0.6	266.0	W	1.8	356.0	N	3.8	359.0	N	9.2	359.0	N	8.5	27.0	NNE	9.5	353.0	N
05:00 AM - 06:00 AM	3.9	25.0	NNE	0.4	266.0	W	0.8	354.0	N	5.0	3.0	N	11.1	359.0	N	8.8	339.0	VNW	8.6	359.0	N
06:00 AM - 07:00 AM	5.8	95.0	E	1.0	285.0	VNW	3.0	0.0	N	6.3	33.0	NNE	8.7	55.0	NE	8.2	352.0	N	8.8	37.0	NE
07:00 AM - 08:00 AM	8.0	95.0	E	4.3	357.0	N	4.5	359.0	N	7.8	1.0	N	8.9	0.0	N	10.2	359.0	N	7.2	13.0	NNE
08:00 AM - 09:00 AM	5.0	60.0	ENE	7.0	0.0	N	6.2	359.0	N	8.0	0.0	N	10.2	48.0	NE	9.8	327.0	VNW	5.0	12.0	NNE
09:00 AM - 10:00 AM	6.0	142.0	SE	7.8	0.0	N	6.6	354.0	N	7.1	0.0	N	11.3	359.0	N	10.5	0.0	N	6.0	8.0	N

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

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

Approved by

Sarayuth Jitranont  
Assistant General 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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124321

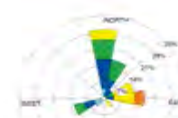
Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 2 of 2

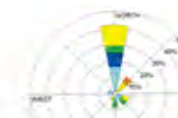
### Wind Rose



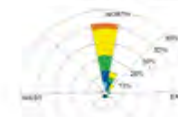
Date : Dec 17-18, 2023



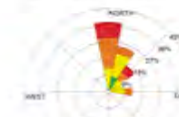
Date : Dec 18-19, 2023



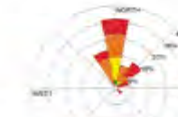
Date : Dec 19-20, 2023



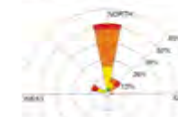
Date : Dec 20-21, 2023



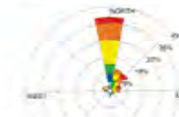
Date : Dec 21-22, 2023



Date : Dec 22-23, 2023



Date : Dec 23-24, 2023



Date : Dec 17-24, 2023

WS(m/s)	%
> 10.0	8.33
8.0-10.0	19.64
5.5-8.0	30.95
3.3-5.5	14.29
1.7-3.3	10.71
0.3-1.7	13.69
Calms	2.38

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

Approved by

Sarayuth Jitranont  
Assistant General Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 1 of 2

Sample Number

23124321-15 to 21

Parameter

Wind Speed / Wind Direction

Location

จุดที่ 7 บริเวณอาคาร ส่วนอาคาร (A3) (GPS 47P 0731874, 1430331)

Sampling Date

Dec 17 - Dec 24, 2023

Sampling by

Satcha Phetsawaeng

Time	Dec 17 - Dec 18, 2023			Dec 18 - Dec 19, 2023			Dec 19 - Dec 20, 2023			Dec 20 - Dec 21, 2023			Dec 21 - Dec 22, 2023			Dec 22 - Dec 23, 2023			Dec 23 - Dec 24, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	3.7	82.0	E	6.6	352.0	N	3.3	69.0	ENE	2.9	14.0	NNE	4.4	13.0	NNE	6.6	30.0	NNE	5.8	20.0	NNE
12:00 PM - 01:00 PM	3.9	108.0	ESE	4.4	359.0	N	2.8	93.0	E	2.7	1.0	N	3.6	359.0	N	4.3	31.0	NNE	7.0	10.0	N
01:00 PM - 02:00 PM	2.9	355.0	N	4.6	31.0	NNE	2.5	2.0	N	2.4	354.0	N	3.6	3.0	N	7.0	19.0	NNE	6.0	5.0	N
02:00 PM - 03:00 PM	2.5	86.0	E	3.2	335.0	NNW	1.7	346.0	NNW	3.6	179.0	S	3.1	20.0	NNE	8.0	5.0	N	7.0	8.0	N
03:00 PM - 04:00 PM	2.8	15.0	NNE	0.4	109.0	ESE	1.7	129.0	SE	1.7	14.0	NNE	2.2	9.0	N	3.5	34.0	NE	8.0	0.0	N
04:00 PM - 05:00 PM	1.6	192.0	SSW	1.5	126.0	SE	0.7	131.0	SE	1.2	47.0	NE	2.3	18.0	NNE	3.2	354.0	N	1.9	11.0	N
05:00 PM - 06:00 PM	2.3	161.0	SSE	0.0	-	-	0.0	-	-	0.0	-	-	2.5	23.0	NNE	3.5	5.0	N	2.3	4.0	N
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	1.0	23.0	NNE	2.4	22.0	NNE	4.8	1.0	N	3.0	14.0	NNE
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	2.1	1.0	N	5.1	16.0	NNE	3.8	0.0	N	2.9	8.0	N
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	2.1	355.0	N	5.0	354.0	N	4.9	8.0	N	3.4	2.0	N
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	3.0	10.0	N	4.6	7.0	N	4.6	8.0	N	3.0	9.0	N
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	2.2	359.0	N	3.1	8.0	N	7.0	23.0	NNE	3.2	14.0	NNE
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	3.0	359.0	N	2.4	0.0	N	5.0	3.0	N	2.8	0.0	N
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.7	3.0	N	4.2	0.0	N	8.0	7.0	N	3.0	73.0	ENE
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	1.5	20.0	NNE	4.0	21.0	NNE	8.0	10.0	N	3.1	7.0	N
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	1.9	3.0	N	3.3	15.0	NNE	3.8	0.0	N	3.4	354.0	N
03:00 AM - 04:00 AM	0.9	358.0	N	0.8	5.0	N	0.0	-	-	3.5	359.0	N	5.3	35.0	NE	3.2	13.0	NNE	3.3	313.0	NW
04:00 AM - 05:00 AM	0.0	-	-	1.6	4.0	N	1.6	343.0	NNW	4.8	359.0	N	6.0	9.0	N	5.0	350.0	N	2.0	310.0	NW
05:00 AM - 06:00 AM	2.8	359.0	N	2.8	45.0	NE	2.3	7.0	N	3.7	4.0	N	8.0	335.0	NNW	5.3	359.0	N	1.3	75.0	ENE
06:00 AM - 07:00 AM	2.5	3.0	N	4.3	339.0	NNW	3.7	4.0	N	4.0	37.0	NE	5.8	20.0	NNE	4.5	359.0	N	5.0	76.0	ENE
07:00 AM - 08:00 AM	3.1	10.0	N	3.5	356.0	N	3.6	359.0	N	6.2	7.0	N	6.9	12.0	NNE	4.4	1.0	N	4.0	77.0	ENE
08:00 AM - 09:00 AM	3.9	39.0	NE	3.3	335.0	NNW	4.0	328.0	NNW	4.8	0.0	N	6.3	63.0	ENE	6.5	72.0	ENE	6.0	20.0	NNE
09:00 AM - 10:00 AM	3.5	12.0	NNE	4.2	3.0	N	4.3	15.0	NNE	5.4	20.0	NNE	5.0	53.0	NE	6.8	31.0	NNE	8.0	10.0	N
10:00 AM - 11:00 AM	4.6	0.0	N	2.9	0.0	N	4.7	359.0	N	4.1	19.0	NNE	4.1	47.0	NE	4.9	61.0	ENE	7.0	8.0	N

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jitranont  
Assistant General 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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124321

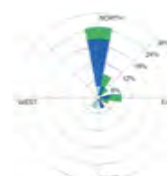
Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 2 of 2

### Wind Rose



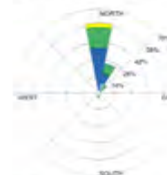
Date : Dec 17-18, 2023



Date : Dec 18-19, 2023



Date : Dec 19-20, 2023



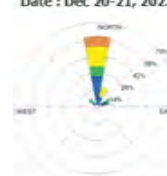
Date : Dec 20-21, 2023



Date : Dec 21-22, 2023



Date : Dec 22-23, 2023



Date : Dec 23-24, 2023



Date : Dec 24-25, 2023

WS(m/s)	%
> 10.0	0.00
8.0-10.0	3.57
5.5-8.0	10.12
3.3-5.5	33.33
1.7-3.3	26.79
0.3-1.7	7.14
Calms	19.05

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

Approved by

Sarayuth Jitranont  
Assistant General Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 1 of 2

**Sample Number** : 23124321-22 to 28  
**Parameter** : Wind Speed / Wind Direction  
**Location** : หมู่ที่ 6 บ้านหนองระก้า ตำบลหนองเต็ง (A4) (GPS 47P 0733189, 1426937)  
**Sampling Date** : Dec 17 - Dec 24, 2023  
**Sampling by** : Satcha Phetsawaeng

Time	Dec 17 - Dec 18, 2023			Dec 18 - Dec 19, 2023			Dec 19 - Dec 20, 2023			Dec 20 - Dec 21, 2023			Dec 21 - Dec 22, 2023			Dec 22 - Dec 23, 2023			Dec 23 - Dec 24, 2023		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	6.6	88.0	E	6.8	94.0	E	6.7	42.0	NE	6.1	63.0	ENE	6.6	39.0	NE	9.4	100.0	E	7.4	48.0	NE
01:00 PM - 02:00 PM	7.3	49.0	NE	8.0	30.0	NNE	6.8	93.0	E	5.7	69.0	ENE	7.0	88.0	E	8.6	16.0	NNE	7.7	11.0	N
02:00 PM - 03:00 PM	6.7	106.0	ESE	6.5	73.0	ENE	6.9	135.0	SE	6.4	61.0	ENE	7.6	120.0	ESE	8.6	98.0	E	8.0	17.0	NNE
03:00 PM - 04:00 PM	6.5	89.0	E	7.7	52.0	NE	5.9	359.0	N	5.7	63.0	ENE	6.3	106.0	ESE	9.2	45.0	NE	9.5	324.0	NW
04:00 PM - 05:00 PM	6.3	77.0	ENE	6.9	38.0	NE	5.9	127.0	SE	4.8	71.0	ENE	5.6	92.0	E	8.3	79.0	E	9.1	92.0	E
05:00 PM - 06:00 PM	6.4	7.0	N	6.8	102.0	ESE	6.0	103.0	ESE	4.8	88.0	E	6.2	38.0	NE	9.5	42.0	NE	10.1	106.0	ESE
06:00 PM - 07:00 PM	4.9	60.0	ENE	6.4	101.0	E	5.2	78.0	ENE	4.1	81.0	E	5.8	80.0	E	8.9	58.0	ENE	8.5	98.0	E
07:00 PM - 08:00 PM	3.1	157.0	SSE	5.7	173.0	S	4.5	133.0	SE	0.7	181.0	S	6.0	26.0	NNE	9.1	23.0	NNE	7.7	28.0	NNE
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	4.4	50.0	NE	5.8	72.0	ENE	3.8	12.0	NNE
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	5.2	39.0	NE	4.4	43.0	NE	3.8	22.0	NNE
10:00 PM - 11:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	5.3	58.0	ENE	4.2	20.0	NNE
11:00 PM - 12:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	3.5	47.0	NE	6.6	7.0	N	7.1	36.0	NE
12:00 AM - 01:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	6.0	78.0	ENE	4.1	58.0	ENE	5.2	27.0	NNE
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	6.1	89.0	E	6.0	13.0	NNE	5.5	42.0	NE
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.8	41.0	NE	5.9	82.0	E	6.4	38.0	NE	5.3	34.0	NE
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	6.2	47.0	NE	3.3	57.0	ENE	6.4	42.0	NE
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.9	63.0	ENE	3.4	17.0	NNE	5.3	41.0	NE	5.9	30.0	NNE
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	3.6	27.0	NNE	0.0	-	-	8.5	53.0	NE	5.0	29.0	NNE
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	2.9	40.0	NE	3.3	61.0	ENE	6.9	27.0	NNE	6.7	48.0	NE
07:00 AM - 08:00 AM	1.7	67.0	ENE	0.0	-	-	0.0	-	-	3.4	26.0	NNE	7.4	27.0	NNE	7.5	9.0	N	6.7	31.0	NNE
08:00 AM - 09:00 AM	2.5	9.0	N	0.0	-	-	0.0	-	-	4.8	56.0	NE	8.3	46.0	NE	7.2	52.0	NE	6.8	43.0	NE
09:00 AM - 10:00 AM	3.7	26.0	NNE	4.2	31.0	NNE	0.0	-	-	6.8	27.0	NNE	8.9	83.0	E	8.2	56.0	NE	5.8	89.0	E
10:00 AM - 11:00 AM	5.2	59.0	ENE	6.3	35.0	NE	4.8	0.0	N	7.3	86.0	E	10.9	41.0	NE	9.5	49.0	NE	4.0	88.0	E
11:00 AM - 12:00 PM	5.6	70.0	ENE	6.2	85.0	E	4.9	89.0	E	6.3	75.0	ENE	9.2	47.0	NE	7.9	34.0	NE	3.0	80.0	E

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jitranont  
Assistant General 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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

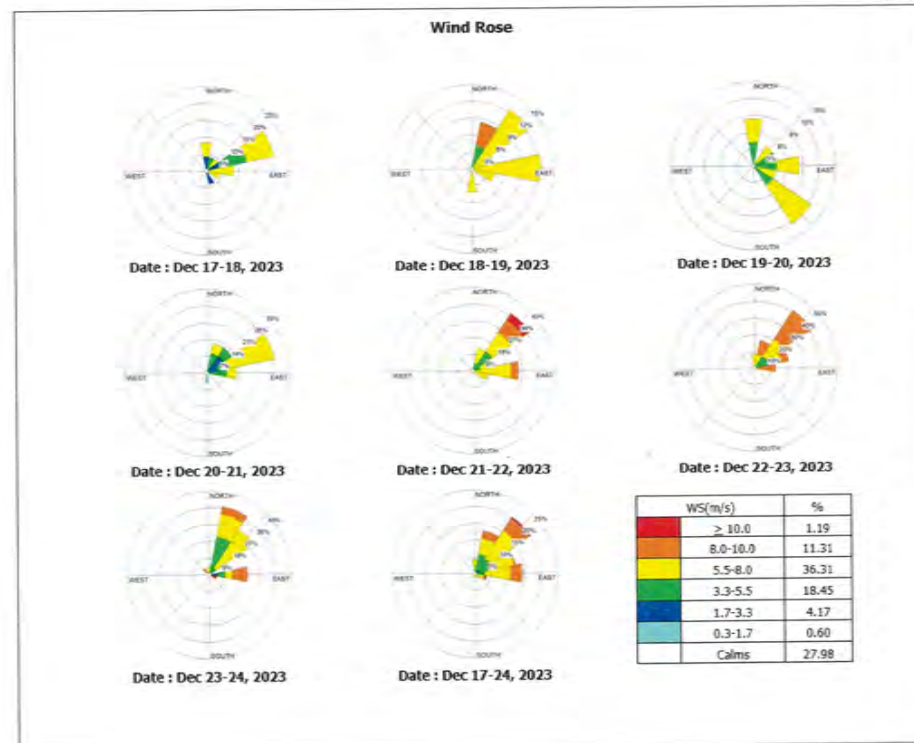
**Lot ID:** 23124321

Date Received : Dec 25, 2023

Date Reported : Dec 29, 2023

Report Number : 2816213-1

Page 2 of 2



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

Approved by

Sarayuth Jitranont  
Assistant General Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



---

ระดับเสียงโดยทั่วไป





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873430-1

Page 1 of 1

Sample Number 23124325-1  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านเลข 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
 Measurement Date Dec 17 - Dec 18, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.6	75.8	44.9
12:00 PM - 01:00 PM	48.5	72.0	43.7
01:00 PM - 02:00 PM	48.5	65.8	43.9
02:00 PM - 03:00 PM	53.3	85.6	45.1
03:00 PM - 04:00 PM	52.2	82.1	44.4
04:00 PM - 05:00 PM	50.2	73.7	45.5
05:00 PM - 06:00 PM	47.5	75.0	44.2
06:00 PM - 07:00 PM	47.0	76.9	44.8
07:00 PM - 08:00 PM	54.2	88.0	44.9
08:00 PM - 09:00 PM	48.0	69.0	44.7
09:00 PM - 10:00 PM	47.7	72.1	45.0
10:00 PM - 11:00 PM	47.1	61.5	44.7
11:00 PM - 12:00 AM	47.0	66.7	43.2
12:00 AM - 01:00 AM	45.5	68.6	43.5
01:00 AM - 02:00 AM	45.9	63.5	42.7
02:00 AM - 03:00 AM	47.5	68.0	42.2
03:00 AM - 04:00 AM	49.1	76.2	40.3
04:00 AM - 05:00 AM	45.7	72.7	42.0
05:00 AM - 06:00 AM	52.2	78.0	44.7
06:00 AM - 07:00 AM	56.1	86.9	47.0
07:00 AM - 08:00 AM	52.8	73.7	46.3
08:00 AM - 09:00 AM	51.1	74.0	46.3
09:00 AM - 10:00 AM	51.3	71.7	45.2
10:00 AM - 11:00 AM	58.2	89.5	47.5
Leq Average 24 hrs. (dB(A))	51.4		
Lmax (dB(A))		89.5	
L90 (dB(A))			44.7
Ldn (dB(A))	56.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise.rpt (10:36AM)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873431-1

Page 1 of 1

Sample Number 23124325-2  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านเลข 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
 Measurement Date Dec 18 - Dec 19, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.2	79.5	45.1
12:00 PM - 01:00 PM	51.2	76.1	45.6
01:00 PM - 02:00 PM	51.6	74.8	45.9
02:00 PM - 03:00 PM	50.9	73.0	46.1
03:00 PM - 04:00 PM	52.0	74.2	46.3
04:00 PM - 05:00 PM	52.0	78.3	45.5
05:00 PM - 06:00 PM	48.2	70.3	44.5
06:00 PM - 07:00 PM	48.2	72.3	45.4
07:00 PM - 08:00 PM	47.4	68.2	44.6
08:00 PM - 09:00 PM	47.0	62.6	44.4
09:00 PM - 10:00 PM	46.7	72.1	43.8
10:00 PM - 11:00 PM	44.5	62.3	42.5
11:00 PM - 12:00 AM	44.7	59.9	43.0
12:00 AM - 01:00 AM	48.0	72.4	43.4
01:00 AM - 02:00 AM	43.1	66.6	40.5
02:00 AM - 03:00 AM	41.9	62.9	40.0
03:00 AM - 04:00 AM	43.7	67.0	41.4
04:00 AM - 05:00 AM	55.0	93.6	40.6
05:00 AM - 06:00 AM	50.8	85.0	44.2
06:00 AM - 07:00 AM	54.5	84.8	47.6
07:00 AM - 08:00 AM	52.3	72.2	46.1
08:00 AM - 09:00 AM	54.7	88.7	47.1
09:00 AM - 10:00 AM	55.7	90.1	47.1
10:00 AM - 11:00 AM	51.0	85.3	45.5
Leq Average 24 hrs. (dB(A))	51.0		
Lmax (dB(A))		93.6	
L90 (dB(A))			44.6
Ldn (dB(A))	56.6		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise.rpt (10:37AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124325  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number: 2873432-1

Page 1 of 1

Sample Number : 23124325-3  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 1 บ้านดอน 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date : Dec 19 - Dec 20, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	55.0	88.1	44.1
12:00 PM - 01:00 PM	51.4	77.7	44.3
01:00 PM - 02:00 PM	51.1	70.3	45.5
02:00 PM - 03:00 PM	50.4	78.2	44.5
03:00 PM - 04:00 PM	52.3	73.4	45.5
04:00 PM - 05:00 PM	55.9	87.9	44.8
05:00 PM - 06:00 PM	48.4	69.2	44.4
06:00 PM - 07:00 PM	47.2	66.3	44.4
07:00 PM - 08:00 PM	49.4	74.2	44.6
08:00 PM - 09:00 PM	46.4	60.7	44.0
09:00 PM - 10:00 PM	48.4	59.5	46.0
10:00 PM - 11:00 PM	47.7	63.8	45.1
11:00 PM - 12:00 AM	46.1	76.0	42.9
12:00 AM - 01:00 AM	43.2	53.1	42.0
01:00 AM - 02:00 AM	43.3	60.9	41.6
02:00 AM - 03:00 AM	42.6	69.3	40.4
03:00 AM - 04:00 AM	42.0	58.6	39.8
04:00 AM - 05:00 AM	45.8	72.2	41.2
05:00 AM - 06:00 AM	52.1	83.2	44.5
06:00 AM - 07:00 AM	53.9	88.8	47.1
07:00 AM - 08:00 AM	54.9	89.9	45.1
08:00 AM - 09:00 AM	50.4	68.3	46.0
09:00 AM - 10:00 AM	50.9	72.9	45.9
10:00 AM - 11:00 AM	50.9	70.6	46.5

Leq Average 24 hrs. (dB(A)) : 50.8  
Lmax (dB(A)) : 89.9  
L90 (dB(A)) : 44.5  
Ldn (dB(A)) : 55.5  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kusumwong  
Scientist (4)

Approved by

Supot S.

Supot Salameh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise.rpt (10:37AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124325  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number: 2873433-1

Page 1 of 1

Sample Number : 23124325-4  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 1 บ้านดอน 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date : Dec 20 - Dec 21, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.5	72.2	44.9
12:00 PM - 01:00 PM	51.1	71.5	44.2
01:00 PM - 02:00 PM	47.3	65.1	42.6
02:00 PM - 03:00 PM	49.6	72.2	44.2
03:00 PM - 04:00 PM	49.9	75.7	45.3
04:00 PM - 05:00 PM	55.9	93.5	45.4
05:00 PM - 06:00 PM	52.9	87.8	44.7
06:00 PM - 07:00 PM	51.2	79.6	45.2
07:00 PM - 08:00 PM	47.0	62.6	44.5
08:00 PM - 09:00 PM	49.1	79.3	43.3
09:00 PM - 10:00 PM	46.4	68.2	43.2
10:00 PM - 11:00 PM	47.0	72.4	42.8
11:00 PM - 12:00 AM	46.9	66.6	43.3
12:00 AM - 01:00 AM	48.8	75.4	43.2
01:00 AM - 02:00 AM	44.9	61.5	42.2
02:00 AM - 03:00 AM	43.7	58.1	41.1
03:00 AM - 04:00 AM	42.5	64.6	40.0
04:00 AM - 05:00 AM	43.7	62.1	40.7
05:00 AM - 06:00 AM	58.8	92.3	45.7
06:00 AM - 07:00 AM	53.4	85.2	48.4
07:00 AM - 08:00 AM	53.2	71.8	49.1
08:00 AM - 09:00 AM	52.7	76.2	48.0
09:00 AM - 10:00 AM	55.2	75.8	47.2
10:00 AM - 11:00 AM	51.9	80.8	46.3

Leq Average 24 hrs. (dB(A)) : 51.7  
Lmax (dB(A)) : 93.5  
L90 (dB(A)) : 44.2  
Ldn (dB(A)) : 57.9  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kusumwong  
Scientist (4)

Approved by

Supot S.

Supot Salameh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise.rpt (10:37AM)





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873434-1

Page 1 of 1

Sample Number 23124325-5  
Parameter Noise (Leq 24 hrs.)  
Location หมู่ที่ 1 บ้านทอง 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 21 - Dec 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.6	71.9	43.9
12:00 PM - 01:00 PM	52.7	77.8	44.6
01:00 PM - 02:00 PM	49.8	72.2	44.7
02:00 PM - 03:00 PM	52.9	74.2	46.2
03:00 PM - 04:00 PM	52.7	76.1	46.3
04:00 PM - 05:00 PM	52.8	80.9	46.4
05:00 PM - 06:00 PM	50.9	76.5	46.9
06:00 PM - 07:00 PM	50.0	76.2	45.9
07:00 PM - 08:00 PM	57.5	88.0	45.2
08:00 PM - 09:00 PM	58.6	86.6	45.1
09:00 PM - 10:00 PM	51.5	79.1	47.4
10:00 PM - 11:00 PM	52.6	78.6	48.2
11:00 PM - 12:00 AM	54.1	79.4	49.6
12:00 AM - 01:00 AM	48.1	71.9	44.3
01:00 AM - 02:00 AM	45.1	74.6	41.7
02:00 AM - 03:00 AM	56.2	86.1	44.2
03:00 AM - 04:00 AM	50.9	84.6	46.0
04:00 AM - 05:00 AM	55.2	81.1	47.3
05:00 AM - 06:00 AM	59.1	88.9	52.1
06:00 AM - 07:00 AM	58.4	91.7	53.0
07:00 AM - 08:00 AM	57.0	80.9	52.1
08:00 AM - 09:00 AM	56.4	74.8	51.9
09:00 AM - 10:00 AM	56.8	76.0	52.2
10:00 AM - 11:00 AM	55.0	76.5	50.3

Leq Average 24 hrs. (dB(A))

54.8

Lmax (dB(A))

91.7

L90 (dB(A))

46.3

Ldn (dB(A))

61.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-37AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873435-1

Page 1 of 1

Sample Number 23124325-6  
Parameter Noise (Leq 24 hrs.)  
Location หมู่ที่ 1 บ้านทอง 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 22 - Dec 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	54.6	77.5	49.7
12:00 PM - 01:00 PM	53.5	79.3	48.2
01:00 PM - 02:00 PM	53.0	77.3	48.1
02:00 PM - 03:00 PM	53.5	68.7	48.8
03:00 PM - 04:00 PM	53.6	74.9	48.5
04:00 PM - 05:00 PM	59.0	94.7	48.0
05:00 PM - 06:00 PM	49.9	81.6	45.1
06:00 PM - 07:00 PM	47.5	68.1	44.5
07:00 PM - 08:00 PM	56.9	88.8	44.8
08:00 PM - 09:00 PM	52.3	68.5	46.6
09:00 PM - 10:00 PM	46.7	69.4	43.0
10:00 PM - 11:00 PM	50.1	77.9	43.8
11:00 PM - 12:00 AM	47.1	67.9	42.6
12:00 AM - 01:00 AM	49.4	82.1	41.8
01:00 AM - 02:00 AM	44.5	70.3	40.5
02:00 AM - 03:00 AM	47.8	65.7	43.4
03:00 AM - 04:00 AM	51.3	82.1	45.0
04:00 AM - 05:00 AM	49.9	76.8	45.4
05:00 AM - 06:00 AM	59.4	91.9	47.8
06:00 AM - 07:00 AM	54.1	81.0	49.3
07:00 AM - 08:00 AM	56.7	80.7	51.0
08:00 AM - 09:00 AM	56.1	76.1	52.1
09:00 AM - 10:00 AM	53.5	74.2	49.1
10:00 AM - 11:00 AM	53.2	75.8	47.7

Leq Average 24 hrs. (dB(A))

53.8

Lmax (dB(A))

94.7

L90 (dB(A))

46.6

Ldn (dB(A))

59.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-37AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873436-1

Page 1 of 1

Sample Number : 23124325-7  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N1) (GPS 47P 0728784, 1425714)  
Measurement Date : Dec 23 - Dec 24, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 1073423

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	54.1	83.7	48.2
12:00 PM - 01:00 PM	54.1	78.6	48.8
01:00 PM - 02:00 PM	52.0	68.1	47.3
02:00 PM - 03:00 PM	53.4	73.7	48.8
03:00 PM - 04:00 PM	54.6	69.1	50.6
04:00 PM - 05:00 PM	53.6	87.2	47.7
05:00 PM - 06:00 PM	53.4	86.1	46.3
06:00 PM - 07:00 PM	48.2	70.6	44.9
07:00 PM - 08:00 PM	47.6	67.7	44.4
08:00 PM - 09:00 PM	48.1	63.6	45.2
09:00 PM - 10:00 PM	47.0	65.0	44.4
10:00 PM - 11:00 PM	47.9	66.1	44.9
11:00 PM - 12:00 AM	49.1	73.8	44.8
12:00 AM - 01:00 AM	47.0	66.7	43.1
01:00 AM - 02:00 AM	45.8	63.8	41.9
02:00 AM - 03:00 AM	46.0	76.0	42.1
03:00 AM - 04:00 AM	46.8	65.4	42.8
04:00 AM - 05:00 AM	47.3	64.0	43.3
05:00 AM - 06:00 AM	52.3	87.5	44.2
06:00 AM - 07:00 AM	51.3	84.2	46.3
07:00 AM - 08:00 AM	54.5	90.9	46.9
08:00 AM - 09:00 AM	55.5	79.7	46.5
09:00 AM - 10:00 AM	51.1	73.1	46.1
10:00 AM - 11:00 AM	51.1	70.8	46.7

Leq Average 24 hrs. (dB(A)) : 51.6

Lmax (dB(A)) : 90.9

L90 (dB(A)) : 45.2

Ldn (dB(A)) : 56.0

Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S: Reports\_Air Noise.rpt (10:28AM)

17004-21/ EMAIL



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873437-1

Page 1 of 1

Sample Number : 23124325-8  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N2) (GPS 47P 0731936, 1423172)  
Measurement Date : Dec 17 - Dec 18, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.6	82.2	41.2
11:00 AM - 12:00 PM	47.9	67.3	41.8
12:00 PM - 01:00 PM	44.7	63.1	38.9
01:00 PM - 02:00 PM	43.4	63.7	38.5
02:00 PM - 03:00 PM	46.3	72.1	40.3
03:00 PM - 04:00 PM	44.5	69.9	40.2
04:00 PM - 05:00 PM	47.6	78.3	42.1
05:00 PM - 06:00 PM	48.9	75.9	45.8
06:00 PM - 07:00 PM	51.2	71.7	49.4
07:00 PM - 08:00 PM	50.8	76.7	49.1
08:00 PM - 09:00 PM	50.2	65.1	48.9
09:00 PM - 10:00 PM	54.4	79.6	47.9
10:00 PM - 11:00 PM	48.3	58.0	46.6
11:00 PM - 12:00 AM	46.9	67.0	45.7
12:00 AM - 01:00 AM	48.7	79.1	44.5
01:00 AM - 02:00 AM	45.3	54.5	43.8
02:00 AM - 03:00 AM	49.0	78.1	44.2
03:00 AM - 04:00 AM	46.0	58.1	44.8
04:00 AM - 05:00 AM	48.8	75.5	45.9
05:00 AM - 06:00 AM	52.1	76.0	48.5
06:00 AM - 07:00 AM	50.1	72.6	46.7
07:00 AM - 08:00 AM	53.2	74.3	44.3
08:00 AM - 09:00 AM	49.8	75.6	42.7
09:00 AM - 10:00 AM	48.9	74.7	43.3

Leq Average 24 hrs. (dB(A)) : 49.5

Lmax (dB(A)) : 82.2

L90 (dB(A)) : 44.3

Ldn (dB(A)) : 55.4

Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S: Reports\_Air Noise.rpt (10:38AM)

17004-21/ EMAIL





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873438-1

Page 1 of 1

Sample Number 23124325-9  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามสูง (NZ) (GPS 47P 0731936, 1423172)  
 Measurement Date Dec 18 - Dec 19, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.4	68.9	44.2
11:00 AM - 12:00 PM	49.4	73.4	43.8
12:00 PM - 01:00 PM	48.4	77.2	42.3
01:00 PM - 02:00 PM	45.3	60.9	41.0
02:00 PM - 03:00 PM	48.9	69.4	43.9
03:00 PM - 04:00 PM	48.6	74.6	44.4
04:00 PM - 05:00 PM	51.1	81.4	44.3
05:00 PM - 06:00 PM	49.0	72.5	45.0
06:00 PM - 07:00 PM	48.7	64.2	47.5
07:00 PM - 08:00 PM	52.2	60.4	48.9
08:00 PM - 09:00 PM	50.7	62.0	47.6
09:00 PM - 10:00 PM	56.5	63.0	54.0
10:00 PM - 11:00 PM	58.9	62.3	56.9
11:00 PM - 12:00 AM	57.0	70.8	53.2
12:00 AM - 01:00 AM	56.1	60.3	51.9
01:00 AM - 02:00 AM	50.5	59.2	45.3
02:00 AM - 03:00 AM	52.9	58.0	50.1
03:00 AM - 04:00 AM	51.6	59.9	48.4
04:00 AM - 05:00 AM	52.0	58.7	49.2
05:00 AM - 06:00 AM	53.2	74.2	50.9
06:00 AM - 07:00 AM	51.3	73.5	46.1
07:00 AM - 08:00 AM	48.2	65.8	44.3
08:00 AM - 09:00 AM	47.8	64.4	43.9
09:00 AM - 10:00 AM	48.0	71.2	42.9

Leq Average 24 hrs. (dB(A))

52.5

Lmax (dB(A))

81.4

L90 (dB(A))

45.3

Ldn (dB(A))

60.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Report\Air Noise\pt (10-3848)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873439-1

Page 1 of 1

Sample Number 23124325-10  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามสูง (NZ) (GPS 47P 0731936, 1423172)  
 Measurement Date Dec 19 - Dec 20, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.5	78.4	43.6
11:00 AM - 12:00 PM	54.4	77.7	43.5
12:00 PM - 01:00 PM	50.6	80.4	40.4
01:00 PM - 02:00 PM	53.3	76.6	42.2
02:00 PM - 03:00 PM	50.6	77.1	42.3
03:00 PM - 04:00 PM	56.9	78.6	48.5
04:00 PM - 05:00 PM	56.9	73.3	47.5
05:00 PM - 06:00 PM	57.5	76.1	52.6
06:00 PM - 07:00 PM	59.7	72.4	56.9
07:00 PM - 08:00 PM	58.8	82.3	54.6
08:00 PM - 09:00 PM	50.4	64.9	48.1
09:00 PM - 10:00 PM	50.0	56.9	48.1
10:00 PM - 11:00 PM	51.8	70.5	49.3
11:00 PM - 12:00 AM	46.5	60.5	44.6
12:00 AM - 01:00 AM	48.7	73.8	44.5
01:00 AM - 02:00 AM	49.5	75.2	45.0
02:00 AM - 03:00 AM	48.6	74.0	45.1
03:00 AM - 04:00 AM	47.7	74.2	44.5
04:00 AM - 05:00 AM	50.3	57.7	46.7
05:00 AM - 06:00 AM	52.8	73.9	49.6
06:00 AM - 07:00 AM	57.0	91.2	45.4
07:00 AM - 08:00 AM	50.3	73.3	44.8
08:00 AM - 09:00 AM	51.5	77.8	46.3
09:00 AM - 10:00 AM	50.6	75.6	46.3

Leq Average 24 hrs. (dB(A))

54.0

Lmax (dB(A))

91.2

L90 (dB(A))

45.4

Ldn (dB(A))

58.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Report\Air Noise\pt (10-3848)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873440-1

Page 1 of 1

Sample Number 23124325-11  
Parameter Noise (Leq 24 hrs.)  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 20 - Dec 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.6	74.4	46.2
11:00 AM - 12:00 PM	49.7	69.8	44.4
12:00 PM - 01:00 PM	48.8	72.5	43.5
01:00 PM - 02:00 PM	49.7	78.7	45.3
02:00 PM - 03:00 PM	50.2	68.1	46.2
03:00 PM - 04:00 PM	51.5	75.3	46.0
04:00 PM - 05:00 PM	49.7	70.9	46.3
05:00 PM - 06:00 PM	55.7	75.3	49.4
06:00 PM - 07:00 PM	60.3	78.7	56.2
07:00 PM - 08:00 PM	61.5	73.0	57.5
08:00 PM - 09:00 PM	59.1	67.8	55.6
09:00 PM - 10:00 PM	57.7	71.7	53.3
10:00 PM - 11:00 PM	51.3	59.4	47.4
11:00 PM - 12:00 AM	51.3	79.7	45.3
12:00 AM - 01:00 AM	48.0	68.7	44.9
01:00 AM - 02:00 AM	51.0	74.2	44.3
02:00 AM - 03:00 AM	48.4	59.5	45.7
03:00 AM - 04:00 AM	46.7	66.4	44.4
04:00 AM - 05:00 AM	51.8	74.0	46.8
05:00 AM - 06:00 AM	52.4	72.3	48.2
06:00 AM - 07:00 AM	52.6	78.0	49.0
07:00 AM - 08:00 AM	59.5	79.9	50.3
08:00 AM - 09:00 AM	55.1	76.9	48.3
09:00 AM - 10:00 AM	55.9	74.7	46.4

Leq Average 24 hrs. (dB(A))

55.1

Lmax (dB(A))

79.9

L90 (dB(A))

46.3

Ldn (dB(A))

58.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak

Thanita Kulsumwong  
Scientist (4)

Approved by

Supt S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise.rpt (10:38AM)

17004-21/ EMAIL



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873441-1

Page 1 of 1

Sample Number 23124325-12  
Parameter Noise (Leq 24 hrs.)  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 21 - Dec 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.4	85.0	44.7
11:00 AM - 12:00 PM	51.9	73.0	47.0
12:00 PM - 01:00 PM	60.7	78.9	53.5
01:00 PM - 02:00 PM	60.8	81.5	52.5
02:00 PM - 03:00 PM	62.7	81.0	52.7
03:00 PM - 04:00 PM	55.7	82.4	47.0
04:00 PM - 05:00 PM	52.5	75.3	48.0
05:00 PM - 06:00 PM	52.7	70.8	49.6
06:00 PM - 07:00 PM	57.5	82.9	52.1
07:00 PM - 08:00 PM	56.7	76.5	53.0
08:00 PM - 09:00 PM	54.4	77.4	49.6
09:00 PM - 10:00 PM	55.2	72.1	51.1
10:00 PM - 11:00 PM	54.9	70.3	50.1
11:00 PM - 12:00 AM	51.1	74.6	47.2
12:00 AM - 01:00 AM	49.8	69.2	45.9
01:00 AM - 02:00 AM	48.8	59.4	46.6
02:00 AM - 03:00 AM	48.8	54.5	47.2
03:00 AM - 04:00 AM	49.1	74.9	46.1
04:00 AM - 05:00 AM	51.2	65.7	48.1
05:00 AM - 06:00 AM	50.8	71.2	47.1
06:00 AM - 07:00 AM	52.1	75.2	47.9
07:00 AM - 08:00 AM	58.4	92.0	51.1
08:00 AM - 09:00 AM	58.3	88.8	52.3
09:00 AM - 10:00 AM	56.2	77.6	51.4

Leq Average 24 hrs. (dB(A))

56.3

Lmax (dB(A))

92.0

L90 (dB(A))

48.1

Ldn (dB(A))

59.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak

Thanita Kulsumwong  
Scientist (4)

Approved by

Supt S

Supot Salamteh  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise.rpt (10:38AM)

17004-21/ EMAIL





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873442-1

Page 1 of 1

Sample Number 23124325-13  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (NZ) (GPS 47P 0731936, 1423172)  
 Measurement Date Dec 22 - Dec 23, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.0	84.5	50.3
11:00 AM - 12:00 PM	55.7	81.1	49.3
12:00 PM - 01:00 PM	54.5	80.0	48.8
01:00 PM - 02:00 PM	54.8	82.5	50.2
02:00 PM - 03:00 PM	54.9	78.0	50.5
03:00 PM - 04:00 PM	58.2	80.4	53.0
04:00 PM - 05:00 PM	57.4	74.5	53.8
05:00 PM - 06:00 PM	59.5	78.8	55.8
06:00 PM - 07:00 PM	59.6	72.6	54.5
07:00 PM - 08:00 PM	54.9	72.2	48.4
08:00 PM - 09:00 PM	49.9	74.0	43.7
09:00 PM - 10:00 PM	45.7	70.5	41.3
10:00 PM - 11:00 PM	45.3	64.0	42.4
11:00 PM - 12:00 AM	48.3	67.0	44.5
12:00 AM - 01:00 AM	45.8	60.5	43.4
01:00 AM - 02:00 AM	47.0	62.2	44.0
02:00 AM - 03:00 AM	49.3	85.0	45.3
03:00 AM - 04:00 AM	49.1	77.1	45.1
04:00 AM - 05:00 AM	49.7	81.2	46.2
05:00 AM - 06:00 AM	51.6	66.0	47.2
06:00 AM - 07:00 AM	52.3	73.0	47.7
07:00 AM - 08:00 AM	53.4	72.8	48.3
08:00 AM - 09:00 AM	54.3	77.6	48.2
09:00 AM - 10:00 AM	52.3	80.9	46.5

Leq Average 24 hrs. (dB(A))

54.4

Lmax (dB(A))

85.0

L90 (dB(A))

47.7

Ldn (dB(A))

57.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ ENAL

S:\Reports\_Air Noise rpt (10.28AM)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873443-1

Page 1 of 1

Sample Number 23124325-14  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (NZ) (GPS 47P 0731936, 1423172)  
 Measurement Date Dec 23 - Dec 24, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296515

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.1	78.0	46.8
11:00 AM - 12:00 PM	52.9	82.0	46.8
12:00 PM - 01:00 PM	51.8	81.8	46.4
01:00 PM - 02:00 PM	51.8	68.5	45.6
02:00 PM - 03:00 PM	52.2	73.4	46.6
03:00 PM - 04:00 PM	52.2	68.7	48.5
04:00 PM - 05:00 PM	51.7	68.8	47.3
05:00 PM - 06:00 PM	60.2	76.3	54.2
06:00 PM - 07:00 PM	61.8	87.6	52.6
07:00 PM - 08:00 PM	59.3	74.0	50.8
08:00 PM - 09:00 PM	51.2	72.3	46.9
09:00 PM - 10:00 PM	53.1	75.9	46.7
10:00 PM - 11:00 PM	47.9	74.0	44.7
11:00 PM - 12:00 AM	47.9	70.1	44.3
12:00 AM - 01:00 AM	47.1	61.0	44.4
01:00 AM - 02:00 AM	46.7	70.6	44.5
02:00 AM - 03:00 AM	46.7	68.1	44.4
03:00 AM - 04:00 AM	49.0	63.2	46.2
04:00 AM - 05:00 AM	49.6	69.7	45.4
05:00 AM - 06:00 AM	48.6	71.3	45.3
06:00 AM - 07:00 AM	49.4	71.9	44.7
07:00 AM - 08:00 AM	49.2	67.1	45.1
08:00 AM - 09:00 AM	50.7	77.5	45.2
09:00 AM - 10:00 AM	52.7	79.9	47.6

Leq Average 24 hrs. (dB(A))

53.9

Lmax (dB(A))

87.6

L90 (dB(A))

46.2

Ldn (dB(A))

56.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ ENAL

S:\Reports\_Air Noise rpt (10.28AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873444-1

Page 1 of 1

Sample Number : 23124325-15  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 2 บ้านตอ 8 ตำบลพนาภิรม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date : Dec 17 - Dec 18, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.6	83.1	39.8
03:00 PM - 04:00 PM	49.9	71.2	41.8
04:00 PM - 05:00 PM	50.8	71.9	44.1
05:00 PM - 06:00 PM	51.4	82.5	46.6
06:00 PM - 07:00 PM	53.3	69.7	51.1
07:00 PM - 08:00 PM	53.3	78.1	50.3
08:00 PM - 09:00 PM	54.2	83.9	48.4
09:00 PM - 10:00 PM	51.0	66.9	48.3
10:00 PM - 11:00 PM	51.0	73.8	47.8
11:00 PM - 12:00 AM	51.4	65.6	48.7
12:00 AM - 01:00 AM	51.3	75.5	48.4
01:00 AM - 02:00 AM	50.8	64.0	47.4
02:00 AM - 03:00 AM	49.9	62.3	46.5
03:00 AM - 04:00 AM	46.8	61.0	43.7
04:00 AM - 05:00 AM	47.7	73.2	43.2
05:00 AM - 06:00 AM	47.0	60.4	42.4
06:00 AM - 07:00 AM	50.0	65.8	45.3
07:00 AM - 08:00 AM	52.7	70.0	45.7
08:00 AM - 09:00 AM	49.6	69.3	43.1
09:00 AM - 10:00 AM	48.0	71.6	42.2
10:00 AM - 11:00 AM	51.4	90.7	43.3
11:00 AM - 12:00 PM	50.6	71.8	43.8
12:00 PM - 01:00 PM	49.1	68.3	43.4
01:00 PM - 02:00 PM	49.4	65.1	41.9

Leq Average 24 hrs. (dB(A))

50.8

Lmax (dB(A))

90.7

L90 (dB(A))

44.1

Ldn (dB(A))

56.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise rpt (10 39AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873445-1

Page 1 of 1

Sample Number : 23124325-16  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 2 บ้านตอ 8 ตำบลพนาภิรม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date : Dec 18 - Dec 19, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.5	71.0	41.0
03:00 PM - 04:00 PM	49.8	68.4	43.0
04:00 PM - 05:00 PM	51.2	69.6	44.4
05:00 PM - 06:00 PM	53.9	83.3	46.7
06:00 PM - 07:00 PM	53.4	74.9	50.9
07:00 PM - 08:00 PM	52.6	74.9	50.0
08:00 PM - 09:00 PM	52.0	70.1	49.5
09:00 PM - 10:00 PM	50.6	70.1	48.2
10:00 PM - 11:00 PM	50.2	68.2	47.8
11:00 PM - 12:00 AM	49.3	55.6	47.3
12:00 AM - 01:00 AM	47.9	67.0	46.1
01:00 AM - 02:00 AM	46.9	63.1	45.2
02:00 AM - 03:00 AM	47.0	59.3	44.7
03:00 AM - 04:00 AM	46.4	63.5	44.3
04:00 AM - 05:00 AM	49.7	61.1	46.7
05:00 AM - 06:00 AM	48.6	64.0	44.0
06:00 AM - 07:00 AM	49.6	67.7	44.4
07:00 AM - 08:00 AM	50.6	66.4	46.1
08:00 AM - 09:00 AM	48.3	66.7	43.2
09:00 AM - 10:00 AM	48.5	68.0	43.3
10:00 AM - 11:00 AM	47.7	63.9	42.6
11:00 AM - 12:00 PM	47.1	62.8	42.1
12:00 PM - 01:00 PM	47.9	67.5	39.4
01:00 PM - 02:00 PM	48.8	68.3	42.4

Leq Average 24 hrs. (dB(A))

49.9

Lmax (dB(A))

83.3

L90 (dB(A))

44.4

Ldn (dB(A))

55.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise rpt (10 39AM)





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873446-1

Page 1 of 1

Sample Number 23124325-17  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาภิรมย์ (N3)(GPS 47P 0731772, 1424767)  
 Measurement Date Dec 19 - Dec 20, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.9	67.0	43.0
03:00 PM - 04:00 PM	49.9	68.6	44.6
04:00 PM - 05:00 PM	50.9	67.1	46.0
05:00 PM - 06:00 PM	51.6	66.9	47.1
06:00 PM - 07:00 PM	52.5	72.7	49.0
07:00 PM - 08:00 PM	51.5	73.1	48.6
08:00 PM - 09:00 PM	50.5	67.5	47.6
09:00 PM - 10:00 PM	50.0	67.2	47.4
10:00 PM - 11:00 PM	48.4	63.2	45.9
11:00 PM - 12:00 AM	48.8	72.2	46.4
12:00 AM - 01:00 AM	47.7	61.9	46.1
01:00 AM - 02:00 AM	47.3	61.2	45.2
02:00 AM - 03:00 AM	46.2	60.9	44.0
03:00 AM - 04:00 AM	46.6	61.3	44.1
04:00 AM - 05:00 AM	45.4	61.2	42.6
05:00 AM - 06:00 AM	47.8	64.0	42.8
06:00 AM - 07:00 AM	50.6	65.7	45.4
07:00 AM - 08:00 AM	50.8	70.4	46.0
08:00 AM - 09:00 AM	49.2	68.3	44.0
09:00 AM - 10:00 AM	48.8	68.4	43.5
10:00 AM - 11:00 AM	50.6	72.0	44.0
11:00 AM - 12:00 PM	49.2	65.9	43.9
12:00 PM - 01:00 PM	47.4	70.4	39.8
01:00 PM - 02:00 PM	50.3	69.3	44.3

Leq Average 24 hrs. (dB(A))

49.6

Lmax (dB(A))

73.1

L90 (dB(A))

44.6

Ldn (dB(A))

54.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurawong  
Scientist (4)

Approved by

Supot S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Report\Air Noise.rpt (10-40AM)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873447-1

Page 1 of 1

Sample Number 23124325-18  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาภิรมย์ (N3)(GPS 47P 0731772, 1424767)  
 Measurement Date Dec 20 - Dec 21, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	51.5	66.8	45.8
03:00 PM - 04:00 PM	52.3	71.1	46.8
04:00 PM - 05:00 PM	54.2	73.0	49.6
05:00 PM - 06:00 PM	56.9	91.7	46.8
06:00 PM - 07:00 PM	54.2	78.3	50.4
07:00 PM - 08:00 PM	52.4	73.9	48.9
08:00 PM - 09:00 PM	51.2	63.9	49.0
09:00 PM - 10:00 PM	50.3	66.7	47.6
10:00 PM - 11:00 PM	48.7	60.0	46.6
11:00 PM - 12:00 AM	49.5	68.4	46.9
12:00 AM - 01:00 AM	48.0	59.7	46.3
01:00 AM - 02:00 AM	48.5	69.4	46.5
02:00 AM - 03:00 AM	47.4	65.0	45.7
03:00 AM - 04:00 AM	46.8	70.7	43.9
04:00 AM - 05:00 AM	45.7	60.9	43.1
05:00 AM - 06:00 AM	46.8	59.9	43.0
06:00 AM - 07:00 AM	49.6	71.9	43.9
07:00 AM - 08:00 AM	51.7	69.8	46.6
08:00 AM - 09:00 AM	50.3	70.6	45.7
09:00 AM - 10:00 AM	50.6	69.8	44.9
10:00 AM - 11:00 AM	50.7	71.6	44.1
11:00 AM - 12:00 PM	49.4	71.1	44.0
12:00 PM - 01:00 PM	49.6	69.6	42.3
01:00 PM - 02:00 PM	52.3	72.4	45.3

Leq Average 24 hrs. (dB(A))

51.2

Lmax (dB(A))

91.7

L90 (dB(A))

45.8

Ldn (dB(A))

55.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurawong  
Scientist (4)

Approved by

Supot S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Report\Air Noise.rpt (10-40AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873448-1

Page 1 of 1

Sample Number : 23124325-19  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 2 บ้านทอ 8 ตำบลพนาภิรม (N3)(GPS 47P 0731772, 1424767)  
Measurement Date : Dec 21 - Dec 22, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	51.0	73.8	45.5
03:00 PM - 04:00 PM	50.9	74.2	45.8
04:00 PM - 05:00 PM	50.2	69.6	45.0
05:00 PM - 06:00 PM	50.7	73.6	46.0
06:00 PM - 07:00 PM	52.1	70.4	49.3
07:00 PM - 08:00 PM	51.5	67.2	49.1
08:00 PM - 09:00 PM	50.0	63.3	47.4
09:00 PM - 10:00 PM	50.2	73.5	46.7
10:00 PM - 11:00 PM	47.9	63.1	45.6
11:00 PM - 12:00 AM	49.2	79.4	44.5
12:00 AM - 01:00 AM	48.7	72.2	44.7
01:00 AM - 02:00 AM	46.0	63.2	44.3
02:00 AM - 03:00 AM	45.2	58.2	43.3
03:00 AM - 04:00 AM	42.6	62.0	40.0
04:00 AM - 05:00 AM	43.0	59.4	39.8
05:00 AM - 06:00 AM	45.9	62.8	41.8
06:00 AM - 07:00 AM	50.0	66.7	45.6
07:00 AM - 08:00 AM	53.5	90.0	48.3
08:00 AM - 09:00 AM	51.2	65.5	46.6
09:00 AM - 10:00 AM	52.3	74.2	46.5
10:00 AM - 11:00 AM	52.1	69.7	46.4
11:00 AM - 12:00 PM	47.8	70.8	42.9
12:00 PM - 01:00 PM	48.0	65.8	42.4
01:00 PM - 02:00 PM	47.8	65.6	42.7

Leq Average 24 hrs. (dB(A)) : 49.9

Lmax (dB(A)) : 90.0

L90 (dB(A)) : 45.5

Ldn (dB(A)) : 54.4

Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าระดับเสียงมาตรฐาน (พ.ศ. 2540) เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Thanita Kulsunwong  
Scientist (4)

Approved by

Supt S

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise rpt (10-40AM)

17004-2U/ EMAIL



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873449-1

Page 1 of 1

Sample Number : 23124325-20  
Parameter : Noise (Leq 24 hrs.)  
Location : หมู่ที่ 2 บ้านทอ 8 ตำบลพนาภิรม (N3)(GPS 47P 0731772, 1424767)  
Measurement Date : Dec 22 - Dec 23, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.4	66.0	43.6
03:00 PM - 04:00 PM	50.5	73.2	44.5
04:00 PM - 05:00 PM	49.8	66.7	45.2
05:00 PM - 06:00 PM	51.8	73.3	47.6
06:00 PM - 07:00 PM	52.7	66.5	50.0
07:00 PM - 08:00 PM	52.4	76.8	48.9
08:00 PM - 09:00 PM	49.9	67.4	46.7
09:00 PM - 10:00 PM	49.3	65.8	45.8
10:00 PM - 11:00 PM	47.1	63.6	44.5
11:00 PM - 12:00 AM	45.2	62.6	41.9
12:00 AM - 01:00 AM	45.0	66.4	41.7
01:00 AM - 02:00 AM	42.2	60.8	39.8
02:00 AM - 03:00 AM	41.5	61.0	38.9
03:00 AM - 04:00 AM	43.7	63.9	39.4
04:00 AM - 05:00 AM	45.0	65.6	41.1
05:00 AM - 06:00 AM	46.2	67.2	40.3
06:00 AM - 07:00 AM	47.8	65.1	44.0
07:00 AM - 08:00 AM	52.2	78.2	47.5
08:00 AM - 09:00 AM	51.1	74.3	47.0
09:00 AM - 10:00 AM	50.1	67.6	46.0
10:00 AM - 11:00 AM	49.3	66.2	44.9
11:00 AM - 12:00 PM	48.2	70.0	43.2
12:00 PM - 01:00 PM	47.2	65.3	42.3
01:00 PM - 02:00 PM	49.8	68.5	43.1

Leq Average 24 hrs. (dB(A)) : 49.1

Lmax (dB(A)) : 78.2

L90 (dB(A)) : 44.0

Ldn (dB(A)) : 52.9

Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง ค่าระดับเสียงมาตรฐาน (พ.ศ. 2540) เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Thanita Kulsunwong  
Scientist (4)

Approved by

Supt S

Supot Salamteh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Reports\_Air Noise rpt (10-40AM)

17004-2U/ EMAIL





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873450-1

Page 1 of 1

Sample Number 23124325-21  
 Parameter Noise (Leq 24 hrs.)  
 Location หมู่ที่ 2 บ้านคลอง 8 ตำบลนาบึงมะ (N3) (GPS 47P 0731772, 1424767)  
 Measurement Date Dec 23 - Dec 24, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 900074

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	49.8	69.3	44.9
03:00 PM - 04:00 PM	50.5	67.5	45.8
04:00 PM - 05:00 PM	52.1	69.9	46.7
05:00 PM - 06:00 PM	51.7	71.9	47.1
06:00 PM - 07:00 PM	54.2	67.0	50.2
07:00 PM - 08:00 PM	54.1	74.2	50.7
08:00 PM - 09:00 PM	52.5	68.8	49.2
09:00 PM - 10:00 PM	51.5	69.0	47.5
10:00 PM - 11:00 PM	51.6	71.1	47.0
11:00 PM - 12:00 AM	52.7	64.7	49.6
12:00 AM - 01:00 AM	53.2	71.6	50.7
01:00 AM - 02:00 AM	52.4	76.8	49.1
02:00 AM - 03:00 AM	50.8	58.8	47.3
03:00 AM - 04:00 AM	51.2	64.1	48.2
04:00 AM - 05:00 AM	49.8	59.9	45.6
05:00 AM - 06:00 AM	48.6	59.2	44.2
06:00 AM - 07:00 AM	47.2	68.9	41.1
07:00 AM - 08:00 AM	47.8	66.3	43.3
08:00 AM - 09:00 AM	48.5	66.4	43.7
09:00 AM - 10:00 AM	50.2	70.7	45.4
10:00 AM - 11:00 AM	52.3	73.9	46.1
11:00 AM - 12:00 PM	47.3	63.5	42.8
12:00 PM - 01:00 PM	48.0	70.5	42.2
01:00 PM - 02:00 PM	47.6	65.3	42.4

Leq Average 24 hrs. (dB(A))

51.1

Lmax (dB(A))

76.8

L90 (dB(A))

46.1

Ldn (dB(A))

57.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supt S

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise rpt (10-40AM)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873451-1

Page 1 of 1

Sample Number 23124325-22  
 Parameter Noise (Leq 24 hrs.)  
 Location ชั้น 3 โรงงานโกลด์เฟรมบนทางพิเศษวินาลก (N4) (GPS 47P 0731031, 1424112)  
 Measurement Date Dec 17 - Dec 18, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	53.7	77.2	45.1
02:00 PM - 03:00 PM	52.2	70.7	44.0
03:00 PM - 04:00 PM	53.2	71.7	45.9
04:00 PM - 05:00 PM	56.4	73.2	48.8
05:00 PM - 06:00 PM	56.7	76.1	49.5
06:00 PM - 07:00 PM	57.4	77.3	48.7
07:00 PM - 08:00 PM	55.9	78.4	47.2
08:00 PM - 09:00 PM	53.8	76.3	45.2
09:00 PM - 10:00 PM	53.1	73.6	44.3
10:00 PM - 11:00 PM	52.9	74.8	42.1
11:00 PM - 12:00 AM	51.5	72.6	39.9
12:00 AM - 01:00 AM	49.4	75.8	38.0
01:00 AM - 02:00 AM	48.8	74.4	35.1
02:00 AM - 03:00 AM	47.0	67.7	35.3
03:00 AM - 04:00 AM	46.0	65.8	35.1
04:00 AM - 05:00 AM	51.1	70.5	38.0
05:00 AM - 06:00 AM	54.6	75.9	45.4
06:00 AM - 07:00 AM	54.7	73.4	49.0
07:00 AM - 08:00 AM	53.4	75.8	47.2
08:00 AM - 09:00 AM	52.2	70.4	45.7
09:00 AM - 10:00 AM	50.5	68.0	44.9
10:00 AM - 11:00 AM	51.3	70.0	45.0
11:00 AM - 12:00 PM	51.0	78.9	43.7
12:00 PM - 01:00 PM	49.9	69.3	43.6

Leq Average 24 hrs. (dB(A))

53.2

Lmax (dB(A))

78.9

L90 (dB(A))

44.9

Ldn (dB(A))

58.4

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supt S

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise rpt (10-41AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kao,  
Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124325  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number: 2873452-1

Page 1 of 1

Sample Number : 23124325-23  
Parameter : Noise (Leq 24 hrs.)  
Location : บริเวณโครงการโรงงานอุตสาหกรรมทางทิศเหนือ (N4) (GPS 47P 0731031, 1424112)  
Measurement Date : Dec 18 - Dec 19, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	50.7	69.9	42.8
02:00 PM - 03:00 PM	50.8	69.3	44.1
03:00 PM - 04:00 PM	52.3	68.0	45.3
04:00 PM - 05:00 PM	54.3	71.9	48.2
05:00 PM - 06:00 PM	56.2	77.8	48.9
06:00 PM - 07:00 PM	55.8	73.8	48.1
07:00 PM - 08:00 PM	56.5	78.6	48.0
08:00 PM - 09:00 PM	53.2	68.5	45.1
09:00 PM - 10:00 PM	52.8	70.9	42.6
10:00 PM - 11:00 PM	54.2	78.2	41.2
11:00 PM - 12:00 AM	55.2	79.7	40.3
12:00 AM - 01:00 AM	50.8	72.0	38.4
01:00 AM - 02:00 AM	50.5	72.6	37.0
02:00 AM - 03:00 AM	44.7	64.0	37.2
03:00 AM - 04:00 AM	46.4	66.7	37.5
04:00 AM - 05:00 AM	50.8	66.0	40.7
05:00 AM - 06:00 AM	56.1	75.5	48.1
06:00 AM - 07:00 AM	58.0	77.7	51.7
07:00 AM - 08:00 AM	54.0	71.5	48.2
08:00 AM - 09:00 AM	53.2	79.7	46.9
09:00 AM - 10:00 AM	51.6	69.5	45.5
10:00 AM - 11:00 AM	50.5	67.7	43.8
11:00 AM - 12:00 PM	51.3	74.7	42.2
12:00 PM - 01:00 PM	50.7	68.5	43.4

Leq Average 24 hrs. (dB(A)) : 53.5  
Lmax (dB(A)) : 79.7  
L90 (dB(A)) : 43.8  
Ldn (dB(A)) : 60.0  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เฝ้าระวังการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Thanita K.  
Thanita Kulsumwong  
Scientist (4)

Approved by

Supot S.  
Supot Salamteh  
Section Head

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-41AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kao,  
Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124325  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number: 2873453-1

Page 1 of 1

Sample Number : 23124325-24  
Parameter : Noise (Leq 24 hrs.)  
Location : บริเวณโครงการโรงงานอุตสาหกรรมทางทิศเหนือ (N4) (GPS 47P 0731031, 1424112)  
Measurement Date : Dec 19 - Dec 20, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level meter : Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	52.4	79.5	44.0
02:00 PM - 03:00 PM	51.0	70.0	43.7
03:00 PM - 04:00 PM	51.7	70.0	44.0
04:00 PM - 05:00 PM	55.7	70.7	49.2
05:00 PM - 06:00 PM	57.5	81.8	48.5
06:00 PM - 07:00 PM	59.4	86.7	48.5
07:00 PM - 08:00 PM	54.9	73.8	47.3
08:00 PM - 09:00 PM	54.7	74.4	45.7
09:00 PM - 10:00 PM	53.2	70.8	43.6
10:00 PM - 11:00 PM	51.1	70.6	41.4
11:00 PM - 12:00 AM	52.0	72.1	39.8
12:00 AM - 01:00 AM	51.1	78.3	38.9
01:00 AM - 02:00 AM	55.6	82.2	38.7
02:00 AM - 03:00 AM	52.4	79.2	38.6
03:00 AM - 04:00 AM	46.9	64.9	38.3
04:00 AM - 05:00 AM	50.1	68.9	41.5
05:00 AM - 06:00 AM	56.4	81.0	48.1
06:00 AM - 07:00 AM	57.3	74.3	50.7
07:00 AM - 08:00 AM	54.3	70.3	48.5
08:00 AM - 09:00 AM	54.0	75.0	47.3
09:00 AM - 10:00 AM	53.0	75.0	46.6
10:00 AM - 11:00 AM	53.1	76.7	45.9
11:00 AM - 12:00 PM	53.5	79.1	44.1
12:00 PM - 01:00 PM	53.1	74.1	45.6

Leq Average 24 hrs. (dB(A)) : 54.3  
Lmax (dB(A)) : 86.7  
L90 (dB(A)) : 44.1  
Ldn (dB(A)) : 60.2  
Standard (dB(A)) : 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เฝ้าระวังการประกอบกิจการโรงงาน พ.ศ. 2548

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

Technical Management

Thanita K.  
Thanita Kulsumwong  
Scientist (4)

Approved by

Supot S.  
Supot Salamteh  
Section Head

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-41AM)





## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873454-1

Page 1 of 1

Sample Number 23124325-25  
 Parameter Noise (Leq 24 hrs.)  
 Location ชั้น 15 อาคารที่จอดรถยนต์ (N4) (GPS 47P 0731031, 1424112)  
 Measurement Date Dec 20 - Dec 21, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	52.7	75.7	44.4
02:00 PM - 03:00 PM	53.6	75.2	44.5
03:00 PM - 04:00 PM	54.1	72.6	46.6
04:00 PM - 05:00 PM	58.2	80.4	50.1
05:00 PM - 06:00 PM	56.1	83.6	52.9
06:00 PM - 07:00 PM	56.7	75.4	53.3
07:00 PM - 08:00 PM	55.9	77.5	51.4
08:00 PM - 09:00 PM	53.7	74.5	46.9
09:00 PM - 10:00 PM	51.8	69.1	45.3
10:00 PM - 11:00 PM	51.4	71.2	45.7
11:00 PM - 12:00 AM	52.9	67.0	48.4
12:00 AM - 01:00 AM	51.5	66.6	46.4
01:00 AM - 02:00 AM	48.0	71.7	42.6
02:00 AM - 03:00 AM	45.2	61.1	40.9
03:00 AM - 04:00 AM	46.8	61.4	43.3
04:00 AM - 05:00 AM	48.8	66.1	45.3
05:00 AM - 06:00 AM	51.6	69.1	48.8
06:00 AM - 07:00 AM	51.5	72.1	47.8
07:00 AM - 08:00 AM	52.1	68.2	47.2
08:00 AM - 09:00 AM	51.7	76.0	45.7
09:00 AM - 10:00 AM	54.6	79.6	46.4
10:00 AM - 11:00 AM	55.6	74.7	47.9
11:00 AM - 12:00 PM	53.3	75.9	44.4
12:00 PM - 01:00 PM	53.2	77.8	45.5

Leq Average 24 hrs. (dB(A))

53.5

Lmax (dB(A))

83.6

L90 (dB(A))

46.4

Ldn (dB(A))

57.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise\pdf (10-41AM)



## Analysis / Test Report

TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaew,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873455-1

Page 1 of 1

Sample Number 23124325-26  
 Parameter Noise (Leq 24 hrs.)  
 Location ชั้น 15 อาคารที่จอดรถยนต์ (N4) (GPS 47P 0731031, 1424112)  
 Measurement Date Dec 21 - Dec 22, 2023  
 Measurement by Satcha Phetsawaeng  
 Sound Level meter Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	53.1	74.6	45.6
02:00 PM - 03:00 PM	52.4	73.4	45.3
03:00 PM - 04:00 PM	55.3	82.5	46.8
04:00 PM - 05:00 PM	53.5	72.2	48.2
05:00 PM - 06:00 PM	53.0	67.4	47.9
06:00 PM - 07:00 PM	52.7	71.4	45.7
07:00 PM - 08:00 PM	51.7	70.7	44.6
08:00 PM - 09:00 PM	52.9	76.1	42.8
09:00 PM - 10:00 PM	49.5	66.3	43.3
10:00 PM - 11:00 PM	46.4	69.8	39.9
11:00 PM - 12:00 AM	46.8	64.3	41.1
12:00 AM - 01:00 AM	44.9	64.1	39.9
01:00 AM - 02:00 AM	42.8	59.4	37.6
02:00 AM - 03:00 AM	43.4	63.7	36.9
03:00 AM - 04:00 AM	46.0	62.3	42.1
04:00 AM - 05:00 AM	48.1	67.9	43.5
05:00 AM - 06:00 AM	50.6	72.2	45.4
06:00 AM - 07:00 AM	53.3	70.9	48.4
07:00 AM - 08:00 AM	54.2	73.1	49.4
08:00 AM - 09:00 AM	54.2	79.0	49.4
09:00 AM - 10:00 AM	54.1	73.9	49.2
10:00 AM - 11:00 AM	53.7	67.9	49.3
11:00 AM - 12:00 PM	52.5	72.2	46.7
12:00 PM - 01:00 PM	53.7	73.5	47.8

Leq Average 24 hrs. (dB(A))

52.0

Lmax (dB(A))

82.5

L90 (dB(A))

45.4

Ldn (dB(A))

55.8

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanitak.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\Air Noise\pdf (10-42AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873456-1

Page 1 of 1

Sample Number 23124325-27  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณโครงการปลูกไม้ผลตามทางฟิเคอร์นาถ (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 22 - Dec 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	53.2	71.1	48.5
02:00 PM - 03:00 PM	53.5	69.7	48.4
03:00 PM - 04:00 PM	53.2	70.4	48.5
04:00 PM - 05:00 PM	53.3	68.8	48.9
05:00 PM - 06:00 PM	52.8	74.1	47.8
06:00 PM - 07:00 PM	52.5	67.6	45.5
07:00 PM - 08:00 PM	51.7	71.5	44.6
08:00 PM - 09:00 PM	50.4	71.8	42.2
09:00 PM - 10:00 PM	50.2	68.8	41.1
10:00 PM - 11:00 PM	46.9	65.1	39.1
11:00 PM - 12:00 AM	47.3	67.0	39.8
12:00 AM - 01:00 AM	47.1	68.6	37.2
01:00 AM - 02:00 AM	46.5	68.7	37.4
02:00 AM - 03:00 AM	43.6	60.3	37.7
03:00 AM - 04:00 AM	44.7	66.0	38.2
04:00 AM - 05:00 AM	48.8	73.0	42.7
05:00 AM - 06:00 AM	51.1	72.0	43.9
06:00 AM - 07:00 AM	53.9	71.9	48.7
07:00 AM - 08:00 AM	54.0	72.0	50.1
08:00 AM - 09:00 AM	53.3	70.9	49.4
09:00 AM - 10:00 AM	53.0	70.6	48.7
10:00 AM - 11:00 AM	52.7	71.5	48.2
11:00 AM - 12:00 PM	52.1	71.9	46.9
12:00 PM - 01:00 PM	53.6	70.3	48.5

Leq Average 24 hrs. (dB(A))

51.7

Lmax (dB(A))

74.1

L90 (dB(A))

45.5

Ldn (dB(A))

56.1

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S

Supot Salamtezh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-44AM)



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,  
Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124325

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number: 2873457-1

Page 1 of 1

Sample Number 23124325-28  
Parameter Noise (Leq 24 hrs.)  
Location บริเวณโครงการปลูกไม้ผลตามทางฟิเคอร์นาถ (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 23 - Dec 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level meter Serial No. 296516

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	52.9	69.0	47.8
02:00 PM - 03:00 PM	52.4	72.4	47.7
03:00 PM - 04:00 PM	52.7	71.1	47.7
04:00 PM - 05:00 PM	53.8	73.4	48.9
05:00 PM - 06:00 PM	53.9	70.2	49.2
06:00 PM - 07:00 PM	56.0	82.4	48.1
07:00 PM - 08:00 PM	52.6	71.7	47.5
08:00 PM - 09:00 PM	51.1	68.0	46.5
09:00 PM - 10:00 PM	50.5	70.3	46.0
10:00 PM - 11:00 PM	50.8	72.8	45.7
11:00 PM - 12:00 AM	49.8	73.1	42.4
12:00 AM - 01:00 AM	46.3	59.9	40.4
01:00 AM - 02:00 AM	46.6	70.7	38.0
02:00 AM - 03:00 AM	43.1	58.9	38.2
03:00 AM - 04:00 AM	45.7	67.2	37.9
04:00 AM - 05:00 AM	48.0	69.4	41.6
05:00 AM - 06:00 AM	48.6	65.2	43.8
06:00 AM - 07:00 AM	51.5	69.1	45.7
07:00 AM - 08:00 AM	53.7	76.1	47.7
08:00 AM - 09:00 AM	53.5	71.4	48.6
09:00 AM - 10:00 AM	52.1	69.4	47.8
10:00 AM - 11:00 AM	51.8	70.2	47.2
11:00 AM - 12:00 PM	51.2	70.5	46.0
12:00 PM - 01:00 PM	52.6	69.5	47.5

Leq Average 24 hrs. (dB(A))

51.7

Lmax (dB(A))

82.4

L90 (dB(A))

46.5

Ldn (dB(A))

55.9

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsurwong  
Scientist (4)

Approved by

Supt S

Supot Salamtezh  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ EMAIL

S:\Reports\_Air Noise rpt (10-44AM)



---

ระดับเสียงรบกวน





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872439-1

Sample No. 23124326-1  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านทอง 12 ตำบลพนาดิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 1 of 3

เวลา	ระดับเสียง (dB(A))						
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน (A-C)	กลางคืน (A-C-N)	
11:00 AM - 12:00 PM	51.6	50.9	0.7	7.0	44.6	-	43.4
12:00 PM - 01:00 PM	48.5	47.3	1.2	7.0	41.5	-	41.6
01:00 PM - 02:00 PM	48.5	46.1	2.4	4.5	44.0	-	42.2
02:00 PM - 03:00 PM	53.3	53.1	0.2	7.0	46.3	-	43.6
03:00 PM - 04:00 PM	52.2	50.7	1.5	4.5	47.7	-	42.1
04:00 PM - 05:00 PM	50.2	49.0	1.2	7.0	43.2	-	43.0
05:00 PM - 06:00 PM	47.5	45.7	1.8	4.5	43.0	-	41.9
06:00 PM - 07:00 PM	47.0	44.6	2.4	4.5	42.5	-	42.2
07:00 PM - 08:00 PM	54.7	47.5	6.7	1.0	53.2	-	42.8
08:00 PM - 09:00 PM	48.0	45.2	2.8	3.0	45.0	-	42.1
09:00 PM - 10:00 PM	47.7	45.9	1.8	4.5	43.2	-	42.7
10:00 PM - 10:05 PM	45.2	42.8	2.4	4.5	-	43.7	41.7
10:05 PM - 10:10 PM	46.7	44.0	2.7	3.0	-	46.7	41.8
10:10 PM - 10:15 PM	46.1	45.7	0.4	7.0	-	42.1	41.8
10:15 PM - 10:20 PM	44.7	42.5	2.2	4.5	-	43.2	40.8
10:20 PM - 10:25 PM	47.8	46.5	1.3	7.0	-	43.8	43.7
10:25 PM - 10:30 PM	48.6	48.1	0.5	7.0	-	44.6	45.4
10:30 PM - 10:35 PM	48.6	48.3	0.3	7.0	-	44.6	41.5
10:35 PM - 10:40 PM	46.2	45.6	0.6	7.0	-	42.2	41.2
10:40 PM - 10:45 PM	46.3	45.0	1.3	7.0	-	42.3	41.7
10:45 PM - 10:50 PM	46.4	44.4	2.0	4.5	-	44.9	41.3
10:50 PM - 10:55 PM	47.9	45.5	2.4	4.5	-	46.4	41.8
10:55 PM - 11:00 PM	48.5	48.1	0.4	7.0	-	44.5	42.3
11:00 PM - 11:05 PM	48.6	46.2	2.4	4.5	-	47.1	41.9
11:05 PM - 11:10 PM	46.9	45.4	1.5	4.5	-	45.4	39.5
11:10 PM - 11:15 PM	46.0	43.4	2.6	3.0	-	46.0	39.1
11:15 PM - 11:20 PM	46.1	43.4	2.7	3.0	-	46.1	39.9
11:20 PM - 11:25 PM	45.5	42.8	2.7	3.0	-	45.5	39.0
11:25 PM - 11:30 PM	44.9	42.0	2.9	3.0	-	44.9	39.4
11:30 PM - 11:35 PM	51.8	48.7	3.1	3.0	-	51.8	39.0
11:35 PM - 11:40 PM	44.2	47.2	-3.0	7.0	-	40.2	38.6
11:40 PM - 11:45 PM	45.9	43.0	2.9	3.0	-	45.9	38.3
11:45 PM - 11:50 PM	45.5	42.1	3.4	3.0	-	45.5	38.6
11:50 PM - 11:55 PM	46.9	41.7	5.2	1.5	-	48.4	38.5
11:55 PM - 12:00 AM	45.9	41.3	4.6	1.5	-	47.4	38.7
12:00 AM - 12:05 AM	46.4	43.2	3.2	3.0	-	46.4	38.8
12:05 AM - 12:10 AM	44.6	42.8	1.8	4.5	-	43.1	39.1
12:10 AM - 12:15 AM	45.3	43.5	1.8	4.5	-	43.8	39.3
12:15 AM - 12:20 AM	45.0	40.5	4.5	1.5	-	46.5	38.9
12:20 AM - 12:25 AM	44.7	39.5	5.2	1.5	-	46.2	38.5

The above results are valid only for the analyzed 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

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

Lab: Solentec

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872439-1

Sample No. 23124326-1  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านทอง 12 ตำบลพนาดิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน (A-C)	กลางคืน (A-C-N)	
12:25 AM - 12:30 AM	44.3	39.4	4.9	1.5	-	45.8	38.3
12:30 AM - 12:35 AM	45.2	41.4	3.8	2.0	-	46.2	39.0
12:35 AM - 12:40 AM	45.5	41.3	4.2	2.0	-	46.5	39.2
12:40 AM - 12:45 AM	45.3	41.1	4.2	2.0	-	46.3	39.1
12:45 AM - 12:50 AM	44.4	39.5	4.9	1.5	-	45.9	38.6
12:50 AM - 12:55 AM	46.6	41.8	4.8	1.5	-	48.1	38.8
12:55 AM - 01:00 AM	47.5	42.5	5.0	1.5	-	49.0	38.9
01:00 AM - 01:05 AM	45.3	41.0	4.3	2.0	-	46.3	38.9
01:05 AM - 01:10 AM	44.2	39.7	4.5	1.5	-	45.7	37.9
01:10 AM - 01:15 AM	48.6	46.1	2.5	3.0	-	48.6	37.2
01:15 AM - 01:20 AM	44.4	41.7	2.7	3.0	-	44.4	38.1
01:20 AM - 01:25 AM	50.4	44.1	6.3	1.5	-	51.9	37.6
01:25 AM - 01:30 AM	45.1	41.3	3.8	2.0	-	46.1	37.6
01:30 AM - 01:35 AM	44.4	40.2	4.2	2.0	-	45.4	37.8
01:35 AM - 01:40 AM	43.5	39.0	4.5	1.5	-	45.0	37.6
01:40 AM - 01:45 AM	43.0	38.6	4.4	2.0	-	44.0	37.4
01:45 AM - 01:50 AM	42.5	38.4	4.1	2.0	-	43.5	37.3
01:50 AM - 01:55 AM	46.3	40.9	5.4	1.5	-	47.8	37.2
01:55 AM - 02:00 AM	45.6	39.3	6.3	1.5	-	47.1	36.7
02:00 AM - 02:05 AM	44.5	39.5	5.0	1.5	-	46.0	37.5
02:05 AM - 02:10 AM	43.6	38.4	5.2	1.5	-	45.1	36.6
02:10 AM - 02:15 AM	43.5	38.1	5.4	1.5	-	45.0	36.6
02:15 AM - 02:20 AM	44.1	38.7	5.4	1.5	-	45.6	35.8
02:20 AM - 02:25 AM	42.3	36.4	5.9	1.5	-	43.8	35.3
02:25 AM - 02:30 AM	42.7	38.0	4.7	1.5	-	44.2	36.1
02:30 AM - 02:35 AM	53.9	47.5	6.4	1.5	-	55.4	38.0
02:35 AM - 02:40 AM	50.5	46.0	4.5	1.5	-	52.0	37.4
02:40 AM - 02:45 AM	47.7	43.2	4.5	1.5	-	49.2	37.4
02:45 AM - 02:50 AM	43.0	39.0	4.0	2.0	-	44.0	36.5
02:50 AM - 02:55 AM	48.4	42.4	6.0	1.5	-	49.9	35.7
02:55 AM - 03:00 AM	45.1	42.2	2.9	3.0	-	45.1	36.2
03:00 AM - 03:05 AM	45.7	42.2	3.5	2.0	-	46.7	35.3
03:05 AM - 03:10 AM	42.4	39.1	3.3	3.0	-	42.4	35.8
03:10 AM - 03:15 AM	41.9	37.9	4.0	2.0	-	42.9	35.7
03:15 AM - 03:20 AM	42.2	37.6	4.6	1.5	-	43.7	35.3
03:20 AM - 03:25 AM	44.6	40.0	4.6	1.5	-	46.1	35.5
03:25 AM - 03:30 AM	42.2	37.8	4.4	2.0	-	43.2	35.5
03:30 AM - 03:35 AM	45.7	45.9	-0.2	7.0	-	41.7	36.2
03:35 AM - 03:40 AM	58.2	48.0	10.2	0.5	-	60.7	36.6
03:40 AM - 03:45 AM	43.7	37.9	5.8	1.5	-	45.2	36.2

The above results are valid only for the analyzed 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

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

Lab: Solentec

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.





## Analysis / Test Report



TESTING  
No. 0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872439-1

Page 3 of 3

Sample No. 23124326-1  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
					ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางคืน	กลางวัน	
03:45 AM - 03:50 AM	49.7	42.0	7.7	0.5	--	52.2	37.2
03:50 AM - 03:55 AM	41.9	38.4	3.5	2.0	--	42.9	36.0
03:55 AM - 04:00 AM	42.0	38.3	3.7	2.0	--	43.0	35.9
04:00 AM - 04:05 AM	42.2	38.3	3.9	2.0	--	43.2	36.0
04:05 AM - 04:10 AM	42.3	39.3	3.0	3.0	--	42.3	37.5
04:10 AM - 04:15 AM	43.0	39.9	3.1	3.0	--	43.0	37.2
04:15 AM - 04:20 AM	42.9	40.4	2.5	3.0	--	42.9	38.4
04:20 AM - 04:25 AM	44.3	45.0	-0.7	7.0	--	40.3	39.2
04:25 AM - 04:30 AM	42.5	39.6	2.9	3.0	--	42.5	37.8
04:30 AM - 04:35 AM	44.2	41.4	2.8	3.0	--	44.2	38.1
04:35 AM - 04:40 AM	43.4	41.7	1.7	4.5	--	41.9	39.0
04:40 AM - 04:45 AM	46.6	44.2	2.4	4.5	--	45.1	39.1
04:45 AM - 04:50 AM	48.5	44.8	3.7	2.0	--	49.5	41.6
04:50 AM - 04:55 AM	50.4	44.4	6.0	1.5	--	51.9	40.7
04:55 AM - 05:00 AM	46.9	46.5	0.4	7.0	--	42.9	41.2
05:00 AM - 05:05 AM	54.7	50.2	4.5	1.5	--	56.2	42.2
05:05 AM - 05:10 AM	55.1	69.6	-14.5	7.0	--	51.1	42.2
05:10 AM - 05:15 AM	47.5	45.3	2.2	4.5	--	46.0	42.1
05:15 AM - 05:20 AM	48.0	49.1	-1.1	7.0	--	44.0	41.8
05:20 AM - 05:25 AM	52.0	49.4	2.6	3.0	--	52.0	41.8
05:25 AM - 05:30 AM	53.1	53.0	0.1	7.0	--	49.1	42.8
05:30 AM - 05:35 AM	52.5	52.0	0.5	7.0	--	48.5	42.7
05:35 AM - 05:40 AM	49.1	46.9	2.2	4.5	--	47.6	43.7
05:40 AM - 05:45 AM	53.9	47.9	6.0	1.5	--	55.4	44.1
05:45 AM - 05:50 AM	49.8	47.1	2.7	3.0	--	49.8	44.3
05:50 AM - 05:55 AM	51.8	47.7	4.1	2.0	--	52.8	43.9
05:55 AM - 06:00 AM	50.7	46.3	4.4	2.0	--	51.7	43.9
06:00 AM - 07:00 AM	56.1	51.4	4.7	1.5	54.6	--	45.8
07:00 AM - 08:00 AM	52.8	50.0	2.8	3.0	49.8	--	44.6
08:00 AM - 09:00 AM	51.1	48.3	2.8	3.0	48.1	--	44.6
09:00 AM - 10:00 AM	51.3	50.9	0.4	7.0	44.3	--	43.8
10:00 AM - 11:00 AM	58.2	59.1	-0.9	7.0	51.2	--	46.4
ค่ามาตรฐาน							≤ 10

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

### มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงจากการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 17-18 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-1 วันที่ตรวจวัด 17-18 ธันวาคม 2566)

Approved by

*Wilaw Borik*

Wilaw Borik  
Manager

The above results are valid only for the analysed 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 reworded except in full.

ADDRESS B16/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No. 0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872440-1

Page 1 of 3

Sample No. 23124326-2  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
					ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางคืน	กลางวัน	
11:00 AM - 12:00 PM	51.2	49.5	1.7	4.5	46.7	--	44.2
12:00 PM - 01:00 PM	51.2	49.6	1.6	4.5	46.7	--	44.7
01:00 PM - 02:00 PM	51.6	49.6	2.0	4.5	47.1	--	45.3
02:00 PM - 03:00 PM	50.9	49.9	1.0	7.0	43.9	--	45.3
03:00 PM - 04:00 PM	52.0	52.4	-0.4	7.0	45.0	--	45.2
04:00 PM - 05:00 PM	52.0	51.1	0.9	7.0	45.0	--	43.7
05:00 PM - 06:00 PM	48.2	45.7	2.5	3.0	45.2	--	42.5
06:00 PM - 07:00 PM	48.2	45.7	2.5	3.0	45.2	--	43.0
07:00 PM - 08:00 PM	47.4	45.5	1.9	4.5	42.9	--	42.8
08:00 PM - 09:00 PM	47.0	45.0	2.0	4.5	42.5	--	42.0
09:00 PM - 10:00 PM	46.7	43.5	3.2	3.0	43.7	--	40.3
10:00 PM - 10:05 PM	45.4	43.2	2.2	4.5	--	43.9	39.7
10:05 PM - 10:10 PM	44.9	42.9	2.0	4.5	--	43.4	39.1
10:10 PM - 10:15 PM	44.2	41.8	2.4	4.5	--	42.7	39.5
10:15 PM - 10:20 PM	45.8	43.2	2.6	3.0	--	45.8	40.5
10:20 PM - 10:25 PM	45.7	44.7	1.0	7.0	--	41.7	39.4
10:25 PM - 10:30 PM	43.8	40.0	3.8	2.0	--	44.8	38.8
10:30 PM - 10:35 PM	44.8	43.6	1.2	7.0	--	40.8	39.0
10:35 PM - 10:40 PM	43.6	40.8	2.8	3.0	--	43.6	39.1
10:40 PM - 10:45 PM	43.4	39.8	3.6	2.0	--	44.4	38.5
10:45 PM - 10:50 PM	43.1	40.7	2.4	4.5	--	41.6	38.0
10:50 PM - 10:55 PM	43.2	40.5	2.7	3.0	--	43.2	38.9
10:55 PM - 11:00 PM	44.8	43.0	1.8	4.5	--	43.3	38.2
11:00 PM - 11:05 PM	43.9	41.5	2.4	4.5	--	42.4	38.9
11:05 PM - 11:10 PM	43.4	39.7	3.7	2.0	--	44.4	38.2
11:10 PM - 11:15 PM	43.3	41.1	2.2	4.5	--	41.8	37.9
11:15 PM - 11:20 PM	44.2	41.3	2.9	3.0	--	44.2	38.0
11:20 PM - 11:25 PM	44.2	40.4	3.8	2.0	--	45.2	37.8
11:25 PM - 11:30 PM	44.0	39.6	4.4	2.0	--	45.0	37.5
11:30 PM - 11:35 PM	44.3	40.0	4.3	2.0	--	45.3	38.0
11:35 PM - 11:40 PM	44.9	41.3	3.6	2.0	--	45.9	38.4
11:40 PM - 11:45 PM	46.3	43.3	3.0	3.0	--	46.3	37.6
11:45 PM - 11:50 PM	46.1	42.6	3.5	2.0	--	47.1	38.2
11:50 PM - 11:55 PM	45.5	39.2	6.3	1.5	--	47.0	36.8
11:55 PM - 12:00 AM	45.2	41.4	3.8	2.0	--	46.2	37.8
12:00 AM - 12:05 AM	44.2	40.2	4.0	2.0	--	45.2	37.2
12:05 AM - 12:10 AM	45.5	38.7	6.8	1.0	--	47.5	37.3
12:10 AM - 12:15 AM	46.8	39.7	7.1	1.0	--	48.8	37.4
12:15 AM - 12:20 AM	46.3	38.5	7.8	0.5	--	48.8	37.1
12:20 AM - 12:25 AM	56.0	48.8	7.2	1.0	--	58.0	37.7

The above results are valid only for the analysed 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 reworded except in full.

Approved by

*Wilaw Borik*

Wilaw Borik  
Manager

ADDRESS B16/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872440-1

Sample No. 23124326-2  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						ค่าระดับ การรบกวน	
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			
					กลางวัน (A+C)	กลางคืน (A+C)		
12:25 AM - 12:30 AM	47.1	39.3	7.8	0.5	-	49.6	36.6	13.0
12:30 AM - 12:35 AM	45.6	39.8	5.8	1.5	-	47.1	37.1	10.0
12:35 AM - 12:40 AM	43.4	39.9	3.5	2.0	-	44.4	36.5	7.9
12:40 AM - 12:45 AM	43.2	39.3	3.9	2.0	-	44.2	36.9	7.3
12:45 AM - 12:50 AM	43.7	38.5	5.2	1.5	-	45.2	36.8	8.4
12:50 AM - 12:55 AM	44.6	40.2	4.4	2.0	-	45.6	36.4	9.2
12:55 AM - 01:00 AM	44.2	37.6	6.6	1.0	-	46.2	36.1	10.1
01:00 AM - 01:05 AM	43.2	38.6	4.6	1.5	-	44.7	36.3	8.4
01:05 AM - 01:10 AM	43.1	38.3	4.8	1.5	-	44.6	36.8	7.8
01:10 AM - 01:15 AM	43.4	41.5	1.9	4.5	-	41.9	37.3	4.6
01:15 AM - 01:20 AM	43.8	39.2	4.6	1.5	-	45.3	36.9	8.4
01:20 AM - 01:25 AM	44.3	42.2	2.1	4.5	-	42.8	37.1	5.7
01:25 AM - 01:30 AM	45.1	39.8	5.3	1.5	-	46.6	36.3	10.3
01:30 AM - 01:35 AM	43.0	41.4	1.6	4.5	-	41.5	37.4	4.1
01:35 AM - 01:40 AM	41.3	38.4	2.9	3.0	-	41.3	36.8	4.5
01:40 AM - 01:45 AM	41.4	38.0	3.4	3.0	-	41.4	37.1	4.3
01:45 AM - 01:50 AM	41.8	38.2	3.6	2.0	-	42.8	37.0	5.8
01:50 AM - 01:55 AM	42.8	40.5	2.3	4.5	-	41.3	37.4	3.9
01:55 AM - 02:00 AM	42.2	39.6	2.6	3.0	-	42.2	37.9	4.3
02:00 AM - 02:05 AM	43.6	40.9	2.7	3.0	-	43.6	37.6	6.0
02:05 AM - 02:10 AM	41.0	38.2	2.8	3.0	-	41.0	37.3	3.7
02:10 AM - 02:15 AM	42.3	38.3	4.0	2.0	-	43.3	37.0	6.3
02:15 AM - 02:20 AM	42.1	37.9	4.2	2.0	-	43.1	37.1	6.0
02:20 AM - 02:25 AM	41.1	38.6	2.5	3.0	-	41.1	36.9	4.2
02:25 AM - 02:30 AM	40.8	37.6	3.2	3.0	-	40.8	36.8	4.0
02:30 AM - 02:35 AM	40.7	37.8	2.9	3.0	-	40.7	36.8	3.9
02:35 AM - 02:40 AM	40.6	37.2	3.4	3.0	-	40.6	36.1	4.5
02:40 AM - 02:45 AM	43.8	42.0	1.8	4.5	-	42.3	35.9	6.4
02:45 AM - 02:50 AM	41.2	37.6	3.6	2.0	-	42.2	36.0	6.2
02:50 AM - 02:55 AM	42.2	38.1	4.1	2.0	-	43.2	36.4	6.8
02:55 AM - 03:00 AM	42.4	38.1	4.3	2.0	-	43.4	36.4	7.0
03:00 AM - 03:05 AM	43.1	38.2	4.9	1.5	-	44.6	36.4	8.2
03:05 AM - 03:10 AM	43.0	38.4	4.6	1.5	-	44.5	36.9	7.6
03:10 AM - 03:15 AM	43.7	41.3	2.4	4.5	-	42.2	37.0	5.2
03:15 AM - 03:20 AM	42.1	37.0	5.1	1.5	-	43.6	35.3	8.3
03:20 AM - 03:25 AM	42.6	37.9	4.7	1.5	-	44.1	36.1	8.0
03:25 AM - 03:30 AM	45.0	38.9	6.1	1.5	-	46.5	36.8	9.7
03:30 AM - 03:35 AM	44.9	39.3	5.6	1.5	-	46.4	37.1	9.3
03:35 AM - 03:40 AM	43.1	38.3	4.8	1.5	-	44.6	36.6	8.0
03:40 AM - 03:45 AM	46.6	40.7	5.9	1.5	-	48.1	36.0	12.1

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) (Thailand) or its subsidiaries. This report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872440-1

Sample No. 23124326-2  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 3 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจาก	เสียงขณะ	ผลต่าง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รับทราบ	ค่าระดับ การรบกวน
	แหล่งกำเนิด	ไม่มีการรบกวน	ระดับเสียง		กลางวัน	กลางคืน		
03:45 AM - 03:50 AM	42.7	38.5	4.2	2.0	-	43.7	36.2	7.5
03:50 AM - 03:55 AM	41.6	40.0	1.6	4.5	-	40.1	35.7	4.4
03:55 AM - 04:00 AM	43.2	41.1	2.1	4.5	-	41.7	38.0	3.7
04:00 AM - 04:05 AM	47.1	40.5	6.6	1.0	-	49.1	36.8	12.3
04:05 AM - 04:10 AM	43.2	53.9	-10.7	7.0	-	39.2	36.5	2.7
04:10 AM - 04:15 AM	65.2	43.7	21.5	0.0	-	68.2	38.1	30.1
04:15 AM - 04:20 AM	52.2	63.8	-11.6	7.0	-	48.2	37.6	10.6
04:20 AM - 04:25 AM	48.6	42.2	6.4	1.5	-	50.1	36.4	13.7
04:25 AM - 04:30 AM	41.8	40.5	1.3	7.0	-	37.8	37.8	0.0
04:30 AM - 04:35 AM	43.4	42.2	1.2	7.0	-	39.4	38.4	1.0
04:35 AM - 04:40 AM	44.2	43.3	0.9	7.0	-	40.2	40.3	-0.1
04:40 AM - 04:45 AM	43.2	42.7	0.5	7.0	-	39.2	40.2	-1.0
04:45 AM - 04:50 AM	43.6	42.9	0.7	7.0	-	39.6	41.0	-1.4
04:50 AM - 04:55 AM	43.6	41.8	1.8	4.5	-	42.1	40.2	1.9
04:55 AM - 05:00 AM	46.5	44.4	2.1	4.5	-	45.0	40.9	4.1
05:00 AM - 05:05 AM	49.9	49.0	0.9	7.0	-	45.9	42.0	3.9
05:05 AM - 05:10 AM	48.7	51.0	-2.3	7.0	-	44.7	41.8	2.9
05:10 AM - 05:15 AM	54.8	47.4	7.4	1.0	-	56.8	42.0	14.8
05:15 AM - 05:20 AM	46.2	47.0	-0.8	7.0	-	42.2	42.8	-0.6
05:20 AM - 05:25 AM	47.5	48.0	-0.5	7.0	-	43.5	43.2	0.3
05:25 AM - 05:30 AM	50.8	46.5	4.3	2.0	-	51.8	43.0	8.8
05:30 AM - 05:35 AM	48.0	47.7	0.3	7.0	-	44.0	41.8	2.2
05:35 AM - 05:40 AM	47.8	45.7	2.1	4.5	-	46.3	43.4	2.9
05:40 AM - 05:45 AM	47.7	46.0	1.7	4.5	-	46.2	43.5	2.7
05:45 AM - 05:50 AM	55.4	47.5	7.9	0.5	-	57.9	44.5	13.4
05:50 AM - 05:55 AM	51.1	50.5	0.6	7.0	-	47.1	45.2	1.9
05:55 AM - 06:00 AM	49.6	49.2	0.4	7.0	-	45.6	44.8	0.8
06:00 AM - 07:00 AM	54.5	51.6	2.9	3.0	51.5	-	46.5	5.0
07:00 AM - 08:00 AM	52.3	50.9	1.4	7.0	45.3	-	44.6	0.7
08:00 AM - 09:00 AM	54.7	51.2	3.5	2.0	52.7	-	45.5	7.2
09:00 AM - 10:00 AM	55.7	52.4	3.3	3.0	52.7	-	45.6	7.1
10:00 AM - 11:00 AM	51.0	50.0	1.0	7.0	44.0	-	44.4	-0.4
ค่ามาตรฐาน								≤ 10

ค่ามาตรฐาน

≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกรมการสาธารณสุข เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงตามหลักเกณฑ์ พ.ศ. 2561

ระดับเสียงตามมาตรฐานเสียงรบกวนในที่พักอาศัย (Sample No.23124327-2 วันที่ตรวจวัด 18-19 ธันวาคม 2566)

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) (Thailand) or its subsidiaries. This report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872441-1

Page 1 of 3

Sample No. 23124326-3  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านชอ 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))							
	เสียงจากแหล่งกำเนิด	เสียงรบกวนในบริเวณ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
11:00 AM - 12:00 PM	55.0	49.4	5.6	1.5	53.5	-	42.7	10.8
12:00 PM - 01:00 PM	51.4	52.8	-1.4	7.0	44.4	-	43.1	1.3
01:00 PM - 02:00 PM	51.1	55.7	-4.6	7.0	44.1	-	43.7	0.4
02:00 PM - 03:00 PM	50.4	49.8	0.6	7.0	43.4	-	43.4	0.0
03:00 PM - 04:00 PM	52.3	53.2	-0.9	7.0	45.3	-	44.0	1.3
04:00 PM - 05:00 PM	55.9	49.4	6.5	1.0	54.9	-	43.2	11.7
05:00 PM - 06:00 PM	48.4	47.0	1.4	7.0	41.4	-	42.8	-1.4
06:00 PM - 07:00 PM	47.2	45.6	1.6	4.5	42.7	-	42.6	0.1
07:00 PM - 08:00 PM	49.4	46.3	3.1	3.0	46.4	-	43.0	3.4
08:00 PM - 09:00 PM	46.4	45.0	1.4	7.0	39.4	-	42.0	-2.6
09:00 PM - 10:00 PM	48.4	48.1	0.3	7.0	41.4	-	44.4	-3.0
10:00 PM - 10:05 PM	47.8	46.2	1.6	4.5	-	46.3	40.5	5.8
10:05 PM - 10:10 PM	45.8	44.3	1.5	4.5	-	44.3	39.4	4.9
10:10 PM - 10:15 PM	47.6	47.0	0.6	7.0	-	43.6	43.3	0.3
10:15 PM - 10:20 PM	48.8	48.0	0.8	7.0	-	44.8	45.5	-0.7
10:20 PM - 10:25 PM	49.1	49.0	0.1	7.0	-	45.1	46.4	-1.3
10:25 PM - 10:30 PM	48.3	49.1	-0.8	7.0	-	44.3	46.4	-2.1
10:30 PM - 10:35 PM	48.9	49.6	-0.7	7.0	-	44.9	46.9	-2.0
10:35 PM - 10:40 PM	47.2	46.8	0.4	7.0	-	43.2	41.6	1.6
10:40 PM - 10:45 PM	47.8	48.0	-0.2	7.0	-	43.8	42.9	0.9
10:45 PM - 10:50 PM	45.0	43.9	1.1	7.0	-	41.0	41.0	0.0
10:50 PM - 10:55 PM	47.9	47.4	0.5	7.0	-	43.9	41.3	2.6
10:55 PM - 11:00 PM	46.7	46.5	0.2	7.0	-	42.7	42.5	0.2
11:00 PM - 11:05 PM	45.6	45.9	-0.3	7.0	-	41.6	42.1	-0.5
11:05 PM - 11:10 PM	47.0	45.9	1.1	7.0	-	43.0	42.5	0.5
11:10 PM - 11:15 PM	46.4	44.3	2.1	4.5	-	44.9	42.1	2.8
11:15 PM - 11:20 PM	45.0	43.2	1.8	4.5	-	43.5	39.8	3.7
11:20 PM - 11:25 PM	45.8	45.0	0.8	7.0	-	41.8	38.8	3.0
11:25 PM - 11:30 PM	43.7	40.8	2.9	3.0	-	43.7	39.4	4.3
11:30 PM - 11:35 PM	43.8	40.8	3.0	3.0	-	43.8	39.4	4.4
11:35 PM - 11:40 PM	44.4	41.5	2.9	3.0	-	44.4	38.8	5.6
11:40 PM - 11:45 PM	45.3	44.7	0.6	7.0	-	41.3	38.4	2.9
11:45 PM - 11:50 PM	49.5	41.5	8.0	0.5	-	52.0	38.3	13.7
11:50 PM - 11:55 PM	44.8	41.9	2.9	3.0	-	44.8	38.3	6.5
11:55 PM - 12:00 AM	47.9	47.0	0.9	7.0	-	43.9	38.0	5.9
12:00 AM - 12:05 AM	43.5	39.6	3.9	2.0	-	44.5	37.1	7.4
12:05 AM - 12:10 AM	43.2	38.9	4.3	2.0	-	44.2	36.3	7.9
12:10 AM - 12:15 AM	44.2	40.1	4.1	2.0	-	45.2	36.5	8.7
12:15 AM - 12:20 AM	43.8	40.3	3.5	2.0	-	44.8	36.4	8.4
12:20 AM - 12:25 AM	42.8	37.3	5.5	1.5	-	44.3	36.0	8.3

Approved by

*Wilaw*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872441-1

Page 2 of 3

Sample No. 23124326-3  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านชอ 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))							
	เสียงจากแหล่งกำเนิด	เสียงรบกวนในบริเวณ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
12:25 AM - 12:30 AM	43.2	38.7	4.5	1.5	-	44.7	37.5	7.2
12:30 AM - 12:35 AM	42.6	38.8	3.8	2.0	-	43.6	37.3	6.3
12:35 AM - 12:40 AM	43.0	39.8	3.2	3.0	-	43.0	37.4	5.6
12:40 AM - 12:45 AM	43.2	39.1	4.1	2.0	-	44.2	37.1	7.1
12:45 AM - 12:50 AM	43.5	39.8	3.7	2.0	-	44.5	37.5	7.0
12:50 AM - 12:55 AM	42.4	38.4	4.0	2.0	-	43.4	37.4	6.0
12:55 AM - 01:00 AM	42.8	38.6	4.2	2.0	-	43.8	37.0	6.8
01:00 AM - 01:05 AM	43.2	40.8	2.4	4.5	-	41.7	37.6	4.1
01:05 AM - 01:10 AM	44.0	41.0	3.0	3.0	-	44.0	37.9	6.1
01:10 AM - 01:15 AM	43.4	39.8	3.6	2.0	-	44.4	37.8	6.6
01:15 AM - 01:20 AM	42.8	40.4	2.4	4.5	-	41.3	37.7	3.6
01:20 AM - 01:25 AM	41.9	39.5	2.4	4.5	-	40.4	37.8	2.6
01:25 AM - 01:30 AM	42.5	39.1	3.4	3.0	-	42.5	37.5	5.0
01:30 AM - 01:35 AM	43.4	39.8	3.6	2.0	-	44.4	37.1	7.3
01:35 AM - 01:40 AM	44.6	43.2	1.4	7.0	-	40.6	37.6	3.0
01:40 AM - 01:45 AM	45.2	43.3	1.9	4.5	-	43.7	37.8	5.9
01:45 AM - 01:50 AM	42.5	39.9	2.6	3.0	-	42.5	37.3	5.2
01:50 AM - 01:55 AM	42.2	39.1	3.1	3.0	-	42.2	36.8	5.4
01:55 AM - 02:00 AM	43.2	40.9	2.3	4.5	-	41.7	37.7	4.0
02:00 AM - 02:05 AM	42.7	38.7	4.0	2.0	-	43.7	35.7	8.0
02:05 AM - 02:10 AM	45.2	43.0	2.2	4.5	-	43.7	37.2	6.5
02:10 AM - 02:15 AM	43.8	38.4	5.4	1.5	-	45.3	35.9	9.4
02:15 AM - 02:20 AM	41.6	37.9	3.7	2.0	-	42.6	35.4	7.2
02:20 AM - 02:25 AM	42.8	40.6	2.2	4.5	-	41.3	36.3	5.0
02:25 AM - 02:30 AM	42.1	39.2	2.9	3.0	-	42.1	36.3	5.8
02:30 AM - 02:35 AM	41.9	38.8	3.1	3.0	-	41.9	36.3	5.6
02:35 AM - 02:40 AM	42.7	40.5	2.2	4.5	-	41.2	35.8	5.4
02:40 AM - 02:45 AM	42.6	40.1	2.5	3.0	-	42.6	36.2	6.4
02:45 AM - 02:50 AM	42.2	38.7	3.5	2.0	-	43.2	35.4	7.8
02:50 AM - 02:55 AM	40.7	36.6	4.1	2.0	-	41.7	35.1	6.6
02:55 AM - 03:00 AM	41.2	37.6	3.6	2.0	-	42.2	35.9	6.3
03:00 AM - 03:05 AM	41.5	37.6	3.9	2.0	-	42.5	35.5	7.0
03:05 AM - 03:10 AM	41.6	38.1	3.5	2.0	-	42.6	35.6	7.0
03:10 AM - 03:15 AM	41.5	38.5	3.0	3.0	-	41.5	36.1	5.4
03:15 AM - 03:20 AM	41.7	37.1	4.6	1.5	-	43.2	35.1	8.1
03:20 AM - 03:25 AM	41.3	37.0	4.3	2.0	-	42.3	35.3	7.0
03:25 AM - 03:30 AM	43.0	42.1	0.9	7.0	-	39.0	36.9	2.1
03:30 AM - 03:35 AM	43.9	41.8	2.1	4.5	-	42.4	35.7	6.7
03:35 AM - 03:40 AM	42.5	40.9	1.6	4.5	-	41.0	36.0	5.0
03:40 AM - 03:45 AM	41.4	39.8	1.6	4.5	-	39.9	35.5	4.4

Approved by

*Wilaw*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872441-1

Page 3 of 3

Sample No. 23124326-3  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))					เปรียบเทียบจากแหล่งกำเนิด		ค่าระดับ การรบกวน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ค่าปรับค่า	ค่าปรับค่า	กลางวัน (A/C)	กลางคืน (A/C)	
03:45 AM - 03:50 AM	40.8	38.1	2.7	3.0	-	40.8	35.1	5.7
03:50 AM - 03:55 AM	42.4	39.3	3.1	3.0	-	42.4	36.7	5.7
03:55 AM - 04:00 AM	41.8	38.5	3.3	3.0	-	41.8	36.1	5.7
04:00 AM - 04:05 AM	42.1	38.9	3.2	3.0	-	42.1	36.3	5.8
04:05 AM - 04:10 AM	43.2	41.9	1.3	7.0	-	39.2	37.4	1.8
04:10 AM - 04:15 AM	43.3	42.0	1.3	7.0	-	39.3	38.0	1.3
04:15 AM - 04:20 AM	42.2	39.7	2.5	3.0	-	42.2	37.9	4.3
04:20 AM - 04:25 AM	43.3	40.7	2.6	3.0	-	43.3	38.1	5.2
04:25 AM - 04:30 AM	41.7	39.2	2.5	3.0	-	41.7	36.3	5.4
04:30 AM - 04:35 AM	42.4	39.8	2.6	3.0	-	42.4	36.4	6.0
04:35 AM - 04:40 AM	42.8	40.1	2.7	3.0	-	42.8	38.0	4.8
04:40 AM - 04:45 AM	43.4	41.3	2.1	4.5	-	41.9	38.8	3.1
04:45 AM - 04:50 AM	45.2	43.3	1.9	4.5	-	43.7	40.1	3.6
04:50 AM - 04:55 AM	53.2	46.6	6.6	1.0	-	55.2	40.8	14.4
04:55 AM - 05:00 AM	46.5	46.3	0.2	7.0	-	42.5	40.9	1.6
05:00 AM - 05:05 AM	50.9	45.2	5.7	1.5	-	52.4	40.2	12.2
05:05 AM - 05:10 AM	49.8	67.3	-17.5	7.0	-	45.8	41.6	4.2
05:10 AM - 05:15 AM	50.0	47.5	2.5	3.0	-	50.0	42.2	7.8
05:15 AM - 05:20 AM	55.4	47.9	7.5	0.5	-	57.9	42.6	15.3
05:20 AM - 05:25 AM	48.2	45.8	2.4	4.5	-	46.7	42.0	4.7
05:25 AM - 05:30 AM	51.2	47.9	3.3	3.0	-	51.2	42.9	8.3
05:30 AM - 05:35 AM	48.7	47.1	1.6	4.5	-	47.2	43.2	4.0
05:35 AM - 05:40 AM	48.2	47.7	0.5	7.0	-	44.2	44.4	-0.2
05:40 AM - 05:45 AM	51.3	47.0	4.3	2.0	-	52.3	43.0	9.3
05:45 AM - 05:50 AM	52.2	48.5	3.7	2.0	-	53.2	44.2	9.0
05:50 AM - 05:55 AM	53.9	49.8	4.1	2.0	-	54.9	44.0	10.9
05:55 AM - 06:00 AM	56.0	55.3	0.7	7.0	-	52.0	44.9	7.1
06:00 AM - 07:00 AM	53.9	51.3	2.6	3.0	50.9	-	46.2	4.7
07:00 AM - 08:00 AM	54.9	50.0	4.9	1.5	53.4	-	43.8	9.6
08:00 AM - 09:00 AM	50.4	48.8	1.6	4.5	45.9	-	44.2	1.7
09:00 AM - 10:00 AM	50.9	49.1	1.8	4.5	46.4	-	44.6	1.8
10:00 AM - 11:00 AM	50.9	49.1	1.8	4.5	46.4	-	44.9	1.5
ค่ามาตรฐาน								≤ 10

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- หมายเหตุ
- ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเกณฑ์การประเมินเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง ค่าเกณฑ์มาตรฐานของเสียงรบกวนที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด จากมาตรวัด วันที่ 19-20 ธันวาคม 2566
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-3 วันที่ตรวจวัด 19-20 ธันวาคม 2566)

Approved by

*WibB.*

Wilawan Borikak  
Manager

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

ADDRESS 616/10 Moo 3 : T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. is ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872442-1

Page 1 of 3

Sample No. 23124326-4  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))					เปรียบเทียบจากแหล่งกำเนิด		ค่าระดับ การรบกวน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ค่าปรับค่า	ค่าปรับค่า	กลางวัน (A/C)	กลางคืน (A/C)	
11:00 AM - 12:00 PM	51.5	49.1	2.4	4.5	-	47.0	-	43.6
12:00 PM - 01:00 PM	51.1	47.4	3.7	2.0	-	49.1	-	42.8
01:00 PM - 02:00 PM	47.3	45.3	2.0	4.5	-	42.8	-	41.4
02:00 PM - 03:00 PM	49.6	47.3	2.3	4.5	-	45.1	-	42.5
03:00 PM - 04:00 PM	49.9	49.0	0.9	7.0	-	42.9	-	43.7
04:00 PM - 05:00 PM	55.9	48.2	7.7	0.5	-	55.4	-	43.7
05:00 PM - 06:00 PM	52.9	46.9	6.0	1.5	-	51.4	-	43.5
06:00 PM - 07:00 PM	51.2	46.9	4.3	2.0	-	49.2	-	43.4
07:00 PM - 08:00 PM	47.0	45.5	1.5	4.5	-	42.5	-	43.0
08:00 PM - 09:00 PM	49.1	45.0	4.1	2.0	-	47.1	-	41.5
09:00 PM - 10:00 PM	46.4	44.2	2.2	4.5	-	41.9	-	40.6
10:00 PM - 10:05 PM	45.5	44.0	1.5	4.5	-	-	44.0	41.1
10:05 PM - 10:10 PM	45.5	43.4	2.1	4.5	-	-	44.0	41.5
10:10 PM - 10:15 PM	46.7	45.7	1.0	7.0	-	-	42.7	41.6
10:15 PM - 10:20 PM	45.8	44.6	1.2	7.0	-	-	41.8	41.8
10:20 PM - 10:25 PM	44.0	42.9	1.1	7.0	-	-	40.0	40.7
10:25 PM - 10:30 PM	48.0	44.0	4.0	2.0	-	-	49.0	40.1
10:30 PM - 10:35 PM	47.2	44.0	3.2	3.0	-	-	47.2	39.7
10:35 PM - 10:40 PM	44.7	42.4	2.3	4.5	-	-	43.2	40.5
10:40 PM - 10:45 PM	51.7	45.4	6.3	1.5	-	-	53.2	41.1
10:45 PM - 10:50 PM	48.7	43.2	5.5	1.5	-	-	50.2	39.6
10:50 PM - 10:55 PM	43.8	41.0	2.8	3.0	-	-	43.8	39.3
10:55 PM - 11:00 PM	44.4	44.5	-0.1	7.0	-	-	40.4	39.4
11:00 PM - 11:05 PM	45.8	45.4	0.4	7.0	-	-	41.8	40.3
11:05 PM - 11:10 PM	45.3	44.1	1.2	7.0	-	-	41.3	41.5
11:10 PM - 11:15 PM	44.3	43.1	1.2	7.0	-	-	40.3	41.4
11:15 PM - 11:20 PM	45.9	44.5	1.4	7.0	-	-	41.9	40.5
11:20 PM - 11:25 PM	44.3	42.8	1.5	4.5	-	-	42.8	41.1
11:25 PM - 11:30 PM	46.9	45.4	1.5	4.5	-	-	45.4	41.7
11:30 PM - 11:35 PM	48.5	47.7	0.8	7.0	-	-	44.5	43.3
11:35 PM - 11:40 PM	48.7	48.1	0.6	7.0	-	-	44.7	42.6
11:40 PM - 11:45 PM	45.5	44.1	1.4	7.0	-	-	41.5	41.3
11:45 PM - 11:50 PM	48.8	47.7	1.1	7.0	-	-	44.8	43.0
11:50 PM - 11:55 PM	49.7	48.2	1.5	4.5	-	-	48.2	42.4
11:55 PM - 12:00 AM	44.9	44.9	0.0	7.0	-	-	40.9	41.6
12:00 AM - 12:05 AM	49.9	47.2	2.7	3.0	-	-	49.9	40.6
12:05 AM - 12:10 AM	45.7	44.0	1.7	4.5	-	-	44.2	41.5
12:10 AM - 12:15 AM	45.2	44.9	0.3	7.0	-	-	41.2	42.8
12:15 AM - 12:20 AM	46.5	45.8	0.7	7.0	-	-	42.5	42.6
12:20 AM - 12:25 AM	45.8	44.4	1.4	7.0	-	-	41.8	41.2

Approved by

*WibB.*

Wilawan Borikak  
Manager

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

ADDRESS 616/10 Moo 3 : T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. is ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872442-1



**TESTING**  
**No.0042**

**Sample No.** 23124326-4  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 1 บ้านพลอง 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
**Measurement Date** Dec 20 - 21, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01073423

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ปรับค่าแล้ว	
12:25 AM - 12:30 AM	44.4	42.8	1.6	4.5	-	42.9	2.3
12:30 AM - 12:35 AM	56.9	50.6	6.3	1.5	-	58.4	17.4
12:35 AM - 12:40 AM	45.3	44.4	0.9	7.0	-	41.3	0.6
12:40 AM - 12:45 AM	43.9	42.7	1.2	7.0	-	39.9	0.4
12:45 AM - 12:50 AM	44.1	42.7	1.4	7.0	-	40.1	0.4
12:50 AM - 12:55 AM	44.9	43.8	1.1	7.0	-	40.9	0.1
12:55 AM - 01:00 AM	45.1	42.5	2.6	3.0	-	45.1	4.9
01:00 AM - 01:05 AM	44.8	41.6	3.2	3.0	-	44.8	5.3
01:05 AM - 01:10 AM	43.8	40.0	3.8	2.0	-	44.8	6.3
01:10 AM - 01:15 AM	45.5	42.5	3.0	3.0	-	45.5	7.3
01:15 AM - 01:20 AM	43.8	39.0	4.8	1.5	-	45.3	8.4
01:20 AM - 01:25 AM	45.0	39.7	5.3	1.5	-	46.5	9.4
01:25 AM - 01:30 AM	44.1	41.2	2.9	3.0	-	44.1	7.0
01:30 AM - 01:35 AM	44.3	38.5	5.8	1.5	-	45.8	8.8
01:35 AM - 01:40 AM	44.7	39.2	5.5	1.5	-	46.2	9.1
01:40 AM - 01:45 AM	44.2	40.1	4.1	2.0	-	45.2	7.6
01:45 AM - 01:50 AM	44.9	41.4	3.5	2.0	-	45.9	7.3
01:50 AM - 01:55 AM	46.0	41.6	4.4	2.0	-	47.0	7.5
01:55 AM - 02:00 AM	46.9	44.7	2.2	4.5	-	45.4	4.4
02:00 AM - 02:05 AM	46.3	44.6	1.7	4.5	-	44.8	3.0
02:05 AM - 02:10 AM	46.1	44.6	1.5	4.5	-	44.6	3.1
02:10 AM - 02:15 AM	44.6	40.9	3.7	2.0	-	45.6	7.0
02:15 AM - 02:20 AM	44.0	39.3	4.7	1.5	-	45.5	8.4
02:20 AM - 02:25 AM	43.3	39.7	3.6	2.0	-	44.3	6.6
02:25 AM - 02:30 AM	42.2	39.0	3.2	3.0	-	42.2	5.0
02:30 AM - 02:35 AM	42.7	40.2	2.5	3.0	-	42.7	5.0
02:35 AM - 02:40 AM	41.4	38.7	2.7	3.0	-	41.4	4.2
02:40 AM - 02:45 AM	42.9	40.0	2.9	3.0	-	42.9	5.1
02:45 AM - 02:50 AM	43.0	40.4	2.6	3.0	-	43.0	5.3
02:50 AM - 02:55 AM	42.5	39.4	3.1	3.0	-	42.5	5.4
02:55 AM - 03:00 AM	42.5	38.8	3.7	2.0	-	43.5	6.4
03:00 AM - 03:05 AM	42.6	40.4	2.2	4.5	-	41.1	3.4
03:05 AM - 03:10 AM	42.4	39.9	2.5	3.0	-	42.4	5.1
03:10 AM - 03:15 AM	41.2	39.7	1.5	4.5	-	39.7	2.6
03:15 AM - 03:20 AM	40.5	38.4	2.1	4.5	-	39.0	2.8
03:20 AM - 03:25 AM	45.6	42.5	3.1	3.0	-	45.6	7.4
03:25 AM - 03:30 AM	40.8	39.2	1.6	4.5	-	39.3	1.2
03:30 AM - 03:35 AM	41.4	39.3	2.1	4.5	-	39.9	2.1
03:35 AM - 03:40 AM	41.4	39.2	2.2	4.5	-	39.9	2.3
03:40 AM - 03:45 AM	41.3	38.9	2.4	4.5	-	39.8	2.7

Approved by

Wilawan Borirak  
Manager

The above results are valid only for the sound level meter (SLM) 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) Ltd. strongly recommends that this report is not reproduced except in full.

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872442-1



**TESTING**  
**No.0042**

**Sample No.** 23124326-4  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 1 บ้านพลอง 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
**Measurement Date** Dec 20 - 21, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01073423

Page 3 of 3

เวลา	ระดับเสียง (dB(A))						ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ปรับค่าแล้ว	
03:45 AM - 03:50 AM	44.2	40.4	3.8	2.0	-	45.2	7.8
03:50 AM - 03:55 AM	41.3	40.0	1.3	7.0	-	37.3	-0.5
03:55 AM - 04:00 AM	43.4	41.7	2.2	4.5	-	41.9	3.8
04:00 AM - 04:05 AM	42.3	41.8	0.5	7.0	-	38.3	-0.2
04:05 AM - 04:10 AM	41.6	39.4	2.2	4.5	-	40.1	2.9
04:10 AM - 04:15 AM	42.4	40.0	2.4	4.5	-	40.9	2.9
04:15 AM - 04:20 AM	41.7	39.7	2.0	4.5	-	40.2	2.8
04:20 AM - 04:25 AM	41.2	39.4	1.8	4.5	-	39.7	2.3
04:25 AM - 04:30 AM	41.3	39.5	1.8	4.5	-	39.8	2.2
04:30 AM - 04:35 AM	44.4	43.7	0.7	7.0	-	40.4	2.8
04:35 AM - 04:40 AM	41.5	39.9	1.6	4.5	-	40.0	2.2
04:40 AM - 04:45 AM	42.9	41.1	1.8	4.5	-	41.4	2.4
04:45 AM - 04:50 AM	42.5	41.4	1.1	7.0	-	38.5	-0.9
04:50 AM - 04:55 AM	44.2	42.4	1.8	4.5	-	42.7	2.5
04:55 AM - 05:00 AM	49.2	48.3	0.9	7.0	-	45.2	4.9
05:00 AM - 05:05 AM	49.0	46.0	3.0	3.0	-	49.0	6.9
05:05 AM - 05:10 AM	67.0	61.5	5.5	1.5	-	68.5	23.6
05:10 AM - 05:15 AM	53.5	65.5	-12.0	7.0	-	49.5	5.1
05:15 AM - 05:20 AM	47.5	47.6	-0.1	7.0	-	43.5	-1.1
05:20 AM - 05:25 AM	47.7	46.9	0.8	7.0	-	43.7	-0.5
05:25 AM - 05:30 AM	48.9	47.7	1.2	7.0	-	44.9	0.7
05:30 AM - 05:35 AM	48.8	47.9	0.9	7.0	-	44.8	0.4
05:35 AM - 05:40 AM	53.4	48.8	4.6	1.5	-	54.9	9.8
05:40 AM - 05:45 AM	51.4	49.1	2.3	4.5	-	49.9	4.9
05:45 AM - 05:50 AM	48.9	46.8	2.1	4.5	-	47.4	3.2
05:50 AM - 05:55 AM	62.7	48.9	13.8	0.0	-	65.7	19.7
05:55 AM - 06:00 AM	60.5	47.9	12.6	0.0	-	63.5	18.3
06:00 AM - 07:00 AM	53.4	51.7	1.7	4.5	48.9	47.5	1.4
07:00 AM - 08:00 AM	53.2	52.7	0.5	7.0	46.2	47.7	-1.5
08:00 AM - 09:00 AM	52.7	50.6	2.1	4.5	48.2	46.5	1.7
09:00 AM - 10:00 AM	55.2	52.7	2.5	3.0	52.2	45.6	6.6
10:00 AM - 11:00 AM	51.9	50.4	1.5	4.5	47.4	45.1	2.3

ค่ามาตรฐาน ≤ 10

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่ามาตรฐานเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง ค่ามาตรฐานระดับเสียงทางเสียงสันติภาพการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด ค่ามาตรฐานวัด วันที่ 20-21 ธันวาคม 2566
- ระดับเสียงที่ฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-4 วันที่ตรวจวัด 20-21 ธันวาคม 2566)

Approved by

Wilawan Borirak  
Manager

The above results are valid only for the sound level meter (SLM) 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) Ltd. strongly recommends that this report is not reproduced except in full.

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872443-1

Sample No. 23124326-5  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 1 of 3

เวลา	ระดับเสียง (dB(A))					ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับ การรบกวน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ค่าปรับค่า					
					กลางวัน	กลางคืน			
11:00 AM - 12:00 PM	49.6	47.6	2.0	4.5	45.1	-	43.4	1.7	
12:00 PM - 01:00 PM	52.7	50.6	2.1	4.5	48.2	-	43.2	5.0	
01:00 PM - 02:00 PM	49.8	50.4	-0.6	7.0	42.8	-	44.3	-1.5	
02:00 PM - 03:00 PM	52.9	49.6	3.3	3.0	49.9	-	45.5	4.4	
03:00 PM - 04:00 PM	52.7	52.6	0.1	7.0	45.7	-	44.9	0.8	
04:00 PM - 05:00 PM	52.8	52.1	0.7	7.0	45.8	-	45.9	-0.1	
05:00 PM - 06:00 PM	50.9	49.7	1.2	7.0	43.9	-	45.5	-1.6	
06:00 PM - 07:00 PM	50.0	57.9	-7.9	7.0	43.0	-	45.3	-2.3	
07:00 PM - 08:00 PM	57.5	54.0	3.5	2.0	55.5	-	45.3	10.2	
08:00 PM - 09:00 PM	58.6	48.7	9.9	0.5	58.1	-	44.2	13.9	
09:00 PM - 10:00 PM	51.5	51.4	0.1	7.0	44.5	-	47.1	-2.6	
10:00 PM - 10:05 PM	53.9	52.1	1.8	4.5	-	52.4	48.8	3.6	
10:05 PM - 10:10 PM	53.0	52.0	1.0	7.0	-	49.0	48.6	0.4	
10:10 PM - 10:15 PM	53.5	51.2	2.3	4.5	-	52.0	48.1	3.9	
10:15 PM - 10:20 PM	53.2	50.1	3.1	3.0	-	53.2	46.3	6.9	
10:20 PM - 10:25 PM	51.2	50.3	0.9	7.0	-	47.2	47.1	0.1	
10:25 PM - 10:30 PM	50.8	50.9	-0.1	7.0	-	46.8	44.8	2.0	
10:30 PM - 10:35 PM	52.0	51.0	1.0	7.0	-	48.0	45.4	2.6	
10:35 PM - 10:40 PM	52.6	52.2	0.4	7.0	-	48.6	47.2	1.4	
10:40 PM - 10:45 PM	53.6	50.4	3.2	3.0	-	53.6	44.9	8.7	
10:45 PM - 10:50 PM	51.0	52.7	-1.7	7.0	-	47.0	44.8	2.2	
10:50 PM - 10:55 PM	52.4	50.1	2.3	4.5	-	50.9	46.1	4.8	
10:55 PM - 11:00 PM	52.7	55.2	-2.5	7.0	-	48.7	47.1	1.6	
11:00 PM - 11:05 PM	55.8	53.5	2.3	4.5	-	54.3	49.3	5.0	
11:05 PM - 11:10 PM	56.8	52.9	3.9	2.0	-	57.8	47.5	10.3	
11:10 PM - 11:15 PM	54.4	53.5	0.9	7.0	-	50.4	50.1	0.3	
11:15 PM - 11:20 PM	53.0	55.1	-2.1	7.0	-	49.0	47.8	1.2	
11:20 PM - 11:25 PM	54.2	51.4	2.8	3.0	-	54.2	48.5	5.7	
11:25 PM - 11:30 PM	53.6	53.0	0.6	7.0	-	49.6	49.0	0.6	
11:30 PM - 11:35 PM	52.1	53.3	-1.2	7.0	-	48.1	49.4	-1.3	
11:35 PM - 11:40 PM	54.8	52.3	2.5	3.0	-	54.8	46.6	8.2	
11:40 PM - 11:45 PM	52.4	51.4	1.0	7.0	-	48.4	47.4	1.0	
11:45 PM - 11:50 PM	54.0	53.0	1.0	7.0	-	50.0	44.2	5.8	
11:50 PM - 11:55 PM	54.1	51.6	2.5	3.0	-	54.1	46.9	7.2	
11:55 PM - 12:00 AM	51.7	49.1	2.6	3.0	-	51.7	44.9	6.8	
12:00 AM - 12:05 AM	50.0	52.1	-2.1	7.0	-	46.0	46.4	-0.4	
12:05 AM - 12:10 AM	52.9	49.8	3.1	3.0	-	52.9	45.9	7.0	
12:10 AM - 12:15 AM	50.2	50.7	-0.5	7.0	-	46.2	43.2	3.0	
12:15 AM - 12:20 AM	51.4	46.8	4.6	1.5	-	52.9	42.6	10.3	
12:20 AM - 12:25 AM	48.4	42.7	5.7	1.5	-	49.9	40.0	9.9	

This document is valid only for the project/contract specified as indicated in this report. No part of this report or its contents 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*  
Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872443-1

Sample No. 23124326-5  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 2 of 3

เวลา	ระดับเสียง (dB(A))					ปรับค่าเสียงจากแหล่งกำเนิด		เสียงรบกวนฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ค่าปรับ				
					กลางวัน	กลางคืน			
12:25 AM - 12:30 AM	47.5	40.7	6.8	1.0	-	49.5	38.6	10.9	
12:30 AM - 12:35 AM	43.6	39.5	4.1	2.0	-	44.6	37.2	7.4	
12:35 AM - 12:40 AM	43.1	38.8	4.3	2.0	-	44.1	37.4	6.7	
12:40 AM - 12:45 AM	42.7	36.6	6.1	1.5	-	44.2	35.6	8.6	
12:45 AM - 12:50 AM	41.4	37.6	3.8	2.0	-	42.4	36.4	6.0	
12:50 AM - 12:55 AM	41.7	39.5	2.2	4.5	-	40.2	35.8	4.4	
12:55 AM - 01:00 AM	41.4	38.3	3.1	3.0	-	41.4	35.3	6.1	
01:00 AM - 01:05 AM	41.6	36.9	4.7	1.5	-	43.1	34.8	8.3	
01:05 AM - 01:10 AM	39.6	39.2	0.4	7.0	-	35.6	35.1	0.5	
01:10 AM - 01:15 AM	40.8	39.1	1.7	4.5	-	39.3	37.0	2.3	
01:15 AM - 01:20 AM	41.8	43.2	-1.4	7.0	-	37.8	38.3	-0.5	
01:20 AM - 01:25 AM	43.8	43.7	0.1	7.0	-	39.8	39.8	0.0	
01:25 AM - 01:30 AM	42.8	44.5	-1.7	7.0	-	38.8	40.5	-1.7	
01:30 AM - 01:35 AM	45.6	47.0	-1.4	7.0	-	41.6	42.0	-0.4	
01:35 AM - 01:40 AM	47.2	45.2	2.0	4.5	-	45.7	42.2	3.5	
01:40 AM - 01:45 AM	47.9	45.8	2.1	4.5	-	46.4	43.0	3.4	
01:45 AM - 01:50 AM	46.3	46.1	0.2	7.0	-	42.3	42.9	-0.6	
01:50 AM - 01:55 AM	46.9	46.1	0.8	7.0	-	42.9	42.5	0.4	
01:55 AM - 02:00 AM	47.5	45.7	1.8	4.5	-	46.0	41.7	4.3	
02:00 AM - 02:05 AM	46.9	48.2	-1.3	7.0	-	42.9	41.2	1.7	
02:05 AM - 02:10 AM	49.3	48.2	1.1	7.0	-	45.3	44.5	0.8	
02:10 AM - 02:15 AM	49.7	47.3	2.4	4.5	-	48.2	42.7	5.5	
02:15 AM - 02:20 AM	47.7	50.2	-2.5	7.0	-	43.7	46.4	-2.7	
02:20 AM - 02:25 AM	50.4	47.0	3.4	3.0	-	50.4	41.8	8.6	
02:25 AM - 02:30 AM	49.7	46.3	3.4	3.0	-	49.7	41.7	8.0	
02:30 AM - 02:35 AM	47.2	45.8	1.4	7.0	-	43.2	41.6	1.6	
02:35 AM - 02:40 AM	48.1	45.9	2.2	4.5	-	46.6	42.5	4.1	
02:40 AM - 02:45 AM	47.1	47.1	0.0	7.0	-	43.1	41.4	1.7	
02:45 AM - 02:50 AM	47.0	50.5	-3.5	7.0	-	43.0	43.9	-0.9	
02:50 AM - 02:55 AM	47.8	51.3	-3.5	7.0	-	43.8	44.3	-0.5	
02:55 AM - 03:00 AM	66.3	47.9	18.4	0.0	-	69.3	42.6	26.7	
03:00 AM - 03:05 AM	47.9	49.4	-1.5	7.0	-	43.9	45.4	-1.5	
03:05 AM - 03:10 AM	54.5	48.4	6.1	1.5	-	56.0	45.4	10.6	
03:10 AM - 03:15 AM	51.1	46.7	4.4	2.0	-	52.1	43.6	8.5	
03:15 AM - 03:20 AM	48.4	47.4	1.0	7.0	-	44.4	42.7	1.7	
03:20 AM - 03:25 AM	48.8	49.1	-0.3	7.0	-	44.8	45.3	-0.5	
03:25 AM - 03:30 AM	49.6	52.1	-2.5	7.0	-	45.6	47.8	-2.2	
03:30 AM - 03:35 AM	52.6	51.0	1.6	4.5	-	51.1	45.7	5.4	
03:35 AM - 03:40 AM	52.7	49.3	3.4	3.0	-	52.7	45.0	7.7	
03:40 AM - 03:45 AM	50.4	50.5	-0.1	7.0	-	46.4	46.8	-0.4	

This document is valid only for the project/contract specified as indicated in this report. No part of this report or its contents 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*  
Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Sample No. : 23124326-5  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านชอช 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
Measurement Date : Dec 21 - 22, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 01073423

Page 3 of 3

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน			
03:45 AM - 03:50 AM	51.5	47.4	4.1	2.0	-	52.5	43.7	8.8	-
03:50 AM - 03:55 AM	49.6	47.3	2.3	4.5	-	48.1	43.0	5.1	-
03:55 AM - 04:00 AM	48.1	50.8	-2.7	7.0	-	44.1	45.2	-1.1	-
04:00 AM - 04:05 AM	50.7	49.5	1.2	7.0	-	46.7	44.7	2.0	-
04:05 AM - 04:10 AM	52.0	53.7	-1.7	7.0	-	48.0	46.7	1.3	-
04:10 AM - 04:15 AM	52.3	51.4	0.9	7.0	-	48.3	46.4	1.9	-
04:15 AM - 04:20 AM	62.3	51.2	11.1	0.5	-	64.8	47.4	17.4	-
04:20 AM - 04:25 AM	52.8	50.6	2.2	4.5	-	51.3	44.7	6.6	-
04:25 AM - 04:30 AM	49.6	50.3	-0.7	7.0	-	45.6	45.7	-0.1	-
04:30 AM - 04:35 AM	52.3	52.8	-0.5	7.0	-	48.3	47.3	1.0	-
04:35 AM - 04:40 AM	54.6	50.5	4.1	2.0	-	55.6	43.7	11.9	-
04:40 AM - 04:45 AM	49.6	51.0	-1.4	7.0	-	45.6	47.6	-2.0	-
04:45 AM - 04:50 AM	53.3	49.9	3.4	3.0	-	53.3	46.5	6.8	-
04:50 AM - 04:55 AM	52.1	52.0	0.1	7.0	-	48.1	46.9	1.2	-
04:55 AM - 05:00 AM	57.8	55.3	2.5	3.0	-	57.8	48.6	9.2	-
05:00 AM - 05:05 AM	58.2	54.9	3.3	3.0	-	58.2	48.5	9.7	-
05:05 AM - 05:10 AM	54.7	56.4	-1.7	7.0	-	50.7	49.5	1.2	-
05:10 AM - 05:15 AM	57.7	55.7	2.0	4.5	-	56.2	50.4	5.8	-
05:15 AM - 05:20 AM	57.5	57.2	0.3	7.0	-	53.5	51.9	1.6	-
05:20 AM - 05:25 AM	59.4	57.7	1.7	4.5	-	57.9	52.2	5.7	-
05:25 AM - 05:30 AM	59.7	57.6	2.1	4.5	-	58.2	50.4	7.8	-
05:30 AM - 05:35 AM	60.5	55.5	5.0	1.5	-	62.0	51.3	10.7	-
05:35 AM - 05:40 AM	57.7	60.6	-2.9	7.0	-	53.7	51.9	1.8	-
05:40 AM - 05:45 AM	63.9	63.6	0.3	7.0	-	59.9	53.0	6.9	-
05:45 AM - 05:50 AM	58.2	55.0	3.2	3.0	-	58.2	51.0	7.2	-
05:50 AM - 05:55 AM	57.4	55.4	2.0	4.5	-	55.9	50.4	5.5	-
05:55 AM - 06:00 AM	57.6	58.4	-0.8	7.0	-	53.6	51.0	2.6	-
06:00 AM - 07:00 AM	58.4	57.2	1.2	7.0	51.4	-	52.1	-0.7	-
07:00 AM - 08:00 AM	57.0	55.7	1.3	7.0	50.0	-	50.7	-0.7	-
08:00 AM - 09:00 AM	56.4	56.7	-0.3	7.0	49.4	-	51.0	-1.6	-
09:00 AM - 10:00 AM	56.8	55.9	0.9	7.0	49.8	-	51.2	-1.4	-
10:00 AM - 11:00 AM	55.0	54.0	1.0	7.0	48.0	-	49.2	-1.2	-
ค่ามาตรฐาน									≤ 10

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงจากการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด ตามการตรวจวัด วันที่ 21-22 ธันวาคม 2566
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-5 วันที่ตรวจวัด 21-22 ธันวาคม 2566)

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

ADDRESS: 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3804 8555 | FAX: +66 0 3804 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

USE SOURCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Sample No. : 23124326-6  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านชอช 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
Measurement Date : Dec 22 - 23, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 01073423

Page 1 of 3

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน			
11:00 AM - 12:00 PM	54.6	53.4	1.2	7.0	47.6	-	48.8	-1.2	-
12:00 PM - 01:00 PM	53.5	53.3	0.2	7.0	46.5	-	47.2	-0.7	-
01:00 PM - 02:00 PM	53.0	52.1	0.9	7.0	46.0	-	47.2	-1.2	-
02:00 PM - 03:00 PM	53.5	52.5	1.0	7.0	46.5	-	48.2	-1.7	-
03:00 PM - 04:00 PM	53.6	52.9	0.7	7.0	46.6	-	47.4	-0.8	-
04:00 PM - 05:00 PM	59.0	52.0	7.0	1.0	58.0	-	46.3	11.7	-
05:00 PM - 06:00 PM	49.9	49.2	0.7	7.0	42.9	-	44.3	-1.4	-
06:00 PM - 07:00 PM	47.5	46.6	0.9	7.0	40.5	-	43.9	-3.4	-
07:00 PM - 08:00 PM	56.9	49.2	7.7	0.5	56.4	-	44.4	12.0	-
08:00 PM - 09:00 PM	52.3	50.1	2.2	4.5	47.8	-	45.8	2.0	-
09:00 PM - 10:00 PM	46.7	46.4	0.3	7.0	39.7	-	41.8	-2.1	-
10:00 PM - 10:05 PM	48.5	46.6	1.9	4.5	-	47.0	42.2	4.8	-
10:05 PM - 10:10 PM	46.7	46.2	0.5	7.0	-	42.7	41.1	1.6	-
10:10 PM - 10:15 PM	46.5	51.8	-5.3	7.0	-	42.5	41.8	0.7	-
10:15 PM - 10:20 PM	47.1	49.7	-2.6	7.0	-	43.1	44.0	-0.9	-
10:20 PM - 10:25 PM	56.5	45.8	10.7	0.5	-	59.0	41.5	17.5	-
10:25 PM - 10:30 PM	46.6	47.3	-0.7	7.0	-	42.6	43.2	-0.6	-
10:30 PM - 10:35 PM	48.0	49.3	-1.3	7.0	-	44.0	42.9	1.1	-
10:35 PM - 10:40 PM	48.7	48.0	0.7	7.0	-	44.7	44.6	0.1	-
10:40 PM - 10:45 PM	50.2	49.2	1.0	7.0	-	46.2	45.5	0.7	-
10:45 PM - 10:50 PM	49.1	48.3	0.8	7.0	-	45.1	42.4	2.7	-
10:50 PM - 10:55 PM	50.2	46.3	3.9	2.0	-	51.2	43.1	8.1	-
10:55 PM - 11:00 PM	49.4	50.7	-1.3	7.0	-	45.4	45.9	-0.5	-
11:00 PM - 11:05 PM	52.4	52.3	0.1	7.0	-	48.4	45.9	2.5	-
11:05 PM - 11:10 PM	52.8	46.6	6.2	1.5	-	54.3	42.0	12.3	-
11:10 PM - 11:15 PM	48.2	42.1	6.1	1.5	-	49.7	39.4	10.3	-
11:15 PM - 11:20 PM	45.1	41.3	3.8	2.0	-	46.1	38.6	7.5	-
11:20 PM - 11:25 PM	43.0	42.0	1.0	7.0	-	39.0	39.1	-0.1	-
11:25 PM - 11:30 PM	43.0	41.1	1.9	4.5	-	41.5	37.8	3.7	-
11:30 PM - 11:35 PM	42.0	42.3	-0.3	7.0	-	38.0	37.5	0.5	-
11:35 PM - 11:40 PM	44.0	40.7	3.3	3.0	-	44.0	37.7	6.3	-
11:40 PM - 11:45 PM	40.7	40.2	0.5	7.0	-	36.7	36.6	0.1	-
11:45 PM - 11:50 PM	43.4	39.7	3.7	2.0	-	44.4	36.3	8.1	-
11:50 PM - 11:55 PM	40.6	41.9	-1.3	7.0	-	36.6	38.5	-1.9	-
11:55 PM - 12:00 AM	43.1	43.2	-0.1	7.0	-	39.1	38.3	0.8	-
12:00 AM - 12:05 AM	57.9	43.3	14.6	0.0	-	60.9	39.6	21.3	-
12:05 AM - 12:10 AM	43.4	43.6	-0.2	7.0	-	39.4	40.0	-0.6	-
12:10 AM - 12:15 AM	43.7	42.4	1.3	7.0	-	39.7	37.4	2.3	-
12:15 AM - 12:20 AM	43.0	45.3	-2.3	7.0	-	39.0	41.7	-2.7	-
12:20 AM - 12:25 AM	45.3	47.5	-2.2	7.0	-	41.3	43.3	-2.0	-

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

ADDRESS: 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3804 8555 | FAX: +66 0 3804 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

USE SOURCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872444-1

Sample No. 23124326-6  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านชวลอ 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 2 of 3

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงรบกวนไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางวัน (A-C)	กลางคืน (A-C)			
12:25 AM - 12:30 AM	47.1	46.5	0.6	7.0	-	43.1	43.1	0.0	
12:30 AM - 12:35 AM	46.6	47.0	-0.4	7.0	-	42.6	42.1	0.5	
12:35 AM - 12:40 AM	48.2	44.7	3.5	2.0	-	49.2	41.1	8.1	
12:40 AM - 12:45 AM	45.5	45.2	0.3	7.0	-	41.5	41.2	0.3	
12:45 AM - 12:50 AM	46.3	42.8	3.5	2.0	-	47.3	39.7	7.6	
12:50 AM - 12:55 AM	45.8	46.4	-0.6	7.0	-	41.8	39.9	1.9	
12:55 AM - 01:00 AM	46.4	41.3	5.1	1.5	-	47.9	37.7	10.2	
01:00 AM - 01:05 AM	42.4	42.3	0.1	7.0	-	38.4	38.5	-0.1	
01:05 AM - 01:10 AM	46.5	42.4	4.1	2.0	-	47.5	37.9	9.6	
01:10 AM - 01:15 AM	43.5	40.4	3.1	3.0	-	43.5	37.6	5.9	
01:15 AM - 01:20 AM	41.2	42.9	-1.7	7.0	-	37.2	38.6	-1.4	
01:20 AM - 01:25 AM	43.1	46.2	-3.1	7.0	-	39.1	40.6	-1.5	
01:25 AM - 01:30 AM	45.7	45.3	0.4	7.0	-	41.7	39.6	2.1	
01:30 AM - 01:35 AM	47.6	41.4	6.2	1.5	-	49.1	37.0	12.1	
01:35 AM - 01:40 AM	42.4	39.6	2.8	3.0	-	42.4	36.1	6.3	
01:40 AM - 01:45 AM	41.1	43.7	-2.6	7.0	-	37.1	38.7	-1.6	
01:45 AM - 01:50 AM	43.3	45.7	-2.4	7.0	-	39.3	40.5	-1.2	
01:50 AM - 01:55 AM	45.6	45.0	0.6	7.0	-	41.6	42.1	-0.5	
01:55 AM - 02:00 AM	45.5	43.3	2.2	4.5	-	44.0	39.5	4.5	
02:00 AM - 02:05 AM	44.4	43.2	1.2	7.0	-	40.4	39.1	1.3	
02:05 AM - 02:10 AM	43.0	45.4	-2.4	7.0	-	39.0	39.1	-0.1	
02:10 AM - 02:15 AM	46.7	42.1	4.6	1.5	-	48.2	37.3	10.9	
02:15 AM - 02:20 AM	43.8	44.1	-0.3	7.0	-	39.8	39.4	0.4	
02:20 AM - 02:25 AM	44.2	45.3	-1.1	7.0	-	40.2	41.3	-1.1	
02:25 AM - 02:30 AM	45.5	46.2	-0.7	7.0	-	41.5	41.0	0.5	
02:30 AM - 02:35 AM	45.0	48.8	-3.8	7.0	-	41.0	43.1	-2.1	
02:35 AM - 02:40 AM	48.8	47.4	1.4	7.0	-	44.8	44.2	0.6	
02:40 AM - 02:45 AM	49.0	50.4	-1.4	7.0	-	45.0	45.0	0.0	
02:45 AM - 02:50 AM	50.8	50.7	0.1	7.0	-	46.8	44.6	2.2	
02:50 AM - 02:55 AM	51.0	47.6	3.4	3.0	-	51.0	43.1	7.9	
02:55 AM - 03:00 AM	50.4	44.9	5.5	1.5	-	51.9	41.9	10.0	
03:00 AM - 03:05 AM	46.6	49.9	-3.3	7.0	-	42.6	42.9	-0.3	
03:05 AM - 03:10 AM	49.7	46.2	3.5	2.0	-	50.7	41.8	8.9	
03:10 AM - 03:15 AM	46.4	49.2	-2.8	7.0	-	42.4	43.2	-0.8	
03:15 AM - 03:20 AM	49.6	51.1	-1.5	7.0	-	45.6	46.2	-0.6	
03:20 AM - 03:25 AM	53.9	51.6	2.3	4.5	-	52.4	45.9	6.5	
03:25 AM - 03:30 AM	56.4	49.4	7.0	1.0	-	58.4	45.5	12.9	
03:30 AM - 03:35 AM	50.6	48.5	2.1	4.5	-	49.1	45.1	4.0	
03:35 AM - 03:40 AM	49.5	50.2	-0.7	7.0	-	45.5	46.0	-0.5	
03:40 AM - 03:45 AM	50.1	48.1	2.0	4.5	-	48.6	44.4	4.2	

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

Approved by

Wiwann Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872444-1

Sample No. 23124326-6  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านชวลอ 12 ตำบลพนาภิรม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

Page 3 of 3

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงรบกวนไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางวัน (A-C)	กลางคืน (A-C)			
03:45 AM - 03:50 AM	49.0	48.8	0.2	7.0	-	45.0	44.0	1.0	
03:50 AM - 03:55 AM	48.7	49.0	-0.3	7.0	-	44.7	44.0	0.7	
03:55 AM - 04:00 AM	52.7	46.9	5.8	1.5	-	54.2	42.7	11.5	
04:00 AM - 04:05 AM	47.4	48.9	-1.5	7.0	-	43.4	45.8	-2.4	
04:05 AM - 04:10 AM	48.4	50.1	-1.7	7.0	-	44.4	44.9	-0.5	
04:10 AM - 04:15 AM	50.7	49.5	1.2	7.0	-	46.7	44.5	2.2	
04:15 AM - 04:20 AM	51.7	46.3	5.4	1.5	-	53.2	42.5	10.7	
04:20 AM - 04:25 AM	48.7	49.1	-0.4	7.0	-	44.7	44.5	0.2	
04:25 AM - 04:30 AM	48.9	49.6	-0.7	7.0	-	44.9	44.1	0.8	
04:30 AM - 04:35 AM	50.1	48.1	2.0	4.5	-	48.6	42.9	5.7	
04:35 AM - 04:40 AM	50.2	50.2	0.0	7.0	-	46.2	45.3	0.9	
04:40 AM - 04:45 AM	51.6	48.1	3.5	2.0	-	52.6	44.5	8.1	
04:45 AM - 04:50 AM	49.6	49.7	-0.1	7.0	-	45.6	45.7	-0.1	
04:50 AM - 04:55 AM	49.8	49.7	0.1	7.0	-	45.8	44.5	1.3	
04:55 AM - 05:00 AM	49.3	52.9	-3.6	7.0	-	45.3	46.4	-1.1	
05:00 AM - 05:05 AM	58.4	48.7	9.7	0.5	-	60.9	46.0	14.9	
05:05 AM - 05:10 AM	48.9	50.8	-1.9	7.0	-	44.9	44.4	0.5	
05:10 AM - 05:15 AM	57.4	54.3	3.1	3.0	-	57.4	47.8	9.6	
05:15 AM - 05:20 AM	53.4	61.7	-8.3	7.0	-	49.4	46.3	3.1	
05:20 AM - 05:25 AM	68.5	51.5	17.0	0.0	-	71.5	48.4	23.1	
05:25 AM - 05:30 AM	53.2	49.2	4.0	2.0	-	54.2	46.2	8.0	
05:30 AM - 05:35 AM	50.3	54.3	-4.0	7.0	-	46.3	46.8	-0.5	
05:35 AM - 05:40 AM	58.5	50.7	7.8	0.5	-	61.0	45.5	15.5	
05:40 AM - 05:45 AM	49.9	50.9	-1.0	7.0	-	45.9	47.0	-1.1	
05:45 AM - 05:50 AM	52.6	52.1	0.5	7.0	-	48.6	47.6	1.0	
05:50 AM - 05:55 AM	53.7	52.9	0.8	7.0	-	49.7	48.3	1.4	
05:55 AM - 06:00 AM	54.8	48.7	6.1	1.5	-	56.3	46.2	10.1	
06:00 AM - 07:00 AM	54.1	52.3	1.8	4.5	49.6	-	48.3	1.3	
07:00 AM - 08:00 AM	56.7	55.5	1.2	7.0	49.7	-	50.1	-0.4	
08:00 AM - 09:00 AM	56.1	55.1	1.0	7.0	49.1	-	50.7	-1.6	
09:00 AM - 10:00 AM	53.5	52.7	0.8	7.0	46.5	-	47.7	-1.2	
10:00 AM - 11:00 AM	53.2	51.3	1.9	4.5	48.7	-	46.8	1.9	

ตามมาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน กรณีเสียงต่อเนื่อง 24 ชั่วโมง และการประเมินเสียงสูงส่งที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงสูงส่งที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 22-23 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-6 วันที่ตรวจวัด 22-23 ธันวาคม 2566)

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

Approved by

Wiwann Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872445-1

Page 1 of 3

Sample No. 23124326-7  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านซอย 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Salcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))						ค่าระดับเสียง การรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางวัน	กลางคืน	
11:00 AM - 12:00 PM	54.1	51.9	2.2	4.5	49.6	-	2.9
12:00 PM - 01:00 PM	54.1	52.5	1.6	4.5	49.6	-	1.7
01:00 PM - 02:00 PM	52.0	50.6	1.4	7.0	45.0	-	-1.1
02:00 PM - 03:00 PM	53.4	52.6	0.8	7.0	46.4	-	-1.5
03:00 PM - 04:00 PM	54.6	52.9	1.7	4.5	50.1	-	1.5
04:00 PM - 05:00 PM	53.6	50.4	3.2	3.0	50.6	-	4.3
05:00 PM - 06:00 PM	53.4	48.2	5.2	1.5	51.9	-	6.6
06:00 PM - 07:00 PM	48.2	47.1	1.1	7.0	41.2	-	-3.1
07:00 PM - 08:00 PM	47.6	46.2	1.4	7.0	40.6	-	-3.3
08:00 PM - 09:00 PM	48.1	47.5	0.6	7.0	41.1	-	-3.1
09:00 PM - 10:00 PM	47.0	47.0	0.0	7.0	40.0	-	-3.4
10:00 PM - 10:05 PM	46.4	49.8	-3.4	7.0	-	42.4	-2.8
10:05 PM - 10:10 PM	51.0	46.5	4.5	1.5	-	52.5	9.2
10:10 PM - 10:15 PM	47.6	46.9	0.7	7.0	-	43.6	-0.2
10:15 PM - 10:20 PM	47.3	46.7	0.6	7.0	-	43.3	-0.9
10:20 PM - 10:25 PM	47.4	47.2	0.2	7.0	-	43.4	-0.4
10:25 PM - 10:30 PM	47.6	46.4	1.2	7.0	-	43.6	0.1
10:30 PM - 10:35 PM	47.6	45.5	2.1	4.5	-	46.1	3.2
10:35 PM - 10:40 PM	45.9	49.2	-3.3	7.0	-	41.9	-3.9
10:40 PM - 10:45 PM	48.0	47.3	0.7	7.0	-	44.0	0.7
10:45 PM - 10:50 PM	50.1	47.9	2.2	4.5	-	48.6	6.2
10:50 PM - 10:55 PM	47.5	51.8	-4.3	7.0	-	43.5	1.5
10:55 PM - 11:00 PM	45.5	47.6	-2.1	7.0	-	41.5	-1.0
11:00 PM - 11:05 PM	53.7	47.7	6.0	1.5	-	55.2	12.2
11:05 PM - 11:10 PM	47.4	46.7	0.7	7.0	-	43.4	0.5
11:10 PM - 11:15 PM	47.0	47.7	-0.7	7.0	-	43.0	-1.5
11:15 PM - 11:20 PM	48.2	49.7	-1.5	7.0	-	44.2	-0.6
11:20 PM - 11:25 PM	50.0	49.1	0.9	7.0	-	46.0	2.9
11:25 PM - 11:30 PM	47.9	48.6	-0.7	7.0	-	43.9	-1.0
11:30 PM - 11:35 PM	50.6	48.4	2.2	4.5	-	49.1	4.0
11:35 PM - 11:40 PM	49.5	47.1	2.4	4.5	-	48.0	5.5
11:40 PM - 11:45 PM	47.9	46.5	1.4	7.0	-	43.9	2.7
11:45 PM - 11:50 PM	46.9	44.5	2.4	4.5	-	45.4	4.4
11:50 PM - 11:55 PM	45.1	46.9	-1.8	7.0	-	41.1	-2.4
11:55 PM - 12:00 AM	48.1	46.6	1.5	4.5	-	46.6	3.9
12:00 AM - 12:05 AM	47.3	47.3	0.0	7.0	-	43.3	0.1
12:05 AM - 12:10 AM	49.0	46.8	2.2	4.5	-	47.5	4.5
12:10 AM - 12:15 AM	46.9	44.3	2.6	3.0	-	46.9	5.7
12:15 AM - 12:20 AM	45.7	46.0	-0.3	7.0	-	41.7	-1.2
12:20 AM - 12:25 AM	46.5	44.7	1.8	4.5	-	45.0	3.6

The above results are valid only for the analyzed/checked 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

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872445-1

Page 2 of 3

Sample No. 23124326-7  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านซอย 12 ตำบลพนาธิคม (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Salcha Phetsawaeng  
Sound Level Meter 01073423

เวลา	ระดับเสียง (dB(A))						ค่าระดับเสียง การรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางวัน	กลางคืน	
12:25 AM - 12:30 AM	45.7	46.6	-0.9	7.0	-	41.7	0.0
12:30 AM - 12:35 AM	47.8	47.0	0.8	7.0	-	43.8	0.1
12:35 AM - 12:40 AM	48.5	42.9	5.6	1.5	-	50.0	10.0
12:40 AM - 12:45 AM	45.7	44.1	1.6	4.5	-	44.2	3.9
12:45 AM - 12:50 AM	44.3	45.1	-0.8	7.0	-	40.3	1.1
12:50 AM - 12:55 AM	45.9	46.9	-1.0	7.0	-	41.9	0.3
12:55 AM - 01:00 AM	48.3	45.3	3.0	3.0	-	48.3	7.1
01:00 AM - 01:05 AM	46.9	45.4	1.5	4.5	-	45.4	4.7
01:05 AM - 01:10 AM	46.0	49.6	-3.6	7.0	-	42.0	0.1
01:10 AM - 01:15 AM	49.2	46.6	2.6	3.0	-	49.2	8.8
01:15 AM - 01:20 AM	47.9	45.1	2.8	3.0	-	47.9	7.0
01:20 AM - 01:25 AM	47.2	45.6	1.6	4.5	-	45.7	4.5
01:25 AM - 01:30 AM	47.2	41.8	5.4	1.5	-	48.7	10.2
01:30 AM - 01:35 AM	44.7	41.9	2.8	3.0	-	44.7	7.2
01:35 AM - 01:40 AM	43.7	38.7	5.0	1.5	-	45.2	8.2
01:40 AM - 01:45 AM	42.0	40.8	1.2	7.0	-	38.0	1.4
01:45 AM - 01:50 AM	41.3	41.5	-0.2	7.0	-	37.3	-1.4
01:50 AM - 01:55 AM	43.1	40.3	2.8	3.0	-	43.1	6.6
01:55 AM - 02:00 AM	41.7	41.3	0.4	7.0	-	37.7	-0.3
02:00 AM - 02:05 AM	42.8	41.2	1.6	4.5	-	41.3	3.8
02:05 AM - 02:10 AM	42.1	43.1	-1.0	7.0	-	38.1	-1.0
02:10 AM - 02:15 AM	44.5	41.8	2.7	3.0	-	44.5	5.7
02:15 AM - 02:20 AM	42.9	43.1	-0.2	7.0	-	38.9	0.6
02:20 AM - 02:25 AM	43.4	44.2	-0.8	7.0	-	39.4	-0.8
02:25 AM - 02:30 AM	45.7	47.1	-1.4	7.0	-	41.7	0.3
02:30 AM - 02:35 AM	47.0	45.1	1.9	4.5	-	45.5	2.7
02:35 AM - 02:40 AM	47.0	47.8	-0.8	7.0	-	43.0	1.5
02:40 AM - 02:45 AM	50.8	46.3	4.5	1.5	-	52.3	10.8
02:45 AM - 02:50 AM	47.0	44.8	2.2	4.5	-	45.5	5.7
02:50 AM - 02:55 AM	45.6	44.2	1.4	7.0	-	41.6	1.5
02:55 AM - 03:00 AM	45.3	45.4	-0.1	7.0	-	41.3	0.1
03:00 AM - 03:05 AM	46.1	46.7	-0.6	7.0	-	42.1	1.7
03:05 AM - 03:10 AM	46.6	44.1	2.5	3.0	-	46.6	5.9
03:10 AM - 03:15 AM	47.0	44.5	2.5	3.0	-	47.0	8.3
03:15 AM - 03:20 AM	46.0	48.8	-2.8	7.0	-	42.0	-1.4
03:20 AM - 03:25 AM	46.2	46.5	-0.3	7.0	-	42.2	-0.6
03:25 AM - 03:30 AM	48.1	42.5	5.6	1.5	-	49.6	11.1
03:30 AM - 03:35 AM	43.5	44.7	-1.2	7.0	-	39.5	-2.8
03:35 AM - 03:40 AM	46.4	47.2	-0.8	7.0	-	42.4	-0.3
03:40 AM - 03:45 AM	45.7	44.2	1.5	4.5	-	44.2	4.2

The above results are valid only for the analyzed/checked 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

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872445-1

Page 2 of 3

Sample No. 23124326-7  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาภิรมย์ (N1) (GPS 47P 0728784, 1425714)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01073423

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน			
03:45 AM - 03:50 AM	47.6	47.2	0.4	7.0	-	43.6	41.3	2.3	-
03:50 AM - 03:55 AM	48.6	44.8	3.8	2.0	-	49.6	40.6	9.0	-
03:55 AM - 04:00 AM	47.5	46.5	1.0	7.0	-	43.5	41.5	2.0	-
04:00 AM - 04:05 AM	46.7	51.7	-5.0	7.0	-	42.7	44.1	-1.4	-
04:05 AM - 04:10 AM	49.9	50.2	-0.3	7.0	-	45.9	45.2	0.7	-
04:10 AM - 04:15 AM	51.4	46.6	4.8	1.5	-	52.9	41.0	11.9	-
04:15 AM - 04:20 AM	47.2	46.6	0.6	7.0	-	43.2	42.9	0.3	-
04:20 AM - 04:25 AM	47.8	44.6	3.2	3.0	-	47.8	40.9	6.9	-
04:25 AM - 04:30 AM	45.9	43.1	2.8	3.0	-	45.9	39.9	6.0	-
04:30 AM - 04:35 AM	45.1	43.9	1.2	7.0	-	41.1	40.7	0.4	-
04:35 AM - 04:40 AM	44.5	46.4	-1.9	7.0	-	40.5	42.7	-2.2	-
04:40 AM - 04:45 AM	47.3	44.6	2.7	3.0	-	47.3	40.7	6.6	-
04:45 AM - 04:50 AM	46.8	43.7	3.1	3.0	-	46.8	41.5	5.3	-
04:50 AM - 04:55 AM	44.0	44.3	-0.3	7.0	-	40.0	40.8	-0.8	-
04:55 AM - 05:00 AM	44.2	43.2	1.0	7.0	-	40.2	39.6	0.6	-
05:00 AM - 05:05 AM	43.8	46.0	-2.2	7.0	-	39.8	41.1	-1.3	-
05:05 AM - 05:10 AM	46.1	47.7	-1.6	7.0	-	42.1	43.2	-1.1	-
05:10 AM - 05:15 AM	49.4	48.4	1.0	7.0	-	45.4	43.8	1.6	-
05:15 AM - 05:20 AM	47.7	53.6	-5.9	7.0	-	43.7	42.8	0.9	-
05:20 AM - 05:25 AM	50.7	48.3	2.4	4.5	-	49.2	43.3	5.9	-
05:25 AM - 05:30 AM	50.4	45.8	4.6	1.5	-	51.9	42.7	9.2	-
05:30 AM - 05:35 AM	45.2	52.3	-7.1	7.0	-	41.2	43.4	-2.2	-
05:35 AM - 05:40 AM	60.8	46.5	14.3	0.0	-	63.8	43.0	20.8	-
05:40 AM - 05:45 AM	47.4	50.8	-3.4	7.0	-	43.4	45.1	-1.7	-
05:45 AM - 05:50 AM	50.9	48.4	2.5	3.0	-	50.9	44.4	6.5	-
05:50 AM - 05:55 AM	48.6	51.7	-3.1	7.0	-	44.6	44.5	0.1	-
05:55 AM - 06:00 AM	50.6	47.0	3.6	2.0	-	51.6	42.8	8.8	-
06:00 AM - 07:00 AM	51.3	49.9	1.4	7.0	44.3	-	44.9	-0.6	-
07:00 AM - 08:00 AM	54.5	51.1	3.4	3.0	51.5	-	46.2	5.3	-
08:00 AM - 09:00 AM	55.5	55.0	0.5	7.0	48.5	-	50.3	-1.8	-
09:00 AM - 10:00 AM	51.1	52.5	-1.4	7.0	44.1	-	47.5	-3.4	-
10:00 AM - 11:00 AM	51.1	51.1	0.0	7.0	44.1	-	46.6	-2.5	-

ค่ามาตรฐาน

Reference Method :

1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง มาตรการลดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด จากการตรวจวัด วันที่ 23-24 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-7 วันที่ตรวจวัด 23-24 ธันวาคม 2566)

The above results are valid only for the analytical method(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*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872446-1

Page 1 of 3

Sample No. 23124326-8  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านคลองพนาภิรมย์ ตำบลพนาภิรมย์ (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน			
10:00 AM - 11:00 AM	50.6	48.2	2.4	4.5	46.1	-	41.8	4.3	-
11:00 AM - 12:00 PM	47.9	46.6	1.3	7.0	40.9	-	41.9	-1.0	-
12:00 PM - 01:00 PM	44.7	44.3	0.4	7.0	37.7	-	40.1	-2.4	-
01:00 PM - 02:00 PM	43.4	44.0	-0.6	7.0	36.4	-	39.8	-3.4	-
02:00 PM - 03:00 PM	46.3	46.6	-0.3	7.0	39.3	-	41.8	-2.5	-
03:00 PM - 04:00 PM	44.5	45.6	-1.1	7.0	37.5	-	42.0	-4.5	-
04:00 PM - 05:00 PM	47.6	46.2	1.4	7.0	40.6	-	42.5	-1.9	-
05:00 PM - 06:00 PM	48.9	48.6	0.3	7.0	41.9	-	45.8	-3.9	-
06:00 PM - 07:00 PM	51.2	51.6	-0.4	7.0	44.2	-	49.7	-5.5	-
07:00 PM - 08:00 PM	50.8	49.5	1.3	7.0	43.8	-	47.2	-3.4	-
08:00 PM - 09:00 PM	50.2	49.1	1.1	7.0	43.2	-	47.4	-4.2	-
09:00 PM - 10:00 PM	54.4	49.1	5.3	1.5	52.9	-	46.2	6.7	-
10:00 PM - 10:05 PM	49.5	46.6	2.9	3.0	-	49.5	45.4	4.1	-
10:05 PM - 10:10 PM	49.2	47.2	2.0	4.5	-	47.7	45.3	2.4	-
10:10 PM - 10:15 PM	49.2	46.3	2.9	3.0	-	49.2	44.6	4.6	-
10:15 PM - 10:20 PM	48.4	46.3	2.1	4.5	-	46.9	45.2	1.7	-
10:20 PM - 10:25 PM	48.0	45.5	2.5	3.0	-	48.0	44.7	3.3	-
10:25 PM - 10:30 PM	48.1	45.5	2.6	3.0	-	48.1	44.6	3.5	-
10:30 PM - 10:35 PM	48.1	45.7	2.4	4.5	-	46.6	44.6	2.0	-
10:35 PM - 10:40 PM	48.3	46.6	1.7	4.5	-	46.8	44.8	2.0	-
10:40 PM - 10:45 PM	47.7	45.5	2.2	4.5	-	46.2	44.1	2.1	-
10:45 PM - 10:50 PM	47.5	44.8	2.7	3.0	-	47.5	43.3	4.2	-
10:50 PM - 10:55 PM	47.5	45.6	1.9	4.5	-	46.0	44.1	1.9	-
10:55 PM - 11:00 PM	47.2	45.2	2.0	4.5	-	45.7	43.6	2.1	-
11:00 PM - 11:05 PM	47.3	45.3	2.0	4.5	-	45.8	43.9	1.9	-
11:05 PM - 11:10 PM	48.8	46.5	2.3	4.5	-	47.3	43.9	3.4	-
11:10 PM - 11:15 PM	46.9	45.8	1.1	7.0	-	42.9	44.1	-1.2	-
11:15 PM - 11:20 PM	48.1	46.6	1.5	4.5	-	46.6	44.9	1.7	-
11:20 PM - 11:25 PM	46.8	46.2	0.6	7.0	-	42.8	44.6	-1.8	-
11:25 PM - 11:30 PM	46.0	45.1	0.9	7.0	-	42.0	44.1	-2.1	-
11:30 PM - 11:35 PM	47.0	46.8	0.2	7.0	-	43.0	44.4	-1.4	-
11:35 PM - 11:40 PM	46.9	46.0	0.9	7.0	-	42.9	44.7	-1.8	-
11:40 PM - 11:45 PM	46.6	46.7	-0.1	7.0	-	42.6	44.7	-2.1	-
11:45 PM - 11:50 PM	46.1	45.5	0.6	7.0	-	42.1	44.1	-2.0	-
11:50 PM - 11:55 PM	45.2	45.3	-0.1	7.0	-	41.2	42.8	-1.6	-
11:55 PM - 12:00 AM	45.7	44.9	0.8	7.0	-	41.7	43.5	-1.8	-
12:00 AM - 12:05 AM	46.0	44.9	1.1	7.0	-	42.0	43.3	-1.3	-
12:05 AM - 12:10 AM	48.8	44.8	2.0	4.5	-	45.3	43.5	1.8	-
12:10 AM - 12:15 AM	46.6	44.3	2.3	4.5	-	45.1	43.5	1.6	-
12:15 AM - 12:20 AM	46.8	45.4	1.4	7.0	-	42.8	44.0	-1.2	-

The above results are valid only for the analytical method(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*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872446-1

Page 2 of 3

Sample No. 23124326-8  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางคืน	กลางวัน			
12:20 AM - 12:25 AM	46.7	45.9	0.8	7.0	-	42.7	44.3	-1.6	
12:25 AM - 12:30 AM	46.5	45.0	1.5	4.5	-	45.0	44.1	0.9	
12:30 AM - 12:35 AM	46.8	45.2	1.6	4.5	-	45.3	44.2	1.1	
12:35 AM - 12:40 AM	46.7	46.9	-0.2	7.0	-	42.7	43.9	-1.2	
12:40 AM - 12:45 AM	44.4	43.3	1.1	7.0	-	40.4	42.0	-1.6	
12:45 AM - 12:50 AM	44.4	42.5	1.9	4.5	-	42.9	41.7	1.2	
12:50 AM - 12:55 AM	56.3	49.1	7.2	1.0	-	58.3	41.9	16.4	
12:55 AM - 01:00 AM	45.2	44.2	1.0	7.0	-	41.2	41.9	-0.7	
01:00 AM - 01:05 AM	45.4	44.0	1.4	7.0	-	41.4	42.3	-0.9	
01:05 AM - 01:10 AM	45.6	43.0	2.6	3.0	-	45.6	42.1	3.5	
01:10 AM - 01:15 AM	45.6	43.0	2.6	3.0	-	45.6	42.7	2.9	
01:15 AM - 01:20 AM	46.5	43.8	2.7	3.0	-	46.5	42.1	4.4	
01:20 AM - 01:25 AM	45.0	44.8	0.2	7.0	-	41.0	42.1	-1.1	
01:25 AM - 01:30 AM	43.9	42.7	1.2	4.5	-	42.4	41.4	1.0	
01:30 AM - 01:35 AM	44.3	45.3	-1.0	7.0	-	40.3	41.7	-1.4	
01:35 AM - 01:40 AM	45.3	45.3	0.0	7.0	-	41.3	42.5	-1.2	
01:40 AM - 01:45 AM	45.4	44.0	1.4	7.0	-	41.4	42.8	-1.4	
01:45 AM - 01:50 AM	44.6	44.1	0.5	7.0	-	40.6	42.6	-2.0	
01:50 AM - 01:55 AM	46.0	44.3	1.7	4.5	-	44.5	42.3	2.2	
01:55 AM - 02:00 AM	45.7	45.4	0.3	7.0	-	41.7	43.1	-1.4	
02:00 AM - 02:05 AM	45.7	44.7	1.0	7.0	-	41.7	42.6	-0.9	
02:05 AM - 02:10 AM	46.2	44.2	2.0	4.5	-	44.7	42.2	2.5	
02:10 AM - 02:15 AM	46.6	44.9	1.7	4.5	-	45.1	42.6	2.5	
02:15 AM - 02:20 AM	46.2	46.0	0.2	7.0	-	42.2	43.0	-0.8	
02:20 AM - 02:25 AM	45.7	45.0	0.7	7.0	-	41.7	42.8	-1.1	
02:25 AM - 02:30 AM	45.1	43.6	1.5	4.5	-	43.6	41.7	1.9	
02:30 AM - 02:35 AM	45.3	44.8	0.5	7.0	-	41.3	42.0	-0.7	
02:35 AM - 02:40 AM	44.6	44.9	-0.3	7.0	-	40.6	41.8	-1.2	
02:40 AM - 02:45 AM	44.6	46.6	-2.0	7.0	-	40.6	42.0	-1.4	
02:45 AM - 02:50 AM	44.6	51.8	-7.2	7.0	-	40.6	43.8	-3.2	
02:50 AM - 02:55 AM	45.1	53.6	-8.5	7.0	-	41.1	44.2	-3.1	
02:55 AM - 03:00 AM	57.5	58.0	-0.5	7.0	-	53.5	55.1	-1.6	
03:00 AM - 03:05 AM	46.1	57.2	-11.1	7.0	-	42.1	54.8	-12.7	
03:05 AM - 03:10 AM	46.1	57.4	-11.3	7.0	-	42.1	55.1	-13.0	
03:10 AM - 03:15 AM	46.4	55.4	-9.0	7.0	-	42.4	49.4	-7.0	
03:15 AM - 03:20 AM	46.2	50.9	-4.7	7.0	-	42.2	49.3	-7.1	
03:20 AM - 03:25 AM	46.1	51.0	-4.9	7.0	-	42.1	49.3	-7.2	
03:25 AM - 03:30 AM	46.1	51.1	-5.0	7.0	-	42.1	49.2	-7.1	
03:30 AM - 03:35 AM	45.9	51.7	-5.8	7.0	-	41.9	49.3	-7.4	
03:35 AM - 03:40 AM	46.3	53.0	-6.7	7.0	-	42.3	47.8	-5.5	

Approved by

Wilawan Borik  
Manager

The above report is valid only for the analysed 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) Limited. It is recommended that this report is not reproduced except in full.

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872446-1

Page 3 of 3

Sample No. 23124326-8  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางคืน	กลางวัน			
03:40 AM - 03:45 AM	46.2	51.1	-4.9	7.0	-	42.2	48.8	-6.6	
03:45 AM - 03:50 AM	45.8	49.8	-4.0	7.0	-	41.8	42.5	-0.7	
03:50 AM - 03:55 AM	45.0	46.5	-1.5	7.0	-	41.0	41.8	-0.8	
03:55 AM - 04:00 AM	46.0	48.2	-2.2	7.0	-	42.0	43.3	-1.3	
04:00 AM - 04:05 AM	45.8	49.1	-3.3	7.0	-	41.8	43.3	-1.5	
04:05 AM - 04:10 AM	46.2	49.6	-3.4	7.0	-	42.2	42.6	-0.4	
04:10 AM - 04:15 AM	46.6	48.3	-1.7	7.0	-	42.6	42.5	0.1	
04:15 AM - 04:20 AM	46.7	50.2	-3.5	7.0	-	42.7	43.3	-0.6	
04:20 AM - 04:25 AM	46.9	50.5	-3.6	7.0	-	42.9	43.5	-0.6	
04:25 AM - 04:30 AM	48.0	51.2	-3.2	7.0	-	44.0	45.6	-1.6	
04:30 AM - 04:35 AM	48.0	51.6	-3.6	7.0	-	44.0	46.5	-2.5	
04:35 AM - 04:40 AM	49.1	51.6	-2.5	7.0	-	45.1	46.4	-1.3	
04:40 AM - 04:45 AM	50.2	52.0	-1.8	7.0	-	46.2	47.2	-1.0	
04:45 AM - 04:50 AM	53.6	51.5	2.1	4.5	-	52.1	47.7	4.4	
04:50 AM - 04:55 AM	48.5	53.1	-4.6	7.0	-	44.5	47.0	-2.5	
04:55 AM - 05:00 AM	49.3	54.2	-4.9	7.0	-	45.3	47.3	-2.0	
05:00 AM - 05:05 AM	49.0	54.4	-5.4	7.0	-	45.0	50.6	-5.6	
05:05 AM - 05:10 AM	49.3	51.3	-2.0	7.0	-	45.3	47.0	-1.7	
05:10 AM - 05:15 AM	49.6	51.9	-2.3	7.0	-	45.6	48.4	-2.8	
05:15 AM - 05:20 AM	55.8	53.8	2.0	4.5	-	54.3	50.6	3.7	
05:20 AM - 05:25 AM	56.9	54.2	2.7	3.0	-	56.9	50.6	6.3	
05:25 AM - 05:30 AM	51.2	52.9	-1.7	7.0	-	47.2	50.5	-3.3	
05:30 AM - 05:35 AM	51.1	52.9	-1.8	7.0	-	47.1	50.5	-3.4	
05:35 AM - 05:40 AM	50.9	52.1	-1.2	7.0	-	46.9	49.9	-3.0	
05:40 AM - 05:45 AM	51.0	51.4	-0.4	7.0	-	47.0	49.7	-2.7	
05:45 AM - 05:50 AM	50.7	52.7	-2.0	7.0	-	46.7	49.8	-3.1	
05:50 AM - 05:55 AM	50.4	51.7	-1.3	7.0	-	46.4	49.7	-3.3	
05:55 AM - 06:00 AM	49.7	51.4	-1.7	7.0	-	45.7	48.3	-2.6	
06:00 AM - 07:00 AM	50.1	50.2	-0.1	4.5	43.1	-	45.4	-2.3	
07:00 AM - 08:00 AM	53.2	51.1	2.1	4.5	48.7	-	44.0	4.7	
08:00 AM - 09:00 AM	49.8	48.3	1.5	4.5	45.3	-	42.8	2.5	
09:00 AM - 10:00 AM	48.9	47.6	1.3	7.0	41.9	-	43.3	-1.4	

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงสาธารณสุข เรื่อง "การตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553"

มาตรฐาน

- ประกาศกระทรวงสาธารณสุข เรื่อง "กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548"
- ประกาศกระทรวงสาธารณสุข เรื่อง "กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561"

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-8 วันที่ตรวจวัด 17-18 ธันวาคม 2566)

Approved by

Wilawan Borik  
Manager

The above report is valid only for the analysed 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) Limited. It is recommended that this report is not reproduced except in full.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872447-1

Page 1 of 3

Sample No. 23124326-9  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

เวลา	เสียงจากแหล่งกำเนิด	เสียงรบกวนโดยประมาณ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน		
10:00 AM - 11:00 AM	48.4	51.1	-2.7	7.0	41.4	-	44.2	-2.8
11:00 AM - 12:00 PM	49.4	49.6	-0.2	7.0	42.4	-	43.9	-1.5
12:00 PM - 01:00 PM	48.4	49.5	-1.1	7.0	41.4	-	42.5	-1.1
01:00 PM - 02:00 PM	45.3	45.3	0.0	7.0	38.3	-	40.7	-2.4
02:00 PM - 03:00 PM	48.9	49.1	-0.2	7.0	41.9	-	43.4	-1.5
03:00 PM - 04:00 PM	48.6	50.3	-1.7	7.0	41.6	-	43.9	-2.3
04:00 PM - 05:00 PM	51.1	48.5	2.6	3.0	48.1	-	43.2	4.9
05:00 PM - 06:00 PM	49.0	57.8	-8.8	7.0	42.0	-	44.2	-2.2
06:00 PM - 07:00 PM	48.7	49.2	-0.5	7.0	41.7	-	47.7	-6.0
07:00 PM - 08:00 PM	52.2	49.0	3.2	3.0	49.2	-	46.9	2.3
08:00 PM - 09:00 PM	50.7	48.7	2.0	4.5	46.2	-	47.1	-0.9
09:00 PM - 10:00 PM	56.5	47.4	9.1	0.5	56.0	-	46.1	9.9
10:00 PM - 10:05 PM	59.2	47.3	11.9	0.5	-	61.7	46.0	15.7
10:05 PM - 10:10 PM	59.3	47.2	12.1	0.5	-	61.8	46.1	15.7
10:10 PM - 10:15 PM	59.2	47.8	11.4	0.5	-	61.7	46.7	15.0
10:15 PM - 10:20 PM	59.6	47.8	11.8	0.5	-	62.1	46.3	15.8
10:20 PM - 10:25 PM	59.2	47.6	11.6	0.5	-	61.7	46.2	15.5
10:25 PM - 10:30 PM	59.2	47.6	11.6	0.5	-	61.7	46.1	15.6
10:30 PM - 10:35 PM	58.9	47.1	11.8	0.5	-	61.4	46.2	15.2
10:35 PM - 10:40 PM	58.2	47.1	11.1	0.5	-	60.7	46.1	14.6
10:40 PM - 10:45 PM	58.6	47.0	11.6	0.5	-	61.1	46.1	15.0
10:45 PM - 10:50 PM	58.8	46.9	11.9	0.5	-	61.3	45.9	15.4
10:50 PM - 10:55 PM	58.1	47.2	10.9	0.5	-	60.6	45.6	15.0
10:55 PM - 11:00 PM	58.5	47.0	11.5	0.5	-	61.0	45.7	15.3
11:00 PM - 11:05 PM	58.6	48.1	10.5	0.5	-	61.1	45.1	16.0
11:05 PM - 11:10 PM	58.8	54.3	4.5	1.5	-	60.3	45.3	15.0
11:10 PM - 11:15 PM	58.8	45.7	13.1	0.0	-	61.8	44.3	17.5
11:15 PM - 11:20 PM	57.4	47.2	10.2	0.5	-	59.9	46.1	13.8
11:20 PM - 11:25 PM	53.9	47.2	6.7	1.0	-	55.9	46.1	9.8
11:25 PM - 11:30 PM	55.1	47.2	7.9	0.5	-	57.6	46.1	11.5
11:30 PM - 11:35 PM	54.5	46.2	8.3	0.5	-	57.0	44.8	12.2
11:35 PM - 11:40 PM	56.6	45.5	11.1	0.5	-	59.1	43.5	15.6
11:40 PM - 11:45 PM	57.4	45.2	12.2	0.5	-	59.9	43.3	16.6
11:45 PM - 11:50 PM	56.7	44.3	12.4	0.5	-	59.2	43.1	16.1
11:50 PM - 11:55 PM	57.1	45.1	12.0	0.5	-	59.6	42.8	16.8
11:55 PM - 12:00 AM	56.4	46.1	10.3	0.5	-	58.9	43.6	15.3
12:00 AM - 12:05 AM	56.8	44.7	12.1	0.5	-	59.3	43.4	15.9
12:05 AM - 12:10 AM	55.4	45.6	9.8	0.5	-	57.9	43.3	14.6
12:10 AM - 12:15 AM	54.3	44.5	9.8	0.5	-	56.8	43.1	13.7
12:15 AM - 12:20 AM	56.7	44.9	11.8	0.5	-	59.2	43.6	15.6

The above results are valid only for the analyzed/checked sample(s) as indicated in this report. No part of this report or its results 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 Boirak*  
Wilawan Boirak  
Manager

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

ALM Solution Center

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872447-1

Page 2 of 3

Sample No. 23124326-9  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

เวลา	เสียงจากแหล่งกำเนิด	เสียงรบกวนโดยประมาณ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน		
12:20 AM - 12:25 AM	57.1	45.2	11.9	0.5	-	59.6	43.7	15.9
12:25 AM - 12:30 AM	56.9	44.3	12.6	0.0	-	59.9	43.3	16.6
12:30 AM - 12:35 AM	57.1	44.8	12.3	0.5	-	59.6	43.2	16.4
12:35 AM - 12:40 AM	57.3	43.4	13.9	0.0	-	60.3	42.5	17.8
12:40 AM - 12:45 AM	56.4	44.5	11.9	0.5	-	58.9	42.8	16.1
12:45 AM - 12:50 AM	56.3	43.3	13.0	0.0	-	59.3	42.1	17.2
12:50 AM - 12:55 AM	55.1	43.3	11.8	0.5	-	57.6	41.5	16.1
12:55 AM - 01:00 AM	45.2	43.8	1.4	7.0	-	41.2	41.4	-0.2
01:00 AM - 01:05 AM	46.9	45.3	1.6	4.5	-	45.4	42.5	2.9
01:05 AM - 01:10 AM	47.8	44.1	3.7	2.0	-	48.8	42.5	6.3
01:10 AM - 01:15 AM	47.6	43.0	4.6	1.5	-	49.1	41.9	7.2
01:15 AM - 01:20 AM	50.4	43.4	7.0	1.0	-	52.4	42.5	9.9
01:20 AM - 01:25 AM	49.2	43.3	5.9	1.5	-	50.7	42.6	8.1
01:25 AM - 01:30 AM	50.0	44.1	5.9	1.5	-	51.5	42.8	8.7
01:30 AM - 01:35 AM	49.6	43.6	6.0	1.5	-	51.1	42.9	8.2
01:35 AM - 01:40 AM	48.7	45.8	2.9	3.0	-	48.7	43.0	5.7
01:40 AM - 01:45 AM	49.7	44.4	5.3	1.5	-	51.2	42.7	8.5
01:45 AM - 01:50 AM	51.5	43.9	7.6	0.5	-	54.0	42.7	11.3
01:50 AM - 01:55 AM	53.3	45.5	7.8	0.5	-	55.8	43.4	12.4
01:55 AM - 02:00 AM	54.6	46.1	8.5	0.5	-	57.1	43.7	13.4
02:00 AM - 02:05 AM	54.4	45.6	8.8	0.5	-	56.9	43.3	13.6
02:05 AM - 02:10 AM	53.7	43.6	10.1	0.5	-	56.2	42.5	13.7
02:10 AM - 02:15 AM	53.3	44.2	9.1	0.5	-	55.8	43.0	12.8
02:15 AM - 02:20 AM	52.3	45.8	6.5	1.0	-	54.3	43.2	11.1
02:20 AM - 02:25 AM	52.9	45.1	7.8	0.5	-	55.4	42.7	12.7
02:25 AM - 02:30 AM	52.8	44.0	8.8	0.5	-	55.3	42.3	13.0
02:30 AM - 02:35 AM	52.4	42.8	9.6	0.5	-	54.9	41.8	13.1
02:35 AM - 02:40 AM	52.6	43.6	9.0	0.5	-	55.1	42.2	12.9
02:40 AM - 02:45 AM	52.2	43.9	8.3	0.5	-	54.7	42.8	11.9
02:45 AM - 02:50 AM	52.2	43.5	8.7	0.5	-	54.7	42.2	12.5
02:50 AM - 02:55 AM	52.9	44.1	8.8	0.5	-	55.4	42.8	12.6
02:55 AM - 03:00 AM	52.2	44.1	8.1	0.5	-	54.7	42.8	11.9
03:00 AM - 03:05 AM	51.9	43.7	8.2	0.5	-	54.4	42.1	12.3
03:05 AM - 03:10 AM	52.3	45.4	6.9	1.0	-	54.3	44.3	10.0
03:10 AM - 03:15 AM	52.5	45.9	6.6	1.0	-	54.5	44.9	9.6
03:15 AM - 03:20 AM	53.1	46.0	7.1	1.0	-	55.1	44.9	10.2
03:20 AM - 03:25 AM	53.1	45.7	7.4	1.0	-	55.1	44.6	10.5
03:25 AM - 03:30 AM	52.6	46.2	6.4	1.5	-	54.1	44.9	9.2
03:30 AM - 03:35 AM	51.3	46.2	5.1	1.5	-	52.8	44.9	7.9
03:35 AM - 03:40 AM	49.2	45.4	3.8	2.0	-	50.2	44.4	5.8

The above results are valid only for the analyzed/checked sample(s) as indicated in this report. No part of this report or its results 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 Boirak*  
Wilawan Boirak  
Manager

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

ALM Solution Center

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Sample No. : 23124326-9  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date : Dec 18 - 19, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296515

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872447-1

Page 3 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	49.9	46.0	3.9	2.0	-	50.9	44.9	6.0
03:45 AM - 03:50 AM	50.0	47.4	2.6	3.0	-	50.0	45.1	4.9
03:50 AM - 03:55 AM	50.5	47.0	3.5	2.0	-	51.5	45.4	6.1
03:55 AM - 04:00 AM	49.9	46.4	3.5	2.0	-	50.9	45.0	5.9
04:00 AM - 04:05 AM	50.0	46.9	3.1	3.0	-	50.0	45.1	4.9
04:05 AM - 04:10 AM	50.3	46.3	4.0	2.0	-	51.3	44.9	6.4
04:10 AM - 04:15 AM	50.2	47.0	3.2	3.0	-	50.2	44.8	5.4
04:15 AM - 04:20 AM	50.4	46.9	3.5	2.0	-	51.4	44.9	6.5
04:20 AM - 04:25 AM	51.1	49.4	1.7	4.5	-	49.6	46.3	3.3
04:25 AM - 04:30 AM	51.4	50.4	1.0	7.0	-	47.4	46.9	0.5
04:30 AM - 04:35 AM	52.5	49.5	3.0	3.0	-	52.5	46.7	5.8
04:35 AM - 04:40 AM	53.1	48.8	4.3	2.0	-	54.1	46.0	8.1
04:40 AM - 04:45 AM	53.3	48.8	4.5	1.5	-	54.8	46.1	8.7
04:45 AM - 04:50 AM	53.6	49.0	4.6	1.5	-	55.1	46.8	8.3
04:50 AM - 04:55 AM	53.3	49.8	3.5	2.0	-	54.3	46.9	7.4
04:55 AM - 05:00 AM	52.1	50.7	1.4	7.0	-	48.1	47.4	0.7
05:00 AM - 05:05 AM	52.7	50.9	1.8	4.5	-	51.2	47.4	3.8
05:05 AM - 05:10 AM	53.4	50.6	2.8	3.0	-	53.4	47.2	6.2
05:10 AM - 05:15 AM	53.3	50.9	2.4	4.5	-	51.8	47.6	4.2
05:15 AM - 05:20 AM	54.1	51.0	3.1	3.0	-	54.1	47.8	6.3
05:20 AM - 05:25 AM	53.8	50.8	3.0	3.0	-	53.8	47.3	6.5
05:25 AM - 05:30 AM	54.2	53.6	0.6	7.0	-	50.2	47.4	2.8
05:30 AM - 05:35 AM	53.9	51.6	2.3	4.5	-	52.4	47.2	5.2
05:35 AM - 05:40 AM	53.5	50.6	2.9	3.0	-	53.5	47.4	6.1
05:40 AM - 05:45 AM	52.5	56.8	-4.3	7.0	-	48.5	47.8	0.7
05:45 AM - 05:50 AM	53.6	51.1	2.5	3.0	-	53.6	47.9	5.7
05:50 AM - 05:55 AM	51.8	51.0	0.8	7.0	-	47.8	47.5	0.3
05:55 AM - 06:00 AM	50.9	50.5	0.4	7.0	-	46.9	46.9	0.0
06:00 AM - 07:00 AM	51.3	51.0	0.3	7.0	44.3	-	46.0	-1.7
07:00 AM - 08:00 AM	48.2	50.4	-2.2	7.0	41.2	-	44.2	-3.0
08:00 AM - 09:00 AM	47.8	49.3	-1.5	7.0	40.8	-	44.6	-3.8
09:00 AM - 10:00 AM	48.0	51.6	-3.6	7.0	41.0	-	43.6	-2.6
ค่ามาตรฐาน								≤ 10

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

### มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 18-19 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-9 วันที่ตรวจวัด 18-19 ธันวาคม 2566)

The above results are valid only for the analysed/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) through its subsidiaries that this report is not reproduced except in full.

Approved by

Wilwan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS BRIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Sample No. : 23124326-10  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date : Dec 19 - 20, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296515

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872448-1

Page 1 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
10:00 AM - 11:00 AM	52.5	48.2	4.3	2.0	50.5	-	42.7	7.8
11:00 AM - 12:00 PM	54.4	49.5	4.9	1.5	52.9	-	42.6	10.3
12:00 PM - 01:00 PM	50.6	46.2	4.4	2.0	48.6	-	40.5	8.1
01:00 PM - 02:00 PM	53.3	48.8	4.5	1.5	51.8	-	41.2	10.6
02:00 PM - 03:00 PM	50.6	48.1	2.5	3.0	47.6	-	42.1	5.5
03:00 PM - 04:00 PM	56.9	58.2	-1.3	7.0	49.9	-	46.0	3.9
04:00 PM - 05:00 PM	56.9	53.7	3.2	3.0	53.9	-	45.7	8.2
05:00 PM - 06:00 PM	57.5	52.6	4.9	1.5	56.0	-	49.4	6.6
06:00 PM - 07:00 PM	59.7	54.1	5.6	1.5	58.2	-	52.6	5.6
07:00 PM - 08:00 PM	58.8	52.9	5.9	1.5	57.3	-	49.9	7.4
08:00 PM - 09:00 PM	50.4	50.5	-0.1	7.0	43.4	-	48.5	-5.1
09:00 PM - 10:00 PM	50.0	54.7	-4.7	7.0	43.0	-	51.5	-8.5
10:00 PM - 10:05 PM	49.4	53.9	-4.5	7.0	-	45.4	51.5	-6.1
10:05 PM - 10:10 PM	49.8	53.7	-3.9	7.0	-	45.8	51.3	-5.5
10:10 PM - 10:15 PM	52.3	53.4	-1.1	7.0	-	48.3	50.9	-2.6
10:15 PM - 10:20 PM	52.4	51.4	1.0	7.0	-	48.4	48.0	0.4
10:20 PM - 10:25 PM	52.5	51.0	1.5	4.5	-	51.0	49.1	1.9
10:25 PM - 10:30 PM	53.2	51.4	1.8	4.5	-	51.7	49.9	1.8
10:30 PM - 10:35 PM	52.2	51.6	0.6	7.0	-	48.2	49.2	-1.0
10:35 PM - 10:40 PM	51.2	50.8	0.4	7.0	-	47.2	48.8	-1.6
10:40 PM - 10:45 PM	49.1	49.4	-0.3	7.0	-	45.1	47.2	-2.1
10:45 PM - 10:50 PM	53.5	49.6	3.9	2.0	-	54.5	48.1	6.4
10:50 PM - 10:55 PM	51.8	49.2	2.6	3.0	-	51.8	47.2	4.6
10:55 PM - 11:00 PM	51.5	51.4	0.1	7.0	-	47.5	47.9	-0.4
11:00 PM - 11:05 PM	48.0	52.5	-4.5	7.0	-	44.0	50.6	-6.6
11:05 PM - 11:10 PM	47.2	53.3	-6.1	7.0	-	43.2	51.1	-7.9
11:10 PM - 11:15 PM	47.5	53.4	-5.9	7.0	-	43.5	51.8	-8.3
11:15 PM - 11:20 PM	48.3	53.7	-5.4	7.0	-	44.3	52.0	-7.7
11:20 PM - 11:25 PM	45.9	54.0	-8.1	7.0	-	41.9	52.2	-10.3
11:25 PM - 11:30 PM	46.3	54.1	-7.8	7.0	-	42.3	52.2	-9.9
11:30 PM - 11:35 PM	46.5	54.0	-7.5	7.0	-	42.5	52.3	-9.8
11:35 PM - 11:40 PM	46.2	53.8	-7.6	7.0	-	42.2	52.1	-9.9
11:40 PM - 11:45 PM	45.4	53.9	-8.5	7.0	-	41.4	52.0	-10.6
11:45 PM - 11:50 PM	45.4	54.1	-8.7	7.0	-	41.4	52.4	-11.0
11:50 PM - 11:55 PM	44.3	53.9	-9.6	7.0	-	40.3	52.2	-11.9
11:55 PM - 12:00 AM	45.1	50.5	-5.4	7.0	-	41.1	47.1	-6.0
12:00 AM - 12:05 AM	44.2	49.5	-5.3	7.0	-	40.2	45.3	-5.1
12:05 AM - 12:10 AM	46.2	49.7	-3.5	7.0	-	42.2	46.2	-4.0
12:10 AM - 12:15 AM	46.0	49.7	-3.7	7.0	-	42.0	48.2	-6.2
12:15 AM - 12:20 AM	45.4	54.6	-9.2	7.0	-	41.4	51.9	-10.5

The above results are valid only for the analysed/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) through its subsidiaries that this report is not reproduced except in full.

Approved by

Wilwan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS BRIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872448-1

Sample No. 23124326-10  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						ค่าระดับ การรบกวน	
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			เสียงพื้นฐาน
					กลางวัน (07:00-19:00)	กลางคืน (19:00-07:00)		
12:20 AM - 12:25 AM	46.0	52.1	-6.1	7.0	-	42.0	48.6	-6.6
12:25 AM - 12:30 AM	55.9	53.2	2.7	3.0	-	55.9	48.5	7.4
12:30 AM - 12:35 AM	47.8	55.2	-7.4	7.0	-	43.8	53.1	-9.3
12:35 AM - 12:40 AM	45.2	54.7	-9.5	7.0	-	41.2	52.9	-11.7
12:40 AM - 12:45 AM	46.1	55.4	-9.3	7.0	-	42.1	53.6	-11.5
12:45 AM - 12:50 AM	46.0	54.3	-8.3	7.0	-	42.0	48.6	-6.6
12:50 AM - 12:55 AM	49.0	49.0	0.0	7.0	-	45.0	47.1	-2.1
12:55 AM - 01:00 AM	47.5	49.1	-1.6	7.0	-	43.5	47.9	-4.4
01:00 AM - 01:05 AM	46.4	48.8	-2.4	7.0	-	42.4	47.9	-5.5
01:05 AM - 01:10 AM	45.6	48.4	-2.8	7.0	-	41.6	47.6	-6.0
01:10 AM - 01:15 AM	45.3	48.7	-3.4	7.0	-	41.3	47.8	-6.5
01:15 AM - 01:20 AM	46.1	48.5	-2.4	7.0	-	42.1	47.4	-5.3
01:20 AM - 01:25 AM	46.5	48.6	-2.1	7.0	-	42.5	47.7	-5.2
01:25 AM - 01:30 AM	45.6	48.6	-3.0	7.0	-	41.6	47.5	-5.9
01:30 AM - 01:35 AM	46.0	48.7	-2.7	7.0	-	42.0	47.7	-5.7
01:35 AM - 01:40 AM	48.2	50.6	-2.4	7.0	-	44.2	48.1	-3.9
01:40 AM - 01:45 AM	47.5	55.0	-7.5	7.0	-	43.5	49.3	-5.8
01:45 AM - 01:50 AM	47.3	58.2	-10.9	7.0	-	43.3	55.7	-12.4
01:50 AM - 01:55 AM	49.4	57.2	-7.8	7.0	-	45.4	54.5	-8.1
01:55 AM - 02:00 AM	57.3	58.2	-0.9	7.0	-	53.3	55.8	-2.5
02:00 AM - 02:05 AM	46.0	58.1	-12.1	7.0	-	42.0	55.8	-13.8
02:05 AM - 02:10 AM	46.2	57.7	-11.5	7.0	-	42.2	55.4	-13.2
02:10 AM - 02:15 AM	46.6	58.2	-11.6	7.0	-	42.6	56.1	-13.5
02:15 AM - 02:20 AM	46.1	58.3	-12.2	7.0	-	42.1	56.1	-14.0
02:20 AM - 02:25 AM	46.7	58.4	-11.7	7.0	-	42.7	56.7	-14.0
02:25 AM - 02:30 AM	47.0	58.3	-11.3	7.0	-	43.0	56.3	-13.3
02:30 AM - 02:35 AM	55.2	58.1	-2.9	7.0	-	51.2	55.8	-4.6
02:35 AM - 02:40 AM	48.0	58.4	-10.4	7.0	-	44.0	56.3	-12.3
02:40 AM - 02:45 AM	48.0	57.0	-9.0	7.0	-	44.0	50.9	-6.9
02:45 AM - 02:50 AM	48.1	56.4	-8.3	7.0	-	44.1	51.2	-7.1
02:50 AM - 02:55 AM	46.1	57.4	-11.3	7.0	-	42.1	55.0	-12.9
02:55 AM - 03:00 AM	46.5	56.6	-10.1	7.0	-	42.5	54.2	-11.7
03:00 AM - 03:05 AM	47.2	57.1	-9.9	7.0	-	43.2	55.0	-11.8
03:05 AM - 03:10 AM	47.2	56.4	-9.2	7.0	-	43.2	54.0	-10.8
03:10 AM - 03:15 AM	46.4	55.9	-9.5	7.0	-	42.4	53.5	-11.1
03:15 AM - 03:20 AM	45.6	56.1	-10.5	7.0	-	41.6	54.0	-12.4
03:20 AM - 03:25 AM	47.0	57.1	-10.1	7.0	-	43.0	55.2	-12.2
03:25 AM - 03:30 AM	45.1	56.2	-11.1	7.0	-	41.1	53.5	-12.4
03:30 AM - 03:35 AM	44.6	54.3	-9.7	7.0	-	40.6	43.7	-3.1
03:35 AM - 03:40 AM	44.9	54.1	-9.2	7.0	-	40.9	43.8	-2.9

The above results are valid only for the analytical method applied 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) Ltd. It is recommended that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

LINE: 84001010383

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872448-1

Sample No. 23124326-10  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะคราม (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Page 3 of 3

เวลา	ระดับเสียง (dB(A))						การรบกวน	
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			เสียงพื้นฐาน
					กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	45.5	55.6	-10.1	7.0	-	41.5	53.2	-11.7
03:45 AM - 03:50 AM	46.2	55.7	-9.5	7.0	-	42.2	53.4	-11.2
03:50 AM - 03:55 AM	54.3	55.7	-1.4	7.0	-	50.3	53.0	-2.7
03:55 AM - 04:00 AM	45.4	54.0	-8.6	7.0	-	41.4	51.4	-10.0
04:00 AM - 04:05 AM	46.9	53.2	-6.3	7.0	-	42.9	46.1	-3.2
04:05 AM - 04:10 AM	47.3	53.1	-5.8	7.0	-	43.3	50.5	-7.2
04:10 AM - 04:15 AM	48.7	53.4	-4.7	7.0	-	44.7	51.3	-6.6
04:15 AM - 04:20 AM	50.3	53.6	-3.3	7.0	-	46.3	51.5	-5.2
04:20 AM - 04:25 AM	50.1	54.4	-4.3	7.0	-	46.1	52.1	-6.0
04:25 AM - 04:30 AM	50.7	54.6	-3.9	7.0	-	46.7	52.4	-5.7
04:30 AM - 04:35 AM	50.8	54.9	-4.1	7.0	-	46.8	52.8	-6.0
04:35 AM - 04:40 AM	50.5	55.2	-4.7	7.0	-	46.5	53.5	-7.0
04:40 AM - 04:45 AM	50.5	55.4	-4.9	7.0	-	46.5	53.8	-7.3
04:45 AM - 04:50 AM	51.7	55.6	-3.9	7.0	-	47.7	53.9	-6.2
04:50 AM - 04:55 AM	51.6	55.4	-3.8	7.0	-	47.6	53.7	-6.1
04:55 AM - 05:00 AM	51.7	55.5	-3.8	7.0	-	47.7	54.0	-6.3
05:00 AM - 05:05 AM	51.2	56.4	-5.2	7.0	-	47.2	54.3	-7.1
05:05 AM - 05:10 AM	51.4	56.5	-5.1	7.0	-	47.4	54.8	-7.4
05:10 AM - 05:15 AM	52.0	56.2	-4.2	7.0	-	48.0	54.4	-6.4
05:15 AM - 05:20 AM	55.8	55.7	0.1	7.0	-	51.8	53.4	-1.6
05:20 AM - 05:25 AM	51.9	55.6	-3.7	7.0	-	47.9	53.9	-6.0
05:25 AM - 05:30 AM	56.0	55.5	0.5	7.0	-	52.0	53.3	-1.3
05:30 AM - 05:35 AM	52.2	53.9	-1.7	7.0	-	48.2	50.2	-2.0
05:35 AM - 05:40 AM	52.4	51.1	1.3	7.0	-	48.4	49.6	-1.2
05:40 AM - 05:45 AM	52.0	51.1	0.9	7.0	-	48.0	49.4	-1.4
05:45 AM - 05:50 AM	51.7	50.7	1.0	7.0	-	47.7	48.7	-1.0
05:50 AM - 05:55 AM	51.4	50.7	0.7	7.0	-	47.4	47.4	0.0
05:55 AM - 06:00 AM	51.0	50.1	0.9	7.0	-	47.0	46.3	0.7
06:00 AM - 07:00 AM	57.0	50.4	6.6	1.0	56.0	-	45.9	10.1
07:00 AM - 08:00 AM	50.3	48.1	2.2	4.5	45.8	-	44.5	1.3
08:00 AM - 09:00 AM	51.5	48.6	2.9	3.0	48.5	-	43.8	4.7
09:00 AM - 10:00 AM	50.6	48.8	1.8	4.5	46.1	-	44.5	1.6
ค่าเฉลี่ยรวม								< 10

ค่ามาตรฐาน

≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกินจากค่าประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกินจากค่าประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดของเสียงที่เกินจากค่าประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด พิจารณาจาก วันที่ 19-20 ธันวาคม 2566

ระดับเสียงที่ฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-10 วันที่ตรวจวัด 19-20 ธันวาคม 2566)

The above results are valid only for the analytical method applied 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) Ltd. It is recommended that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

LINE: 84001010383

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Sample No. 23124326-11  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชนบท (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872449-1

Page 1 of 3

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับการรบกวน
10:00 AM - 11:00 AM	51.6	50.2	1.4	7.0	44.6	-	44.1
11:00 AM - 12:00 PM	49.7	48.0	1.7	4.5	45.2	-	42.7
12:00 PM - 01:00 PM	48.8	48.0	0.8	7.0	41.8	-	43.5
01:00 PM - 02:00 PM	49.7	46.7	3.0	3.0	46.7	-	42.4
02:00 PM - 03:00 PM	50.2	47.5	2.7	3.0	47.2	-	43.1
03:00 PM - 04:00 PM	51.5	48.5	3.0	3.0	48.5	-	44.1
04:00 PM - 05:00 PM	49.7	48.7	1.0	7.0	42.7	-	45.5
05:00 PM - 06:00 PM	55.7	51.0	4.7	1.5	54.2	-	47.3
06:00 PM - 07:00 PM	60.3	56.6	3.7	2.0	58.3	-	54.8
07:00 PM - 08:00 PM	61.5	55.3	6.2	1.5	60.0	-	52.0
08:00 PM - 09:00 PM	59.1	53.7	5.4	1.5	57.6	-	51.8
09:00 PM - 10:00 PM	57.7	56.2	1.5	4.5	53.2	-	53.9
10:00 PM - 10:05 PM	51.6	51.8	-0.2	7.0	-	47.6	50.0
10:05 PM - 10:10 PM	52.5	57.4	-4.9	7.0	-	48.5	52.8
10:10 PM - 10:15 PM	52.6	57.8	-5.2	7.0	-	48.6	56.1
10:15 PM - 10:20 PM	51.9	57.5	-5.6	7.0	-	47.9	55.3
10:20 PM - 10:25 PM	51.2	57.1	-5.9	7.0	-	47.2	54.8
10:25 PM - 10:30 PM	52.6	55.3	-2.7	7.0	-	48.6	53.3
10:30 PM - 10:35 PM	52.1	54.8	-2.7	7.0	-	48.1	53.0
10:35 PM - 10:40 PM	51.3	54.6	-3.3	7.0	-	47.3	53.0
10:40 PM - 10:45 PM	48.5	54.6	-6.1	7.0	-	44.5	53.0
10:45 PM - 10:50 PM	48.9	55.2	-6.3	7.0	-	44.9	53.4
10:50 PM - 10:55 PM	48.1	55.5	-7.4	7.0	-	44.1	53.9
10:55 PM - 11:00 PM	50.9	55.7	-4.8	7.0	-	46.9	53.1
11:00 PM - 11:05 PM	48.9	54.2	-5.3	7.0	-	44.9	49.1
11:05 PM - 11:10 PM	47.1	50.8	-3.7	7.0	-	43.1	48.4
11:10 PM - 11:15 PM	47.8	50.5	-2.7	7.0	-	43.8	48.8
11:15 PM - 11:20 PM	49.0	50.8	-1.8	7.0	-	45.0	48.7
11:20 PM - 11:25 PM	50.4	52.8	-2.4	7.0	-	46.4	49.6
11:25 PM - 11:30 PM	46.5	51.6	-5.1	7.0	-	42.5	50.0
11:30 PM - 11:35 PM	47.3	52.1	-4.8	7.0	-	43.3	50.7
11:35 PM - 11:40 PM	58.3	52.4	5.9	1.5	-	59.8	45.7
11:40 PM - 11:45 PM	46.8	49.5	-2.7	7.0	-	42.8	48.1
11:45 PM - 11:50 PM	51.1	50.2	0.9	7.0	-	47.1	48.1
11:50 PM - 11:55 PM	53.7	51.7	2.0	4.5	-	52.2	45.9
11:55 PM - 12:00 AM	46.5	51.7	-5.2	7.0	-	42.5	49.8
12:00 AM - 12:05 AM	46.7	51.7	-5.0	7.0	-	42.7	49.6
12:05 AM - 12:10 AM	48.6	52.0	-3.4	7.0	-	44.6	50.3
12:10 AM - 12:15 AM	48.1	52.3	-4.2	7.0	-	44.1	50.6
12:15 AM - 12:20 AM	47.5	53.0	-5.5	7.0	-	43.5	51.2

The above results are valid only for the analysed/checked 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

ADDRESS 516/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3504 8555 | FAX +66 0 3504 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Sample No. 23124326-11  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชนบท (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872449-1

Page 2 of 3

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับการรบกวน
12:20 AM - 12:25 AM	48.3	53.2	-4.9	7.0	-	44.3	50.9
12:25 AM - 12:30 AM	51.9	53.5	-1.6	7.0	-	47.9	50.6
12:30 AM - 12:35 AM	48.4	53.1	-4.7	7.0	-	44.4	50.3
12:35 AM - 12:40 AM	46.0	52.7	-6.7	7.0	-	42.0	50.2
12:40 AM - 12:45 AM	46.3	51.9	-5.6	7.0	-	42.3	49.6
12:45 AM - 12:50 AM	46.7	52.2	-5.5	7.0	-	42.7	50.0
12:50 AM - 12:55 AM	46.7	51.7	-5.0	7.0	-	42.7	49.3
12:55 AM - 01:00 AM	47.2	51.7	-4.5	7.0	-	43.2	49.5
01:00 AM - 01:05 AM	48.0	51.0	-3.0	7.0	-	44.0	49.3
01:05 AM - 01:10 AM	46.5	50.7	-4.2	7.0	-	42.5	49.3
01:10 AM - 01:15 AM	48.7	51.2	-2.5	7.0	-	44.7	49.5
01:15 AM - 01:20 AM	47.1	51.0	-3.9	7.0	-	43.1	49.7
01:20 AM - 01:25 AM	48.5	50.9	-2.4	7.0	-	44.5	49.3
01:25 AM - 01:30 AM	58.2	54.7	3.5	2.0	-	59.2	49.3
01:30 AM - 01:35 AM	47.7	61.4	-13.7	7.0	-	43.7	47.9
01:35 AM - 01:40 AM	48.0	51.7	-3.7	7.0	-	44.0	50.3
01:40 AM - 01:45 AM	48.3	51.3	-3.0	7.0	-	44.3	49.9
01:45 AM - 01:50 AM	54.0	51.6	2.4	4.5	-	52.5	49.5
01:50 AM - 01:55 AM	47.0	50.3	-3.3	7.0	-	43.0	48.0
01:55 AM - 02:00 AM	47.0	50.3	-3.3	7.0	-	43.0	48.5
02:00 AM - 02:05 AM	47.2	50.6	-3.4	7.0	-	43.2	48.9
02:05 AM - 02:10 AM	47.8	50.3	-2.5	7.0	-	43.8	48.8
02:10 AM - 02:15 AM	47.9	49.1	-1.2	7.0	-	43.9	46.4
02:15 AM - 02:20 AM	48.8	48.6	0.2	7.0	-	44.8	46.4
02:20 AM - 02:25 AM	48.0	48.2	-0.2	7.0	-	44.0	46.4
02:25 AM - 02:30 AM	47.5	47.9	-0.4	7.0	-	43.5	46.2
02:30 AM - 02:35 AM	47.9	47.5	0.4	7.0	-	43.9	45.6
02:35 AM - 02:40 AM	47.8	47.9	-0.1	7.0	-	43.8	46.2
02:40 AM - 02:45 AM	49.5	48.1	1.4	7.0	-	45.5	46.2
02:45 AM - 02:50 AM	49.8	47.8	2.0	4.5	-	48.3	46.1
02:50 AM - 02:55 AM	48.9	47.8	1.1	7.0	-	44.9	46.1
02:55 AM - 03:00 AM	48.5	47.9	0.6	7.0	-	44.5	46.1
03:00 AM - 03:05 AM	47.4	47.7	-0.3	7.0	-	43.4	45.8
03:05 AM - 03:10 AM	47.6	49.2	-1.6	7.0	-	43.6	47.0
03:10 AM - 03:15 AM	46.1	49.4	-3.3	7.0	-	42.1	47.7
03:15 AM - 03:20 AM	46.3	47.9	-1.6	7.0	-	42.3	45.8
03:20 AM - 03:25 AM	45.7	47.3	-1.6	7.0	-	41.7	45.9
03:25 AM - 03:30 AM	47.5	46.8	0.7	7.0	-	43.5	45.3
03:30 AM - 03:35 AM	49.2	47.2	2.0	4.5	-	47.7	45.2
03:35 AM - 03:40 AM	46.1	45.6	0.5	7.0	-	42.1	43.3

The above results are valid only for the analysed/checked 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

ADDRESS 516/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3504 8555 | FAX +66 0 3504 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872449-1

Page 3 of 3

Sample No. 23124326-11  
Parameter เลือกรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางวัน	กลางคืน			
03:40 AM - 03:45 AM	44.6	43.0	1.6	4.5	-	43.1	41.8	1.3	
03:45 AM - 03:50 AM	45.1	42.6	2.5	3.0	-	45.1	41.6	3.5	
03:50 AM - 03:55 AM	45.9	43.9	2.0	4.5	-	44.4	41.8	2.6	
03:55 AM - 04:00 AM	46.4	51.0	-4.6	7.0	-	42.4	41.9	0.5	
04:00 AM - 04:05 AM	46.1	55.4	-9.3	7.0	-	42.1	48.5	-6.4	
04:05 AM - 04:10 AM	50.1	56.2	-6.1	7.0	-	46.1	52.1	-6.0	
04:10 AM - 04:15 AM	50.9	53.5	-2.6	7.0	-	46.9	50.2	-3.3	
04:15 AM - 04:20 AM	51.1	53.6	-2.5	7.0	-	47.1	50.8	-3.7	
04:20 AM - 04:25 AM	56.5	54.4	2.1	4.5	-	55.0	49.7	5.3	
04:25 AM - 04:30 AM	50.3	55.7	-5.4	7.0	-	46.3	51.9	-5.6	
04:30 AM - 04:35 AM	51.4	54.6	-3.2	7.0	-	47.4	50.6	-3.2	
04:35 AM - 04:40 AM	52.1	55.7	-3.6	7.0	-	48.1	53.0	-4.9	
04:40 AM - 04:45 AM	51.9	55.5	-3.6	7.0	-	47.9	52.8	-4.9	
04:45 AM - 04:50 AM	51.7	49.7	2.0	4.5	-	50.2	45.3	4.9	
04:50 AM - 04:55 AM	51.6	52.0	-0.4	7.0	-	47.6	49.4	-1.8	
04:55 AM - 05:00 AM	51.3	53.8	-2.5	7.0	-	47.3	50.1	-2.8	
05:00 AM - 05:05 AM	51.4	53.6	-2.2	7.0	-	47.4	49.7	-2.3	
05:05 AM - 05:10 AM	51.4	56.5	-5.1	7.0	-	47.4	52.4	-5.0	
05:10 AM - 05:15 AM	56.1	57.2	-1.1	7.0	-	52.1	52.2	-0.1	
05:15 AM - 05:20 AM	51.9	60.0	-8.1	7.0	-	47.9	52.5	-4.6	
05:20 AM - 05:25 AM	51.6	62.4	-10.8	7.0	-	47.6	59.2	-11.6	
05:25 AM - 05:30 AM	55.4	61.5	-6.1	7.0	-	51.4	53.2	-1.8	
05:30 AM - 05:35 AM	52.1	55.7	-3.6	7.0	-	48.1	51.9	-3.8	
05:35 AM - 05:40 AM	50.8	57.3	-6.5	7.0	-	46.8	53.7	-6.9	
05:40 AM - 05:45 AM	51.3	55.6	-4.3	7.0	-	47.3	51.8	-4.5	
05:45 AM - 05:50 AM	50.5	54.8	-4.3	7.0	-	46.5	52.1	-5.6	
05:50 AM - 05:55 AM	50.6	53.9	-3.3	7.0	-	46.6	51.5	-4.9	
05:55 AM - 06:00 AM	49.7	51.2	-1.5	7.0	-	45.7	46.5	-0.8	
06:00 AM - 07:00 AM	52.6	50.4	2.2	4.5	48.1	-	47.5	0.6	
07:00 AM - 08:00 AM	59.5	55.0	4.5	1.5	58.0	-	48.7	9.3	
08:00 AM - 09:00 AM	55.1	52.8	2.3	4.5	50.6	-	47.8	2.8	
09:00 AM - 10:00 AM	55.9	52.8	3.1	3.0	52.9	-	46.8	6.1	
ค่ามาตรฐาน								≤ 10	

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด หากตรวจวัด วันที่ 20-21 ธันวาคม 2566
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-11 วันที่ตรวจวัด 20-21 ธันวาคม 2566)

The above results are valid only for the analytical 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), excepting recommendations that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 615/10 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand / PHONE +66 0 3304 8555 / FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872450-1

Page 1 of 3

Sample No. 23124326-12  
Parameter เลือกรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางวัน	กลางคืน			
10:00 AM - 11:00 AM	56.4	52.2	4.2	2.0	-	-	45.0	9.4	
11:00 AM - 12:00 PM	51.9	50.6	1.3	7.0	-	-	44.9	-1.7	
12:00 PM - 01:00 PM	60.7	55.5	5.2	1.5	-	-	59.2	49.7	9.5
01:00 PM - 02:00 PM	60.8	61.8	-1.0	7.0	-	-	53.8	53.8	0.0
02:00 PM - 03:00 PM	62.7	52.2	10.5	0.5	62.2	-	-	48.9	13.3
03:00 PM - 04:00 PM	55.7	53.1	2.6	3.0	52.7	-	-	46.6	6.1
04:00 PM - 05:00 PM	52.5	54.7	-2.2	7.0	45.5	-	-	49.7	-4.2
05:00 PM - 06:00 PM	52.7	51.8	0.9	7.0	45.7	-	-	48.5	-2.8
06:00 PM - 07:00 PM	57.5	55.6	1.9	4.5	53.0	-	-	51.2	1.8
07:00 PM - 08:00 PM	56.7	56.9	-0.2	7.0	49.7	-	-	50.4	-0.7
08:00 PM - 09:00 PM	54.4	55.0	-0.6	7.0	47.4	-	-	50.3	-2.9
09:00 PM - 10:00 PM	55.2	58.7	-3.5	7.0	48.2	-	-	56.0	-7.8
10:00 PM - 10:05 PM	58.4	60.0	-1.6	7.0	-	54.4	-	57.1	-2.7
10:05 PM - 10:10 PM	56.8	60.9	-4.1	7.0	-	52.8	-	58.1	-5.3
10:10 PM - 10:15 PM	56.4	61.5	-5.1	7.0	-	52.4	-	58.9	-6.5
10:15 PM - 10:20 PM	56.4	62.0	-5.6	7.0	-	52.4	-	58.9	-6.5
10:20 PM - 10:25 PM	56.0	60.1	-4.1	7.0	-	52.0	-	57.6	-5.6
10:25 PM - 10:30 PM	55.2	60.3	-5.1	7.0	-	51.2	-	57.7	-6.5
10:30 PM - 10:35 PM	51.6	60.1	-8.5	7.0	-	47.6	-	56.7	-9.1
10:35 PM - 10:40 PM	52.0	59.8	-7.8	7.0	-	48.0	-	57.2	-9.2
10:40 PM - 10:45 PM	51.9	59.6	-7.7	7.0	-	47.9	-	56.8	-8.9
10:45 PM - 10:50 PM	51.2	58.3	-7.1	7.0	-	47.2	-	56.4	-9.2
10:50 PM - 10:55 PM	52.0	58.4	-6.4	7.0	-	48.0	-	56.6	-8.6
10:55 PM - 11:00 PM	52.6	57.6	-5.0	7.0	-	48.6	-	54.9	-6.3
11:00 PM - 11:05 PM	52.7	56.9	-4.2	7.0	-	48.7	-	54.5	-5.8
11:05 PM - 11:10 PM	49.2	57.4	-8.2	7.0	-	45.2	-	55.3	-10.1
11:10 PM - 11:15 PM	49.9	57.5	-7.6	7.0	-	45.9	-	55.3	-9.4
11:15 PM - 11:20 PM	49.9	57.4	-7.5	7.0	-	45.9	-	55.0	-9.1
11:20 PM - 11:25 PM	50.3	56.9	-6.6	7.0	-	46.3	-	54.9	-8.6
11:25 PM - 11:30 PM	52.7	57.1	-4.4	7.0	-	48.7	-	55.2	-6.5
11:30 PM - 11:35 PM	53.0	56.7	-3.7	7.0	-	49.0	-	54.6	-5.6
11:35 PM - 11:40 PM	50.4	56.7	-6.3	7.0	-	46.4	-	54.6	-8.2
11:40 PM - 11:45 PM	51.4	57.3	-5.9	7.0	-	47.4	-	55.2	-7.8
11:45 PM - 11:50 PM	50.4	56.8	-6.4	7.0	-	46.4	-	54.1	-7.7
11:50 PM - 11:55 PM	51.5	56.4	-4.9	7.0	-	47.5	-	54.1	-6.6
11:55 PM - 12:00 AM	49.1	56.2	-7.1	7.0	-	45.1	-	53.3	-8.2
12:00 AM - 12:05 AM	49.4	52.4	-3.0	7.0	-	45.4	-	48.1	-2.7
12:05 AM - 12:10 AM	49.4	53.8	-4.4	7.0	-	45.4	-	49.5	-4.1
12:10 AM - 12:15 AM	51.8	52.1	-0.3	7.0	-	47.8	-	48.0	-0.2
12:15 AM - 12:20 AM	49.2	53.0	-3.8	7.0	-	45.2	-	48.3	-3.1

The above results are valid only for the analytical 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), excepting recommendations that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 615/10 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand / PHONE +66 0 3304 8555 / FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872450-1

Page 2 of 3

**Sample No.** 23124326-12  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N2) (GPS 47P 0731936, 1423172)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296515

เวลา	ระดับเสียง (dB(A))				เปรียบเทียบจากแหล่งกำเนิด		เสียงพื้นฐาน	การรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรมการ	ผลต่างระดับเสียง	ค่าปรับค่า	กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	50.6	52.8	-2.2	7.0	-	46.6	47.8	-1.2
12:25 AM - 12:30 AM	49.7	53.2	-3.5	7.0	-	45.7	49.5	-3.8
12:30 AM - 12:35 AM	48.8	51.9	-3.1	7.0	-	44.8	47.5	-2.7
12:35 AM - 12:40 AM	48.6	52.6	-4.0	7.0	-	44.6	48.9	-4.3
12:40 AM - 12:45 AM	49.6	52.7	-3.1	7.0	-	45.6	48.2	-2.6
12:45 AM - 12:50 AM	47.7	52.5	-4.8	7.0	-	43.7	47.0	-3.3
12:50 AM - 12:55 AM	47.8	51.9	-4.1	7.0	-	43.8	45.7	-1.9
12:55 AM - 01:00 AM	52.4	51.7	0.7	7.0	-	48.4	47.1	1.3
01:00 AM - 01:05 AM	46.6	51.6	-5.0	7.0	-	42.6	46.2	-3.6
01:05 AM - 01:10 AM	49.7	51.7	-2.0	7.0	-	45.7	46.7	-1.0
01:10 AM - 01:15 AM	49.1	52.3	-3.2	7.0	-	45.1	46.6	-1.5
01:15 AM - 01:20 AM	49.7	50.9	-1.2	7.0	-	45.7	45.7	0.0
01:20 AM - 01:25 AM	49.0	51.7	-2.7	7.0	-	45.0	47.3	-2.3
01:25 AM - 01:30 AM	50.4	51.8	-1.4	7.0	-	46.4	47.1	-0.7
01:30 AM - 01:35 AM	49.4	52.3	-2.9	7.0	-	45.4	47.6	-2.2
01:35 AM - 01:40 AM	48.2	51.8	-3.6	7.0	-	44.2	46.8	-2.6
01:40 AM - 01:45 AM	47.8	53.0	-5.2	7.0	-	43.8	48.1	-4.3
01:45 AM - 01:50 AM	48.3	52.4	-4.1	7.0	-	44.3	46.9	-2.6
01:50 AM - 01:55 AM	48.2	50.9	-2.7	7.0	-	44.2	43.7	0.5
01:55 AM - 02:00 AM	47.4	46.2	1.2	7.0	-	43.4	41.6	1.8
02:00 AM - 02:05 AM	46.0	51.3	-5.3	7.0	-	42.0	43.2	-1.2
02:05 AM - 02:10 AM	46.1	44.4	1.7	4.5	-	44.6	41.7	2.9
02:10 AM - 02:15 AM	48.2	48.7	-0.5	7.0	-	44.2	43.6	0.6
02:15 AM - 02:20 AM	48.4	50.2	-1.8	7.0	-	44.4	46.6	-2.2
02:20 AM - 02:25 AM	48.8	50.0	-1.2	7.0	-	44.8	45.3	-0.5
02:25 AM - 02:30 AM	49.2	48.8	0.4	7.0	-	45.2	44.7	0.5
02:30 AM - 02:35 AM	49.4	54.1	-4.7	7.0	-	45.4	50.6	-5.2
02:35 AM - 02:40 AM	49.4	51.2	-1.8	7.0	-	45.4	48.3	-2.9
02:40 AM - 02:45 AM	49.6	51.6	-2.0	7.0	-	45.6	47.6	-2.0
02:45 AM - 02:50 AM	49.7	50.4	-0.7	7.0	-	45.7	46.1	-0.4
02:50 AM - 02:55 AM	49.7	51.0	-1.3	7.0	-	45.7	48.1	-2.4
02:55 AM - 03:00 AM	49.0	50.7	-1.7	7.0	-	45.0	45.2	-0.2
03:00 AM - 03:05 AM	48.3	49.4	-1.1	7.0	-	44.3	45.8	-1.5
03:05 AM - 03:10 AM	47.6	50.3	-2.7	7.0	-	43.6	46.4	-2.8
03:10 AM - 03:15 AM	47.7	49.1	-1.4	7.0	-	43.7	44.9	-1.2
03:15 AM - 03:20 AM	49.8	48.6	1.2	7.0	-	45.8	45.1	0.7
03:20 AM - 03:25 AM	48.1	49.5	-1.4	7.0	-	44.1	45.5	-1.4
03:25 AM - 03:30 AM	48.9	49.8	-0.9	7.0	-	44.9	46.6	-1.7
03:30 AM - 03:35 AM	49.5	47.2	2.3	4.5	-	48.0	43.5	4.5
03:35 AM - 03:40 AM	48.3	50.9	-2.6	7.0	-	44.3	44.2	0.1

The above results are valid only for the analyzed/tested sample(s) as indicated at the top of 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

*Wilwan Borik*  
Wilwan Borik  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872450-1

Page 3 of 3

**Sample No.** 23124326-12  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N2) (GPS 47P 0731936, 1423172)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296515

เวลา	ระดับเสียง (dB(A))				เปรียบเทียบจากแหล่งกำเนิด		เสียงพื้นฐาน	การรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรมการ	ผลต่างระดับเสียง	ค่าปรับค่า	กลางวัน	กลางคืน		
03:40 AM - 03:45 AM	48.6	61.6	-13.0	7.0	-	44.6	57.1	-12.5
03:45 AM - 03:50 AM	47.6	58.1	-10.5	7.0	-	43.6	45.1	-1.5
03:50 AM - 03:55 AM	51.0	60.5	-9.5	7.0	-	47.0	53.4	-6.4
03:55 AM - 04:00 AM	51.7	58.8	-7.1	7.0	-	47.7	45.5	2.2
04:00 AM - 04:05 AM	49.4	55.2	-5.8	7.0	-	45.4	47.1	-1.7
04:05 AM - 04:10 AM	49.0	60.9	-11.9	7.0	-	45.0	51.0	-6.0
04:10 AM - 04:15 AM	47.9	66.9	-19.0	7.0	-	43.9	57.8	-13.9
04:15 AM - 04:20 AM	51.7	65.8	-14.1	7.0	-	47.7	59.3	-11.6
04:20 AM - 04:25 AM	51.7	66.4	-14.7	7.0	-	47.7	58.1	-10.4
04:25 AM - 04:30 AM	52.9	66.6	-13.7	7.0	-	48.9	43.9	5.0
04:30 AM - 04:35 AM	51.6	47.6	4.0	2.0	-	52.6	42.1	10.5
04:35 AM - 04:40 AM	51.9	50.3	1.6	4.5	-	50.4	44.8	5.6
04:40 AM - 04:45 AM	51.9	49.5	2.4	4.5	-	50.4	46.4	4.0
04:45 AM - 04:50 AM	51.6	53.0	-1.4	7.0	-	47.6	49.7	-2.1
04:50 AM - 04:55 AM	51.0	53.0	-2.0	7.0	-	47.0	49.5	-2.5
04:55 AM - 05:00 AM	51.1	52.5	-1.4	7.0	-	47.1	49.0	-1.9
05:00 AM - 05:05 AM	51.3	51.2	0.1	7.0	-	47.3	47.8	-0.5
05:05 AM - 05:10 AM	49.6	49.1	0.5	7.0	-	45.6	47.4	-1.8
05:10 AM - 05:15 AM	54.7	49.8	4.9	1.5	-	56.2	47.6	8.6
05:15 AM - 05:20 AM	49.4	49.9	-0.5	7.0	-	45.4	47.6	-2.2
05:20 AM - 05:25 AM	52.8	50.4	2.4	4.5	-	51.3	47.6	3.7
05:25 AM - 05:30 AM	49.9	49.8	0.1	7.0	-	45.9	47.1	-1.2
05:30 AM - 05:35 AM	49.1	49.9	-0.8	7.0	-	45.1	47.1	-2.0
05:35 AM - 05:40 AM	49.5	50.2	-0.7	7.0	-	45.5	47.3	-1.8
05:40 AM - 05:45 AM	49.9	50.1	-0.2	7.0	-	45.9	47.2	-1.3
05:45 AM - 05:50 AM	48.3	50.3	-2.0	7.0	-	44.3	47.1	-2.8
05:50 AM - 05:55 AM	50.4	51.0	-0.6	7.0	-	46.4	47.5	-1.1
05:55 AM - 06:00 AM	50.0	51.3	-1.3	7.0	-	46.0	47.4	-1.4
06:00 AM - 07:00 AM	52.1	53.1	-1.0	7.0	45.1	-	50.0	-4.9
07:00 AM - 08:00 AM	58.4	54.3	4.1	2.0	56.4	-	49.4	7.0
08:00 AM - 09:00 AM	58.3	51.8	6.5	1.0	57.3	-	48.6	8.7
09:00 AM - 10:00 AM	56.2	55.8	0.4	7.0	49.2	-	51.0	-1.8
ค่ามาตรฐาน								≤ 10

Reference Method:

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเกณฑ์การประเมินเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเกณฑ์การประเมินเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ที่ทำการตรวจวัด วันที่ 21-22 ธันวาคม 2566

ระดับเสียงที่ชุมชนและระดับเสียงขณะไม่มีกิจกรรมการ (Sample No.23124327-12 วันที่ตรวจวัด 21-22 ธันวาคม 2566)

Approved by

*Wilwan Borik*  
Wilwan Borik  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872451-1

Sample No. 23124326-13  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (NZ) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Page 1 of 3

เวลา	ระดับเสียง (dB(A))						เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			
					กลางวัน (A-C)	กลางคืน (A-C)		
10:00 AM - 11:00 AM	56.0	56.6	-0.6	7.0	49.0	-	50.1	-1.1
11:00 AM - 12:00 PM	55.7	54.8	0.9	7.0	48.7	-	50.7	-2.0
12:00 PM - 01:00 PM	54.5	58.7	-4.2	7.0	47.5	-	56.0	-8.5
01:00 PM - 02:00 PM	54.8	59.7	-4.9	7.0	47.8	-	57.0	-9.2
02:00 PM - 03:00 PM	54.9	56.5	-1.6	7.0	47.9	-	54.2	-6.3
03:00 PM - 04:00 PM	58.2	52.3	5.9	1.5	56.7	-	47.8	8.9
04:00 PM - 05:00 PM	57.4	51.8	5.6	1.5	55.9	-	46.1	9.8
05:00 PM - 06:00 PM	59.5	45.7	13.8	0.0	59.5	-	41.2	18.3
06:00 PM - 07:00 PM	59.6	46.2	13.4	0.0	59.6	-	41.5	18.1
07:00 PM - 08:00 PM	54.9	44.1	10.8	0.5	54.4	-	40.0	14.4
08:00 PM - 09:00 PM	49.9	44.1	5.8	1.5	48.4	-	40.2	8.2
09:00 PM - 10:00 PM	45.7	47.0	-1.3	7.0	38.7	-	42.1	-3.4
10:00 PM - 10:05 PM	42.8	46.7	-3.9	7.0	-	38.8	42.2	-3.4
10:05 PM - 10:10 PM	43.7	45.6	-1.9	7.0	-	39.7	41.3	-1.6
10:10 PM - 10:15 PM	44.0	42.2	1.8	4.5	-	42.5	39.8	2.7
10:15 PM - 10:20 PM	43.6	43.8	-0.2	7.0	-	39.6	40.7	-1.1
10:20 PM - 10:25 PM	43.9	44.8	-0.9	7.0	-	39.9	42.1	-2.2
10:25 PM - 10:30 PM	45.4	43.9	1.5	4.5	-	43.9	41.4	2.5
10:30 PM - 10:35 PM	43.0	45.7	-2.7	7.0	-	39.0	41.6	-2.6
10:35 PM - 10:40 PM	50.5	45.9	4.6	1.5	-	52.0	42.4	9.6
10:40 PM - 10:45 PM	44.1	45.6	-1.5	7.0	-	40.1	42.6	-2.5
10:45 PM - 10:50 PM	44.3	46.6	-2.3	7.0	-	40.3	42.2	-1.9
10:50 PM - 10:55 PM	45.2	46.0	-0.8	7.0	-	41.2	41.6	-0.4
10:55 PM - 11:00 PM	46.3	45.1	1.2	7.0	-	42.3	42.1	0.2
11:00 PM - 11:05 PM	46.5	46.7	-0.2	7.0	-	42.5	42.3	0.2
11:05 PM - 11:10 PM	49.5	45.1	4.4	2.0	-	50.5	42.1	8.4
11:10 PM - 11:15 PM	48.4	47.0	1.4	7.0	-	44.4	42.2	2.2
11:15 PM - 11:20 PM	47.8	46.5	1.3	7.0	-	43.8	42.8	1.0
11:20 PM - 11:25 PM	48.3	44.8	3.5	2.0	-	49.3	42.5	6.8
11:25 PM - 11:30 PM	48.4	45.8	2.6	3.0	-	48.4	42.5	5.9
11:30 PM - 11:35 PM	49.3	45.0	4.3	2.0	-	50.3	42.8	7.5
11:35 PM - 11:40 PM	48.5	44.7	3.8	2.0	-	49.5	42.9	6.6
11:40 PM - 11:45 PM	47.2	48.0	-0.8	7.0	-	43.2	42.4	0.8
11:45 PM - 11:50 PM	50.4	44.5	5.9	1.5	-	51.9	42.7	9.2
11:50 PM - 11:55 PM	47.0	45.6	1.4	7.0	-	43.0	43.3	-0.3
11:55 PM - 12:00 AM	46.1	46.2	-0.1	7.0	-	42.1	43.4	-1.3
12:00 AM - 12:05 AM	45.9	48.3	-2.4	7.0	-	41.9	44.2	-2.3
12:05 AM - 12:10 AM	45.6	47.3	-1.7	7.0	-	41.6	43.3	-1.7
12:10 AM - 12:15 AM	46.1	47.3	-1.2	7.0	-	42.1	44.3	-2.2
12:15 AM - 12:20 AM	46.2	46.5	-0.3	7.0	-	42.2	44.2	-2.0

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or test results 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

*Wiwian Borirak*  
Wiwian Borirak  
Manager

ADDRESS: 616/10 Moo 5 - 7, Maenabul Khro A, Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3304 8555 | FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCHEMES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872451-1

Sample No. 23124326-13  
Parameter เสียงรบกวน  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (NZ) (GPS 47P 0731936, 1423172)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296515

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						ค่าระดับการรบกวน	
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			เสียงที่รบกวน
					กลางวัน	กลางคืน		
12:20 AM - 12:25 AM	44.5	46.3	-1.8	7.0	-	40.5	-3.0	
12:25 AM - 12:30 AM	45.2	47.3	-2.1	7.0	-	41.2	-2.9	
12:30 AM - 12:35 AM	45.6	50.3	-4.7	7.0	-	41.6	-4.6	
12:35 AM - 12:40 AM	45.5	51.6	-6.1	7.0	-	41.5	-8.1	
12:40 AM - 12:45 AM	45.4	52.2	-6.8	7.0	-	41.4	-9.5	
12:45 AM - 12:50 AM	46.1	52.4	-6.3	7.0	-	42.1	-9.1	
12:50 AM - 12:55 AM	46.1	52.4	-6.3	7.0	-	42.1	-9.0	
12:55 AM - 01:00 AM	46.5	52.3	-5.8	7.0	-	42.5	-8.6	
01:00 AM - 01:05 AM	46.2	52.0	-5.8	7.0	-	42.2	-8.1	
01:05 AM - 01:10 AM	45.6	52.0	-6.4	7.0	-	41.6	-9.2	
01:10 AM - 01:15 AM	45.1	52.0	-6.9	7.0	-	41.1	-9.4	
01:15 AM - 01:20 AM	45.2	51.1	-5.9	7.0	-	41.2	-8.0	
01:20 AM - 01:25 AM	47.6	51.4	-3.8	7.0	-	43.6	-5.6	
01:25 AM - 01:30 AM	48.9	50.4	-1.5	7.0	-	44.9	-2.2	
01:30 AM - 01:35 AM	47.5	49.6	-2.1	7.0	-	43.5	-2.3	
01:35 AM - 01:40 AM	45.8	50.8	-5.0	7.0	-	41.8	-4.9	
01:40 AM - 01:45 AM	47.5	49.8	-2.3	7.0	-	43.5	-2.8	
01:45 AM - 01:50 AM	48.0	49.7	-1.7	7.0	-	44.0	-3.0	
01:50 AM - 01:55 AM	48.2	49.9	-1.7	7.0	-	44.2	-2.5	
01:55 AM - 02:00 AM	46.9	47.8	-0.9	7.0	-	42.9	-3.3	
02:00 AM - 02:05 AM	45.5	50.1	-4.6	7.0	-	41.5	-4.3	
02:05 AM - 02:10 AM	47.8	49.9	-2.1	7.0	-	43.8	-3.8	
02:10 AM - 02:15 AM	47.3	49.9	-2.6	7.0	-	43.3	-3.5	
02:15 AM - 02:20 AM	49.4	48.7	0.7	7.0	-	45.4	-1.1	
02:20 AM - 02:25 AM	46.2	49.3	-3.1	7.0	-	42.2	-4.0	
02:25 AM - 02:30 AM	49.3	49.2	0.1	7.0	-	45.3	-1.5	
02:30 AM - 02:35 AM	53.8	49.2	4.6	1.5	-	55.3	7.7	
02:35 AM - 02:40 AM	48.0	49.3	-1.3	7.0	-	44.0	-3.8	
02:40 AM - 02:45 AM	48.0	49.1	-1.1	7.0	-	44.0	-3.8	
02:45 AM - 02:50 AM	49.3	49.1	0.2	7.0	-	45.3	-2.5	
02:50 AM - 02:55 AM	49.5	48.8	0.7	7.0	-	45.5	-1.6	
02:55 AM - 03:00 AM	50.7	48.7	2.0	4.5	-	49.2	1.9	
03:00 AM - 03:05 AM	52.8	48.5	4.3	2.0	-	53.8	6.6	
03:05 AM - 03:10 AM	48.4	49.3	-0.9	7.0	-	44.4	-3.2	
03:10 AM - 03:15 AM	49.0	48.9	0.1	7.0	-	45.0	-2.4	
03:15 AM - 03:20 AM	47.5	49.0	-1.5	7.0	-	43.5	-3.9	
03:20 AM - 03:25 AM	49.6	49.3	0.3	7.0	-	45.6	-1.8	
03:25 AM - 03:30 AM	51.0	49.0	2.0	4.5	-	49.5	2.5	
03:30 AM - 03:35 AM	48.4	49.0	-0.6	7.0	-	44.4	-2.6	
03:35 AM - 03:40 AM	46.7	50.0	-3.3	7.0	-	42.7	-4.8	

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or test results 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

*Wiwian Borirak*  
Wiwian Borirak  
Manager

ADDRESS: 616/10 Moo 5 - 7, Maenabul Khro A, Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3304 8555 | FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCHEMES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872451-1

Page 3 of 3

**Sample No.:** 23124326-13  
**Parameter:** เสียงรบกวน  
**Location:** หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
**Measurement Date:** Dec 22 - 23, 2023  
**Measurement by:** Satcha Phetsawaeng  
**Sound Level Meter:** 00296515

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับเสียงที่ฐานการรบกวน
					กลางวัน	กลางคืน	
03:40 AM - 03:45 AM	47.9	48.4	-0.5	7.0	-	43.9	47.1
03:45 AM - 03:50 AM	48.4	47.5	0.9	7.0	-	44.4	46.7
03:50 AM - 03:55 AM	47.6	47.7	-0.1	7.0	-	43.6	46.5
03:55 AM - 04:00 AM	48.1	47.4	0.7	7.0	-	44.1	46.0
04:00 AM - 04:05 AM	49.2	46.8	2.4	4.5	-	47.7	45.9
04:05 AM - 04:10 AM	48.3	54.9	-6.6	7.0	-	44.3	46.1
04:10 AM - 04:15 AM	49.7	51.4	-1.7	7.0	-	45.7	46.3
04:15 AM - 04:20 AM	50.3	46.9	3.4	3.0	-	50.3	46.2
04:20 AM - 04:25 AM	48.5	47.2	1.3	7.0	-	44.5	46.4
04:25 AM - 04:30 AM	48.4	47.4	1.0	7.0	-	44.4	46.5
04:30 AM - 04:35 AM	49.1	47.6	1.5	4.5	-	47.6	46.2
04:35 AM - 04:40 AM	49.3	45.7	3.6	2.0	-	50.3	44.7
04:40 AM - 04:45 AM	49.0	46.7	2.3	4.5	-	47.5	44.6
04:45 AM - 04:50 AM	51.1	46.5	4.6	1.5	-	52.6	45.3
04:50 AM - 04:55 AM	52.5	47.1	5.4	1.5	-	54.0	45.2
04:55 AM - 05:00 AM	49.5	46.2	3.3	3.0	-	49.5	44.5
05:00 AM - 05:05 AM	51.6	46.2	5.4	1.5	-	53.1	45.1
05:05 AM - 05:10 AM	51.1	45.4	5.7	1.5	-	52.6	44.6
05:10 AM - 05:15 AM	51.1	45.4	5.7	1.5	-	52.6	44.5
05:15 AM - 05:20 AM	51.0	45.6	5.4	1.5	-	52.5	44.5
05:20 AM - 05:25 AM	51.1	46.5	4.6	1.5	-	52.6	44.7
05:25 AM - 05:30 AM	50.4	45.4	5.0	1.5	-	51.9	44.0
05:30 AM - 05:35 AM	49.2	44.7	4.5	1.5	-	50.7	43.2
05:35 AM - 05:40 AM	52.0	45.5	6.5	1.0	-	54.0	44.0
05:40 AM - 05:45 AM	54.8	45.1	9.7	0.5	-	57.3	43.5
05:45 AM - 05:50 AM	52.4	45.2	7.2	1.0	-	54.4	43.8
05:50 AM - 05:55 AM	48.7	46.4	2.3	4.5	-	47.2	43.8
05:55 AM - 06:00 AM	52.7	45.7	7.0	1.0	-	54.7	44.0
06:00 AM - 07:00 AM	52.3	45.6	6.7	1.0	51.3	-	44.0
07:00 AM - 08:00 AM	53.4	45.1	8.3	0.5	52.9	-	42.9
08:00 AM - 09:00 AM	54.3	44.4	9.9	0.5	53.8	-	42.3
09:00 AM - 10:00 AM	52.3	53.3	-1.0	7.0	45.3	-	49.9
ค่ามาตรฐาน							≤ 10

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง มาตรการควบคุมระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด จากการตรวจวัด วันที่ 22-23 ธันวาคม 2566  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-13 วันที่ตรวจวัด 22-23 ธันวาคม 2566)

Approved by

Wilawan Borirak  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERSHIP.



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124326  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report Number :** 2872452-1

Page 1 of 3

**Sample No.:** 23124326-14  
**Parameter:** เสียงรบกวน  
**Location:** หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
**Measurement Date:** Dec 23 - 24, 2023  
**Measurement by:** Satcha Phetsawaeng  
**Sound Level Meter:** 00296515

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับเสียงที่ฐานการรบกวน
					กลางวัน	กลางคืน	
10:00 AM - 11:00 AM	52.1	50.2	1.9	4.5	47.6	-	46.8
11:00 AM - 12:00 PM	52.9	52.1	0.8	7.0	45.9	-	47.0
12:00 PM - 01:00 PM	51.8	52.3	-0.5	7.0	44.8	-	49.1
01:00 PM - 02:00 PM	51.8	49.4	2.4	4.5	47.3	-	45.2
02:00 PM - 03:00 PM	52.2	51.3	0.9	7.0	45.2	-	43.2
03:00 PM - 04:00 PM	52.2	47.0	5.2	1.5	50.7	-	42.5
04:00 PM - 05:00 PM	51.7	47.2	4.5	1.5	50.2	-	43.4
05:00 PM - 06:00 PM	60.2	48.4	11.8	0.5	59.7	-	44.1
06:00 PM - 07:00 PM	61.8	49.2	12.6	0.0	61.8	-	43.5
07:00 PM - 08:00 PM	59.3	48.1	11.2	0.5	58.8	-	42.2
08:00 PM - 09:00 PM	51.2	46.5	4.7	1.5	49.7	-	41.1
09:00 PM - 10:00 PM	53.1	49.1	4.0	2.0	51.1	-	44.6
10:00 PM - 10:05 PM	47.8	50.3	-2.5	7.0	-	43.8	45.7
10:05 PM - 10:10 PM	49.8	47.3	2.5	3.0	-	49.8	44.1
10:10 PM - 10:15 PM	50.1	45.3	4.8	1.5	-	51.6	42.7
10:15 PM - 10:20 PM	47.1	48.5	-1.4	7.0	-	43.1	44.6
10:20 PM - 10:25 PM	46.3	50.5	-4.2	7.0	-	42.3	44.2
10:25 PM - 10:30 PM	46.7	46.1	0.6	7.0	-	42.7	43.4
10:30 PM - 10:35 PM	48.8	46.2	2.6	3.0	-	48.8	43.0
10:35 PM - 10:40 PM	49.0	45.2	3.8	2.0	-	50.0	42.6
10:40 PM - 10:45 PM	46.5	45.4	1.1	7.0	-	42.5	42.8
10:45 PM - 10:50 PM	46.4	58.3	-11.9	7.0	-	42.4	44.1
10:50 PM - 10:55 PM	47.4	48.4	-1.0	7.0	-	43.4	42.9
10:55 PM - 11:00 PM	46.4	48.5	-2.1	7.0	-	42.4	44.8
11:00 PM - 11:05 PM	47.8	52.5	-4.7	7.0	-	43.8	46.3
11:05 PM - 11:10 PM	49.5	51.5	-2.0	7.0	-	45.5	43.3
11:10 PM - 11:15 PM	48.7	48.3	0.4	7.0	-	44.7	44.6
11:15 PM - 11:20 PM	45.0	47.7	-2.7	7.0	-	41.0	43.2
11:20 PM - 11:25 PM	46.1	46.0	0.1	7.0	-	42.1	43.4
11:25 PM - 11:30 PM	46.8	45.3	1.5	4.5	-	45.3	43.2
11:30 PM - 11:35 PM	46.7	47.4	-0.7	7.0	-	42.7	44.4
11:35 PM - 11:40 PM	46.6	48.0	-1.4	7.0	-	42.6	44.7
11:40 PM - 11:45 PM	51.3	47.7	3.6	2.0	-	52.3	44.7
11:45 PM - 11:50 PM	47.0	47.2	-0.2	7.0	-	43.0	44.7
11:50 PM - 11:55 PM	48.5	46.7	1.8	4.5	-	47.0	44.4
11:55 PM - 12:00 AM	46.2	48.3	-2.1	7.0	-	42.2	44.5
12:00 AM - 12:05 AM	47.0	47.5	-0.5	7.0	-	43.0	45.1
12:05 AM - 12:10 AM	47.3	47.8	-0.5	7.0	-	43.3	45.0
12:10 AM - 12:15 AM	45.7	48.9	-3.2	7.0	-	41.7	44.5
12:15 AM - 12:20 AM	47.9	47.5	0.4	7.0	-	43.9	45.2

Approved by

Wilawan Borirak  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERSHIP.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872452-1

Page 2 of 3

Sample No. : 23124326-14  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date : Dec 23 - 24, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296515

เวลา	ระดับเสียง (dB(A))						ค่าระดับเสียงเกินมาตรฐาน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
					กลางวัน (H)	กลางคืน (I)	
12:20 AM - 12:25 AM	47.0	46.9	0.1	7.0	-	43.0	-2.1
12:25 AM - 12:30 AM	48.2	53.6	-5.4	7.0	-	44.2	-0.4
12:30 AM - 12:35 AM	48.0	47.1	0.9	7.0	-	44.0	-0.5
12:35 AM - 12:40 AM	47.3	47.2	0.1	7.0	-	43.3	-1.3
12:40 AM - 12:45 AM	47.5	50.9	-3.4	7.0	-	43.5	-2.6
12:45 AM - 12:50 AM	46.2	49.3	-3.1	7.0	-	42.2	-5.5
12:50 AM - 12:55 AM	46.4	49.9	-3.5	7.0	-	42.4	-5.4
12:55 AM - 01:00 AM	46.5	49.0	-2.5	7.0	-	42.5	-5.1
01:00 AM - 01:05 AM	47.7	48.4	-1.2	7.0	-	43.2	-4.3
01:05 AM - 01:10 AM	46.8	48.3	-1.5	7.0	-	42.8	-4.5
01:10 AM - 01:15 AM	47.1	48.2	-1.1	7.0	-	43.1	-4.2
01:15 AM - 01:20 AM	46.8	47.9	-1.1	7.0	-	42.8	-4.2
01:20 AM - 01:25 AM	47.6	48.3	-0.7	7.0	-	43.6	-3.6
01:25 AM - 01:30 AM	45.8	48.0	-2.2	7.0	-	41.6	-5.3
01:30 AM - 01:35 AM	46.1	48.3	-2.2	7.0	-	42.1	-4.9
01:35 AM - 01:40 AM	47.6	48.5	-0.9	7.0	-	43.6	-3.8
01:40 AM - 01:45 AM	47.1	48.7	-1.6	7.0	-	43.1	-4.6
01:45 AM - 01:50 AM	45.9	48.2	-2.3	7.0	-	41.9	-4.9
01:50 AM - 01:55 AM	46.1	49.0	-2.9	7.0	-	42.1	-4.9
01:55 AM - 02:00 AM	45.5	49.2	-3.7	7.0	-	41.5	-5.2
02:00 AM - 02:05 AM	46.6	49.7	-3.1	7.0	-	42.6	-3.8
02:05 AM - 02:10 AM	45.9	49.7	-3.8	7.0	-	41.9	-5.0
02:10 AM - 02:15 AM	46.0	53.1	-7.1	7.0	-	42.0	-6.2
02:15 AM - 02:20 AM	45.5	53.6	-8.1	7.0	-	41.5	-8.3
02:20 AM - 02:25 AM	46.2	54.0	-7.8	7.0	-	42.2	-8.9
02:25 AM - 02:30 AM	49.1	53.6	-4.5	7.0	-	45.1	-4.8
02:30 AM - 02:35 AM	47.7	53.2	-5.5	7.0	-	43.7	-5.0
02:35 AM - 02:40 AM	47.6	53.6	-6.2	7.0	-	43.6	-7.8
02:40 AM - 02:45 AM	46.3	52.8	-6.5	7.0	-	42.3	-6.5
02:45 AM - 02:50 AM	46.2	52.5	-6.3	7.0	-	42.2	-7.4
02:50 AM - 02:55 AM	45.9	52.9	-7.0	7.0	-	41.9	-7.3
02:55 AM - 03:00 AM	46.2	52.9	-6.7	7.0	-	42.2	-6.5
03:00 AM - 03:05 AM	47.2	52.8	-5.6	7.0	-	43.2	-4.5
03:05 AM - 03:10 AM	45.9	51.6	-5.7	7.0	-	41.9	-3.4
03:10 AM - 03:15 AM	48.1	56.4	-7.7	4.5	-	46.6	-1.6
03:15 AM - 03:20 AM	46.9	46.5	0.4	7.0	-	42.9	-1.8
03:20 AM - 03:25 AM	47.1	47.0	0.1	7.0	-	43.1	-2.3
03:25 AM - 03:30 AM	49.0	48.1	0.9	7.0	-	45.0	-1.2
03:30 AM - 03:35 AM	49.3	49.0	0.3	7.0	-	45.3	-1.0
03:35 AM - 03:40 AM	49.0	50.4	-1.4	7.0	-	45.0	-1.2

The above result is valid only for the analysed/selected sample(s) as indicated in this report. No part of this report or its result can be reproduced in any form without written consent from the Laboratory, ALS Laboratory Group (Thailand) along with its website that this report is not reproduced except in full.

Approved by

Wilawan Boririk  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872452-1

Page 3 of 3

Sample No. : 23124326-14  
Parameter : เสียงรบกวน  
Location : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (GPS 47P 0731936, 1423172)  
Measurement Date : Dec 23 - 24, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296515

เวลา	ระดับเสียง (dB(A))						ค่าระดับเสียงเกินมาตรฐาน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
					กลางวัน (H)	กลางคืน (I)	
03:40 AM - 03:45 AM	50.0	49.6	0.4	7.0	-	46.0	-0.2
03:45 AM - 03:50 AM	50.5	49.3	1.2	7.0	-	46.5	0.9
03:50 AM - 03:55 AM	50.6	48.0	2.6	3.0	-	50.6	6.3
03:55 AM - 04:00 AM	51.2	46.5	4.7	1.5	-	52.7	8.6
04:00 AM - 04:05 AM	51.6	46.8	4.8	1.5	-	53.1	8.8
04:05 AM - 04:10 AM	48.8	55.4	-6.6	7.0	-	44.8	-2.8
04:10 AM - 04:15 AM	51.4	56.1	-4.7	7.0	-	47.4	-4.2
04:15 AM - 04:20 AM	49.5	57.3	-7.8	7.0	-	45.5	-9.6
04:20 AM - 04:25 AM	48.6	58.6	-10.0	7.0	-	44.6	-12.3
04:25 AM - 04:30 AM	48.3	58.3	-10.0	7.0	-	44.3	-12.3
04:30 AM - 04:35 AM	50.1	58.9	-8.8	7.0	-	46.1	-11.1
04:35 AM - 04:40 AM	47.4	59.1	-11.7	7.0	-	43.4	-14.0
04:40 AM - 04:45 AM	48.3	58.7	-10.4	7.0	-	44.3	-9.9
04:45 AM - 04:50 AM	48.9	59.1	-10.2	7.0	-	44.9	-12.1
04:50 AM - 04:55 AM	48.3	59.2	-10.9	7.0	-	44.3	-13.1
04:55 AM - 05:00 AM	51.0	59.1	-8.1	7.0	-	47.0	-10.1
05:00 AM - 05:05 AM	48.9	59.5	-10.6	7.0	-	44.9	-13.0
05:05 AM - 05:10 AM	49.1	59.1	-10.0	7.0	-	45.1	-11.8
05:10 AM - 05:15 AM	49.5	59.1	-9.6	7.0	-	45.5	-11.8
05:15 AM - 05:20 AM	49.0	58.8	-9.8	7.0	-	45.0	-11.7
05:20 AM - 05:25 AM	47.6	58.1	-10.5	7.0	-	43.6	-12.0
05:25 AM - 05:30 AM	48.2	58.5	-10.3	7.0	-	44.2	-12.2
05:30 AM - 05:35 AM	48.9	58.7	-9.8	7.0	-	44.9	-11.9
05:35 AM - 05:40 AM	47.2	58.0	-10.8	7.0	-	43.2	-12.5
05:40 AM - 05:45 AM	46.6	58.4	-11.8	7.0	-	42.6	-13.8
05:45 AM - 05:50 AM	48.0	58.5	-10.5	7.0	-	44.0	-11.9
05:50 AM - 05:55 AM	50.7	58.7	-8.0	7.0	-	46.7	-9.9
05:55 AM - 06:00 AM	47.6	58.7	-11.1	7.0	-	43.6	-12.7
06:00 AM - 07:00 AM	49.4	56.0	-6.6	7.0	42.4	-	-8.4
07:00 AM - 08:00 AM	49.2	55.0	-5.8	7.0	42.2	-	-9.0
08:00 AM - 09:00 AM	50.7	51.9	-1.2	7.0	43.7	-	-4.1
09:00 AM - 10:00 AM	52.7	52.3	0.4	7.0	45.7	-	-3.6

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงสาธารณสุข เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและพิสัยทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 23-24 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-14 วันที่ตรวจวัด 23-24 ธันวาคม 2566)

The above result is valid only for the analysed/selected sample(s) as indicated in this report. No part of this report or its result can be reproduced in any form without written consent from the Laboratory, ALS Laboratory Group (Thailand) along with its website that this report is not reproduced except in full.

Approved by

Wilawan Boririk  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872453-1

Sample No. 23124326-15  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 1 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
02:00 PM - 03:00 PM	48.6	47.9	0.7	7.0	41.6	-	39.8	1.8
03:00 PM - 04:00 PM	49.9	49.0	0.9	7.0	42.9	-	39.3	3.6
04:00 PM - 05:00 PM	50.8	51.3	-0.5	7.0	43.8	-	40.4	3.4
05:00 PM - 06:00 PM	51.4	48.9	2.5	3.0	48.4	-	42.0	6.4
06:00 PM - 07:00 PM	53.3	50.9	2.4	4.5	48.8	-	46.4	2.4
07:00 PM - 08:00 PM	53.3	50.4	2.9	3.0	50.3	-	46.5	3.8
08:00 PM - 09:00 PM	54.2	50.7	3.5	2.0	52.2	-	44.6	7.6
09:00 PM - 10:00 PM	51.0	49.1	1.9	4.5	46.5	-	43.9	2.6
10:00 PM - 10:05 PM	50.2	48.2	2.0	4.5	-	48.7	44.3	4.4
10:05 PM - 10:10 PM	50.7	46.7	4.0	2.0	-	51.7	44.0	7.7
10:10 PM - 10:15 PM	54.5	46.4	8.1	0.5	-	57.0	44.3	12.7
10:15 PM - 10:20 PM	49.2	49.8	-0.6	7.0	-	45.2	43.5	1.7
10:20 PM - 10:25 PM	50.4	45.3	5.1	1.5	-	51.9	44.2	7.7
10:25 PM - 10:30 PM	51.7	45.4	6.3	1.5	-	53.2	43.9	9.3
10:30 PM - 10:35 PM	50.5	46.4	4.1	2.0	-	51.5	43.8	7.7
10:35 PM - 10:40 PM	50.9	45.8	5.1	1.5	-	52.4	43.8	8.6
10:40 PM - 10:45 PM	50.3	46.3	4.0	2.0	-	51.3	44.0	7.3
10:45 PM - 10:50 PM	50.1	44.1	6.0	1.5	-	51.6	42.8	8.8
10:50 PM - 10:55 PM	50.7	44.5	6.2	1.5	-	52.2	42.6	9.6
10:55 PM - 11:00 PM	50.2	46.4	3.8	2.0	-	51.2	43.0	8.2
11:00 PM - 11:05 PM	51.5	48.3	3.2	3.0	-	51.5	47.2	4.3
11:05 PM - 11:10 PM	51.4	47.0	4.4	2.0	-	52.4	42.2	10.2
11:10 PM - 11:15 PM	50.6	45.8	4.8	1.5	-	52.1	42.4	9.7
11:15 PM - 11:20 PM	49.4	46.2	3.2	3.0	-	49.4	42.9	6.5
11:20 PM - 11:25 PM	50.5	44.1	6.4	1.5	-	52.0	42.3	9.7
11:25 PM - 11:30 PM	50.9	44.6	6.3	1.5	-	52.4	42.9	9.5
11:30 PM - 11:35 PM	51.8	44.1	7.7	0.5	-	54.3	43.0	11.3
11:35 PM - 11:40 PM	51.8	45.7	6.1	1.5	-	53.3	44.2	9.1
11:40 PM - 11:45 PM	51.9	45.5	6.4	1.5	-	53.4	43.7	9.7
11:45 PM - 11:50 PM	51.3	44.7	6.6	1.0	-	53.3	44.0	9.3
11:50 PM - 11:55 PM	52.6	44.5	8.1	0.5	-	55.1	43.5	11.6
11:55 PM - 12:00 AM	51.7	52.9	-1.2	7.0	-	47.7	43.7	4.0
12:00 AM - 12:05 AM	51.2	43.9	7.3	1.0	-	47.7	43.1	10.1
12:05 AM - 12:10 AM	51.1	43.4	7.7	0.5	-	53.6	42.7	10.9
12:10 AM - 12:15 AM	50.5	43.7	6.8	1.0	-	52.5	42.6	9.9
12:15 AM - 12:20 AM	51.2	43.9	7.3	1.0	-	53.2	42.4	10.8
12:20 AM - 12:25 AM	50.9	45.6	5.3	1.5	-	52.4	43.1	9.3
12:25 AM - 12:30 AM	50.8	43.4	7.4	1.0	-	52.8	42.3	10.5
12:30 AM - 12:35 AM	55.1	49.9	5.2	1.5	-	56.6	42.5	14.1
12:35 AM - 12:40 AM	51.3	43.7	7.6	0.5	-	53.8	42.6	11.2

Approved by

Wilawan Borirak  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872453-1

Sample No. 23124326-15  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 2 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
12:40 AM - 12:45 AM	50.4	44.4	6.0	1.5	-	51.9	41.6	10.3
12:45 AM - 12:50 AM	50.3	43.1	7.2	1.0	-	52.3	41.7	10.6
12:50 AM - 12:55 AM	49.5	43.4	6.1	1.5	-	51.0	41.0	10.0
12:55 AM - 01:00 AM	49.7	43.0	6.7	1.0	-	51.7	41.5	10.2
01:00 AM - 01:05 AM	50.1	45.3	4.8	1.5	-	51.6	42.6	9.0
01:05 AM - 01:10 AM	50.7	46.5	4.2	2.0	-	51.7	42.5	9.2
01:10 AM - 01:15 AM	49.7	46.0	3.7	2.0	-	50.7	43.0	7.7
01:15 AM - 01:20 AM	49.8	44.0	5.8	1.5	-	51.3	42.9	8.4
01:20 AM - 01:25 AM	49.4	44.0	5.4	1.5	-	50.9	42.6	8.3
01:25 AM - 01:30 AM	50.5	43.7	6.8	1.0	-	52.5	42.4	10.1
01:30 AM - 01:35 AM	50.1	44.7	5.4	1.5	-	51.6	43.1	8.5
01:35 AM - 01:40 AM	50.1	44.6	5.5	1.5	-	51.6	43.1	8.5
01:40 AM - 01:45 AM	51.8	44.6	7.2	1.0	-	53.8	43.1	10.7
01:45 AM - 01:50 AM	52.1	43.8	8.3	0.5	-	54.6	42.8	11.8
01:50 AM - 01:55 AM	51.7	44.3	7.4	1.0	-	53.7	43.2	10.5
01:55 AM - 02:00 AM	52.0	45.3	6.7	1.0	-	54.0	42.7	11.3
02:00 AM - 02:05 AM	51.1	44.4	6.7	1.0	-	53.1	43.3	9.8
02:05 AM - 02:10 AM	50.6	45.0	5.6	1.5	-	52.1	43.3	8.8
02:10 AM - 02:15 AM	50.3	44.3	6.0	1.5	-	51.8	43.4	8.4
02:15 AM - 02:20 AM	50.0	44.2	5.8	1.5	-	51.5	43.1	8.4
02:20 AM - 02:25 AM	50.1	44.1	6.0	1.5	-	51.6	42.9	8.7
02:25 AM - 02:30 AM	49.7	45.4	4.3	2.0	-	50.7	43.6	7.1
02:30 AM - 02:35 AM	49.8	45.6	4.2	2.0	-	50.8	43.4	7.4
02:35 AM - 02:40 AM	49.7	44.0	5.7	1.5	-	51.2	42.6	8.6
02:40 AM - 02:45 AM	49.6	48.9	0.7	7.0	-	45.6	42.5	3.1
02:45 AM - 02:50 AM	49.2	46.7	2.5	3.0	-	49.2	42.9	6.3
02:50 AM - 02:55 AM	48.8	47.4	1.4	7.0	-	44.8	42.9	1.9
02:55 AM - 03:00 AM	50.0	43.9	6.1	1.5	-	51.5	42.2	9.3
03:00 AM - 03:05 AM	48.4	45.0	3.4	3.0	-	48.4	41.9	6.5
03:05 AM - 03:10 AM	47.0	44.1	2.9	3.0	-	47.0	42.9	4.1
03:10 AM - 03:15 AM	48.3	44.7	3.6	2.0	-	49.3	42.7	6.6
03:15 AM - 03:20 AM	47.5	43.7	3.8	2.0	-	48.5	42.0	6.5
03:20 AM - 03:25 AM	44.8	43.1	1.7	4.5	-	43.3	41.6	1.7
03:25 AM - 03:30 AM	45.6	43.0	2.6	3.0	-	45.6	41.9	3.7
03:30 AM - 03:35 AM	46.0	44.4	1.6	4.5	-	44.5	42.0	2.5
03:35 AM - 03:40 AM	46.5	43.6	2.9	3.0	-	46.5	41.9	4.6
03:40 AM - 03:45 AM	47.1	43.3	3.8	2.0	-	48.1	41.8	6.3
03:45 AM - 03:50 AM	47.3	43.8	3.5	2.0	-	48.3	41.8	6.5
03:50 AM - 03:55 AM	45.8	43.6	2.2	4.5	-	44.3	41.5	2.8
03:55 AM - 04:00 AM	45.6	45.6	0.0	7.0	-	41.6	41.9	-0.3

Approved by

Wilawan Borirak  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872453-1

Page 3 of 3

Sample No. 23124326-15  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน (A/C)	กลางคืน (A/C)	
04:00 AM - 04:05 AM	45.4	42.6	2.8	3.0	-	45.4	41.2
04:05 AM - 04:10 AM	43.5	43.0	0.5	7.0	-	39.5	41.0
04:10 AM - 04:15 AM	46.2	42.2	4.0	2.0	-	47.2	40.3
04:15 AM - 04:20 AM	50.4	46.2	4.2	2.0	-	51.4	39.2
04:20 AM - 04:25 AM	47.2	49.0	-1.8	7.0	-	43.2	40.3
04:25 AM - 04:30 AM	48.4	42.9	5.5	1.5	-	49.9	40.9
04:30 AM - 04:35 AM	47.6	44.9	2.7	3.0	-	47.6	41.7
04:35 AM - 04:40 AM	47.7	42.7	5.0	1.5	-	49.2	39.1
04:40 AM - 04:45 AM	49.5	42.4	7.1	1.0	-	51.5	40.5
04:45 AM - 04:50 AM	47.5	46.1	1.4	7.0	-	43.5	40.6
04:50 AM - 04:55 AM	47.4	42.5	4.9	1.5	-	48.9	40.4
04:55 AM - 05:00 AM	47.3	43.7	3.6	2.0	-	48.3	40.2
05:00 AM - 05:05 AM	46.8	44.3	2.5	3.0	-	46.8	40.7
05:05 AM - 05:10 AM	46.5	44.6	1.9	4.5	-	45.0	40.6
05:10 AM - 05:15 AM	46.9	43.9	3.0	3.0	-	46.9	40.1
05:15 AM - 05:20 AM	46.2	45.5	0.7	7.0	-	42.2	40.4
05:20 AM - 05:25 AM	44.6	44.2	0.4	7.0	-	40.6	40.7
05:25 AM - 05:30 AM	49.5	46.0	3.5	2.0	-	50.5	41.7
05:30 AM - 05:35 AM	46.4	52.4	-6.0	7.0	-	42.4	43.5
05:35 AM - 05:40 AM	46.4	45.2	1.2	7.0	-	42.4	43.0
05:40 AM - 05:45 AM	46.9	45.6	1.3	7.0	-	42.9	42.9
05:45 AM - 05:50 AM	46.9	45.9	1.0	7.0	-	42.9	43.1
05:50 AM - 05:55 AM	47.2	45.9	1.3	7.0	-	43.2	42.1
05:55 AM - 06:00 AM	48.3	45.1	3.2	3.0	-	48.3	42.2
06:00 AM - 07:00 AM	50.0	49.1	0.9	7.0	43.0	-	43.2
07:00 AM - 08:00 AM	52.7	52.7	0.0	7.0	45.7	-	44.4
08:00 AM - 09:00 AM	49.6	50.9	-1.3	7.0	42.6	-	41.6
09:00 AM - 10:00 AM	48.0	48.7	-0.7	7.0	41.0	-	40.5
10:00 AM - 11:00 AM	51.4	47.2	4.2	2.0	49.4	-	40.9
11:00 AM - 12:00 PM	50.6	49.8	0.8	7.0	43.6	-	42.3
12:00 PM - 01:00 PM	49.1	50.1	-1.0	7.0	42.1	-	42.0
01:00 PM - 02:00 PM	49.4	49.0	0.4	7.0	42.4	-	40.4
ค่ามาตรฐาน							≤ 10

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

### มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด ที่การตรวจวัด วันที่ 17-18 ธันวาคม 2566  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-15 วันที่ตรวจวัด 17-18 ธันวาคม 2566)

The above results are valid only for the analysed parameter(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) Limited recommends that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872454-1

Page 1 of 3

Sample No. 23124326-16  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน (A/C)	กลางคืน (A/C)	
02:00 PM - 03:00 PM	48.5	48.5	0.0	7.0	41.5	-	39.3
03:00 PM - 04:00 PM	49.8	49.4	0.4	7.0	42.8	-	41.4
04:00 PM - 05:00 PM	51.2	51.5	-0.3	7.0	44.2	-	42.2
05:00 PM - 06:00 PM	53.9	58.0	-4.1	7.0	46.9	-	44.0
06:00 PM - 07:00 PM	53.4	50.4	3.0	3.0	50.4	-	45.9
07:00 PM - 08:00 PM	52.6	49.0	3.6	2.0	50.6	-	44.9
08:00 PM - 09:00 PM	52.0	50.1	1.9	4.5	47.5	-	43.7
09:00 PM - 10:00 PM	50.6	47.5	3.1	3.0	47.6	-	43.2
10:00 PM - 10:05 PM	50.3	45.1	5.2	1.5	-	51.8	43.4
10:05 PM - 10:10 PM	50.4	45.0	5.4	1.5	-	51.9	43.4
10:10 PM - 10:15 PM	50.0	45.0	5.0	1.5	-	51.5	43.7
10:15 PM - 10:20 PM	50.2	45.4	4.8	1.5	-	51.7	43.5
10:20 PM - 10:25 PM	49.5	49.2	0.3	7.0	-	45.5	44.2
10:25 PM - 10:30 PM	50.0	45.9	4.1	2.0	-	51.0	43.9
10:30 PM - 10:35 PM	51.8	47.5	4.3	2.0	-	52.8	44.4
10:35 PM - 10:40 PM	50.5	47.5	3.0	3.0	-	50.5	44.2
10:40 PM - 10:45 PM	49.7	47.2	2.5	3.0	-	49.7	44.0
10:45 PM - 10:50 PM	49.2	46.8	2.4	4.5	-	47.7	44.1
10:50 PM - 10:55 PM	49.9	45.6	4.3	2.0	-	50.9	43.9
10:55 PM - 11:00 PM	50.2	46.7	3.5	2.0	-	51.2	44.2
11:00 PM - 11:05 PM	48.7	45.4	3.3	3.0	-	48.7	44.0
11:05 PM - 11:10 PM	48.7	45.5	3.2	3.0	-	48.7	43.4
11:10 PM - 11:15 PM	49.8	44.7	5.1	1.5	-	51.3	42.9
11:15 PM - 11:20 PM	48.8	44.4	4.4	2.0	-	49.8	42.7
11:20 PM - 11:25 PM	49.1	44.7	4.4	2.0	-	50.1	42.6
11:25 PM - 11:30 PM	49.5	44.2	5.3	1.5	-	51.0	42.7
11:30 PM - 11:35 PM	49.3	45.4	3.9	2.0	-	50.3	43.4
11:35 PM - 11:40 PM	50.9	45.3	5.6	1.5	-	52.4	43.2
11:40 PM - 11:45 PM	49.7	46.4	3.3	3.0	-	49.7	43.0
11:45 PM - 11:50 PM	48.9	45.6	3.3	3.0	-	48.9	43.2
11:50 PM - 11:55 PM	49.1	44.8	4.3	2.0	-	50.1	43.2
11:55 PM - 12:00 AM	48.6	44.6	4.0	2.0	-	49.6	43.3
12:00 AM - 12:05 AM	49.1	44.3	4.8	1.5	-	50.6	43.3
12:05 AM - 12:10 AM	48.3	45.4	2.9	3.0	-	48.3	43.3
12:10 AM - 12:15 AM	48.3	44.2	4.1	2.0	-	49.3	43.1
12:15 AM - 12:20 AM	48.0	45.1	2.9	3.0	-	48.0	43.2
12:20 AM - 12:25 AM	49.8	43.7	6.1	1.5	-	51.3	42.2
12:25 AM - 12:30 AM	46.8	47.2	-0.4	7.0	-	42.8	43.0
12:30 AM - 12:35 AM	47.0	44.0	3.0	3.0	-	47.0	42.8
12:35 AM - 12:40 AM	46.1	44.4	1.7	4.5	-	44.6	43.1

The above results are valid only for the analysed parameter(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) Limited recommends that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872454-1

Page 2 of 3

Sample No. 23124326-16  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

เวลา	ระดับเสียง (dB(A))				ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	กลางคืน	กลางวัน		
12:40 AM - 12:45 AM	47.4	44.1	3.3	3.0	-	47.4	42.9	4.5
12:45 AM - 12:50 AM	47.8	44.2	3.6	2.0	-	48.8	43.2	5.6
12:50 AM - 12:55 AM	47.1	44.6	2.5	3.0	-	47.1	43.4	3.7
12:55 AM - 01:00 AM	47.2	44.2	3.0	3.0	-	47.2	43.2	4.0
01:00 AM - 01:05 AM	47.4	44.4	3.0	3.0	-	47.4	43.3	4.1
01:05 AM - 01:10 AM	48.3	44.8	3.5	2.0	-	49.3	43.5	5.8
01:10 AM - 01:15 AM	46.7	46.1	0.6	7.0	-	42.7	43.4	-0.7
01:15 AM - 01:20 AM	46.3	44.1	2.2	4.5	-	44.8	43.0	1.8
01:20 AM - 01:25 AM	45.9	43.8	2.1	4.5	-	44.4	42.5	1.9
01:25 AM - 01:30 AM	48.2	43.3	4.9	1.5	-	49.7	42.3	7.4
01:30 AM - 01:35 AM	45.8	46.8	-1.0	7.0	-	41.8	42.1	-0.3
01:35 AM - 01:40 AM	46.2	43.4	2.8	3.0	-	46.2	41.3	4.9
01:40 AM - 01:45 AM	45.7	43.2	2.5	3.0	-	45.7	41.9	3.8
01:45 AM - 01:50 AM	46.6	43.1	3.5	2.0	-	47.6	41.9	5.7
01:50 AM - 01:55 AM	46.8	44.3	2.5	3.0	-	46.8	42.0	4.8
01:55 AM - 02:00 AM	47.3	42.7	4.6	1.5	-	48.8	40.8	8.0
02:00 AM - 02:05 AM	47.6	42.7	4.9	1.5	-	49.1	41.1	8.0
02:05 AM - 02:10 AM	47.4	43.4	4.0	2.0	-	48.4	41.5	6.9
02:10 AM - 02:15 AM	47.9	43.2	4.7	1.5	-	49.4	41.8	7.6
02:15 AM - 02:20 AM	47.4	42.9	4.5	1.5	-	48.9	40.9	8.0
02:20 AM - 02:25 AM	47.3	42.8	4.5	1.5	-	48.8	41.3	7.5
02:25 AM - 02:30 AM	48.9	42.5	6.4	1.5	-	50.4	40.9	9.5
02:30 AM - 02:35 AM	47.6	42.9	4.7	1.5	-	49.1	41.7	7.4
02:35 AM - 02:40 AM	46.0	42.9	3.1	3.0	-	46.0	41.5	4.5
02:40 AM - 02:45 AM	45.2	42.9	2.3	4.5	-	43.7	41.7	2.0
02:45 AM - 02:50 AM	45.6	43.4	2.2	4.5	-	44.1	41.6	2.5
02:50 AM - 02:55 AM	46.1	42.6	3.5	2.0	-	47.1	40.2	6.9
02:55 AM - 03:00 AM	46.0	43.1	2.9	3.0	-	46.0	40.8	5.2
03:00 AM - 03:05 AM	46.3	43.3	3.0	3.0	-	46.3	41.3	5.0
03:05 AM - 03:10 AM	46.4	43.3	3.1	3.0	-	46.4	42.1	4.3
03:10 AM - 03:15 AM	45.6	43.2	2.4	4.5	-	44.1	41.7	2.4
03:15 AM - 03:20 AM	46.2	43.2	3.0	3.0	-	46.2	41.8	4.4
03:20 AM - 03:25 AM	47.0	43.4	3.6	2.0	-	48.0	42.1	5.9
03:25 AM - 03:30 AM	46.6	44.5	2.1	4.5	-	45.1	42.5	2.6
03:30 AM - 03:35 AM	47.4	44.1	3.3	3.0	-	47.4	42.0	5.4
03:35 AM - 03:40 AM	47.0	44.0	3.0	3.0	-	47.0	42.2	4.8
03:40 AM - 03:45 AM	47.5	44.1	3.4	3.0	-	47.5	42.4	5.1
03:45 AM - 03:50 AM	44.6	47.1	-2.5	7.0	-	40.6	42.5	-1.9
03:50 AM - 03:55 AM	45.0	43.2	1.8	4.5	-	43.5	41.9	1.6
03:55 AM - 04:00 AM	45.9	43.2	2.7	3.0	-	45.9	42.0	3.9

The above results are valid only for the analysed/checked sample(s) as indicated in this report. No part of this report or any data may be reproduced or used from without written consent from the Laboratory. ALS Laboratory Group (Thailand) Private Limited recommends that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872454-1

Page 3 of 3

Sample No. 23124326-16  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

เวลา	ระดับเสียง (dB(A))				ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	กลางคืน	กลางวัน		
04:00 AM - 04:05 AM	48.4	43.7	4.7	1.5	-	49.9	42.4	7.5
04:05 AM - 04:10 AM	51.0	44.8	6.2	1.5	-	52.5	42.7	9.8
04:10 AM - 04:15 AM	51.0	44.5	6.5	1.0	-	53.0	42.8	10.2
04:15 AM - 04:20 AM	49.2	45.1	4.1	2.0	-	50.2	42.3	6.9
04:20 AM - 04:25 AM	48.1	44.7	3.4	3.0	-	48.1	42.9	5.2
04:25 AM - 04:30 AM	52.1	43.8	8.3	0.5	-	54.6	42.2	12.4
04:30 AM - 04:35 AM	49.0	44.2	4.8	1.5	-	50.5	42.5	8.0
04:35 AM - 04:40 AM	52.4	43.5	8.9	0.5	-	54.9	42.0	12.9
04:40 AM - 04:45 AM	47.3	44.0	3.3	3.0	-	47.3	41.8	5.5
04:45 AM - 04:50 AM	47.3	44.5	2.8	3.0	-	47.3	42.2	5.1
04:50 AM - 04:55 AM	47.6	44.7	2.9	3.0	-	47.6	42.5	5.1
04:55 AM - 05:00 AM	48.3	43.9	4.4	2.0	-	49.3	41.9	7.4
05:00 AM - 05:05 AM	47.4	44.6	2.8	3.0	-	47.4	40.4	7.0
05:05 AM - 05:10 AM	46.4	43.7	2.7	3.0	-	46.4	41.0	5.4
05:10 AM - 05:15 AM	46.5	44.2	2.3	4.5	-	45.0	41.4	3.6
05:15 AM - 05:20 AM	46.6	43.6	3.0	1.5	-	50.1	41.9	8.2
05:20 AM - 05:25 AM	51.4	43.9	7.5	0.5	-	53.9	42.2	11.7
05:25 AM - 05:30 AM	49.0	52.7	-3.7	7.0	-	45.0	43.1	1.9
05:30 AM - 05:35 AM	49.7	44.6	5.1	1.5	-	51.2	42.7	8.5
05:35 AM - 05:40 AM	48.3	45.2	3.1	3.0	-	48.3	42.8	5.5
05:40 AM - 05:45 AM	48.6	45.5	3.1	3.0	-	48.6	42.4	6.2
05:45 AM - 05:50 AM	49.0	45.9	3.1	3.0	-	49.0	42.5	6.5
05:50 AM - 05:55 AM	48.2	47.2	1.0	7.0	-	44.2	42.1	2.1
05:55 AM - 06:00 AM	47.8	45.8	2.0	4.5	-	46.3	42.3	4.0
06:00 AM - 06:05 AM	49.6	49.5	0.1	7.0	42.6	-	42.0	0.6
06:05 AM - 06:10 AM	50.6	52.4	-1.8	7.0	43.6	-	44.0	-0.4
06:10 AM - 06:15 AM	48.3	48.7	-0.4	7.0	41.3	-	41.1	0.2
06:15 AM - 06:20 AM	48.5	47.7	0.8	7.0	41.5	-	41.4	0.1
06:20 AM - 06:25 AM	47.7	47.2	0.5	7.0	40.7	-	40.9	-0.2
06:25 AM - 06:30 AM	47.1	46.8	0.3	7.0	40.1	-	40.6	-0.5
06:30 AM - 06:35 AM	47.9	46.9	1.0	7.0	40.9	-	37.7	3.2
06:35 AM - 06:40 AM	48.8	48.2	0.6	7.0	41.8	-	40.8	1.0

หมายเหตุ:

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน:

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการเป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ที่ทำการตรวจวัด วันที่ 18-19 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-16 วันที่ตรวจวัด 18-19 ธันวาคม 2566)

The above results are valid only for the analysed/checked sample(s) as indicated in this report. No part of this report or any data may be reproduced or used from without written consent from the Laboratory. ALS Laboratory Group (Thailand) Private Limited recommends that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872455-1

Sample No. 23124326-17  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านตลาด 8 ตำบลหนองหิน (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Sattha Phetsawaeng  
Sound Level Meter 00900074

Page 1 of 3

เวลา	ระดับเสียง (dB(A))						ค่าเฉลี่ย การรวมกัน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางวัน (A-C)	กลางคืน (A-C)	
02:00 PM - 03:00 PM	48.9	48.4	0.5	7.0	41.9	-	41.3
03:00 PM - 04:00 PM	49.9	47.9	2.0	4.5	45.4	-	42.7
04:00 PM - 05:00 PM	50.9	49.9	1.0	7.0	43.9	-	43.3
05:00 PM - 06:00 PM	51.6	50.0	1.6	4.5	47.1	-	45.5
06:00 PM - 07:00 PM	52.5	50.0	2.5	3.0	49.5	-	45.0
07:00 PM - 08:00 PM	51.5	51.5	0.0	7.0	44.5	-	45.0
08:00 PM - 09:00 PM	50.5	51.1	-0.6	7.0	43.5	-	45.1
09:00 PM - 10:00 PM	50.0	48.8	1.2	7.0	43.0	-	44.2
10:00 PM - 10:05 PM	47.8	46.1	1.7	4.5	-	46.3	42.2
10:05 PM - 10:10 PM	48.5	44.6	3.9	2.0	-	49.5	42.7
10:10 PM - 10:15 PM	48.3	45.5	2.8	3.0	-	48.3	43.6
10:15 PM - 10:20 PM	48.1	44.7	3.4	3.0	-	48.1	43.4
10:20 PM - 10:25 PM	48.7	45.9	2.8	3.0	-	48.7	43.5
10:25 PM - 10:30 PM	48.7	50.6	-1.9	7.0	-	44.7	43.9
10:30 PM - 10:35 PM	49.5	47.3	2.2	4.5	-	48.0	43.5
10:35 PM - 10:40 PM	50.6	47.3	3.3	3.0	-	50.6	44.2
10:40 PM - 10:45 PM	47.1	51.0	-3.9	7.0	-	43.1	43.8
10:45 PM - 10:50 PM	46.1	45.3	0.8	7.0	-	42.1	43.3
10:50 PM - 10:55 PM	47.6	44.2	3.4	3.0	-	47.6	43.2
10:55 PM - 11:00 PM	47.7	45.5	2.2	4.5	-	46.2	43.6
11:00 PM - 11:05 PM	48.6	45.6	3.0	3.0	-	48.6	43.7
11:05 PM - 11:10 PM	52.5	46.1	6.4	1.5	-	54.0	44.0
11:10 PM - 11:15 PM	48.5	52.0	-3.5	7.0	-	44.5	43.7
11:15 PM - 11:20 PM	48.7	47.3	1.4	7.0	-	44.7	43.5
11:20 PM - 11:25 PM	47.8	45.1	2.7	3.0	-	47.8	43.3
11:25 PM - 11:30 PM	48.1	44.0	4.1	2.0	-	49.1	43.2
11:30 PM - 11:35 PM	47.7	44.7	3.0	3.0	-	47.7	43.6
11:35 PM - 11:40 PM	47.4	44.9	2.5	3.0	-	47.4	43.8
11:40 PM - 11:45 PM	50.2	43.7	6.5	1.0	-	52.2	42.7
11:45 PM - 11:50 PM	47.6	47.9	-0.3	7.0	-	43.6	43.4
11:50 PM - 11:55 PM	47.8	44.4	3.4	3.0	-	47.8	42.8
11:55 PM - 12:00 AM	47.4	44.1	3.3	3.0	-	47.4	43.0
12:00 AM - 12:05 AM	48.1	43.6	4.5	1.5	-	49.6	42.4
12:05 AM - 12:10 AM	47.8	44.6	3.2	3.0	-	47.8	43.5
12:10 AM - 12:15 AM	47.9	44.5	3.4	3.0	-	47.9	43.7
12:15 AM - 12:20 AM	47.8	45.2	2.6	3.0	-	47.8	43.6
12:20 AM - 12:25 AM	47.9	44.9	3.0	3.0	-	47.9	43.9
12:25 AM - 12:30 AM	49.1	45.8	3.3	3.0	-	49.1	44.1
12:30 AM - 12:35 AM	47.3	47.5	-0.2	7.0	-	43.3	43.4
12:35 AM - 12:40 AM	47.8	43.7	4.1	2.0	-	48.8	42.9

The above results are valid only for the analyzed/checked sample(s) as indicated in this report. No part of this report or its contents 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

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872455-1

Sample No. 23124326-17  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านตลาด 8 ตำบลหนองหิน (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Sattha Phetsawaeng  
Sound Level Meter 00900074

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						ค่าเฉลี่ย การรวมกัน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	
					กลางวัน (A-C)	กลางคืน (A-C)	
12:40 AM - 12:45 AM	47.1	45.1	2.0	4.5	-	45.6	43.0
12:45 AM - 12:50 AM	48.1	43.9	4.2	2.0	-	49.1	42.9
12:50 AM - 12:55 AM	46.5	44.7	1.8	4.5	-	45.0	43.0
12:55 AM - 01:00 AM	46.5	43.4	3.1	3.0	-	46.5	42.5
01:00 AM - 01:05 AM	47.4	43.6	3.8	2.0	-	48.4	42.8
01:05 AM - 01:10 AM	46.6	44.6	2.0	4.5	-	45.1	42.8
01:10 AM - 01:15 AM	46.7	43.4	3.3	3.0	-	46.7	42.3
01:15 AM - 01:20 AM	47.3	43.1	4.2	2.0	-	48.3	42.2
01:20 AM - 01:25 AM	48.3	42.8	5.5	1.5	-	49.8	41.6
01:25 AM - 01:30 AM	47.6	43.4	4.2	2.0	-	48.6	41.3
01:30 AM - 01:35 AM	47.8	43.5	4.3	2.0	-	48.6	41.5
01:35 AM - 01:40 AM	47.0	43.2	3.8	2.0	-	48.0	41.8
01:40 AM - 01:45 AM	46.8	42.5	4.3	2.0	-	47.8	41.6
01:45 AM - 01:50 AM	46.3	41.6	4.7	1.5	-	47.8	40.6
01:50 AM - 01:55 AM	47.2	42.0	5.2	1.5	-	48.7	40.5
01:55 AM - 02:00 AM	47.8	43.2	4.6	1.5	-	49.3	41.8
02:00 AM - 02:05 AM	47.2	44.0	3.2	3.0	-	47.2	42.6
02:05 AM - 02:10 AM	47.7	42.9	4.8	1.5	-	49.2	41.8
02:10 AM - 02:15 AM	47.4	43.5	3.9	2.0	-	48.4	41.7
02:15 AM - 02:20 AM	47.1	43.1	4.0	2.0	-	48.1	42.2
02:20 AM - 02:25 AM	46.8	43.6	3.2	3.0	-	46.8	42.5
02:25 AM - 02:30 AM	46.6	45.0	1.6	4.5	-	45.1	42.4
02:30 AM - 02:35 AM	45.7	41.3	4.4	2.0	-	46.7	40.2
02:35 AM - 02:40 AM	45.1	42.1	3.0	3.0	-	45.1	40.7
02:40 AM - 02:45 AM	45.7	42.0	3.7	2.0	-	46.7	40.8
02:45 AM - 02:50 AM	44.6	41.6	3.0	3.0	-	44.6	40.7
02:50 AM - 02:55 AM	44.7	42.8	1.9	4.5	-	43.2	39.8
02:55 AM - 03:00 AM	44.5	41.3	3.2	3.0	-	44.5	40.0
03:00 AM - 03:05 AM	44.3	41.4	2.9	3.0	-	44.3	39.8
03:05 AM - 03:10 AM	43.7	40.9	2.8	3.0	-	43.7	39.9
03:10 AM - 03:15 AM	47.7	41.9	5.8	1.5	-	49.2	40.2
03:15 AM - 03:20 AM	47.6	43.1	4.5	1.5	-	49.1	40.4
03:20 AM - 03:25 AM	48.3	42.6	5.7	1.5	-	49.8	39.7
03:25 AM - 03:30 AM	47.2	43.5	3.7	2.0	-	48.2	39.6
03:30 AM - 03:35 AM	46.6	41.7	4.9	1.5	-	48.1	39.5
03:35 AM - 03:40 AM	47.3	41.7	5.6	1.5	-	48.2	39.4
03:40 AM - 03:45 AM	47.2	41.2	6.0	1.5	-	48.7	39.0
03:45 AM - 03:50 AM	45.9	41.9	4.0	2.0	-	46.9	39.8
03:50 AM - 03:55 AM	45.8	41.0	4.8	1.5	-	47.3	39.7
03:55 AM - 04:00 AM	45.8	42.1	3.7	2.0	-	46.8	40.4

The above results are valid only for the analyzed/checked sample(s) as indicated in this report. No part of this report or its contents 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

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872455-1

Page 3 of 3

Sample No. 23124326-17  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านข่อย 8 ตำบลหน้าดิน (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางคืน	กลางวัน			
04:00 AM - 04:05 AM	45.4	42.1	3.3	3.0	-	45.4	40.6	4.8	
04:05 AM - 04:10 AM	46.2	41.7	4.5	1.5	-	47.7	40.3	7.4	
04:10 AM - 04:15 AM	46.1	42.4	3.7	2.0	-	47.1	40.5	6.6	
04:15 AM - 04:20 AM	45.5	42.4	3.1	3.0	-	45.5	40.8	4.7	
04:20 AM - 04:25 AM	47.3	42.6	4.7	1.5	-	48.8	41.2	7.6	
04:25 AM - 04:30 AM	44.6	44.6	0.0	7.0	-	40.6	41.3	-0.7	
04:30 AM - 04:35 AM	44.2	42.5	1.7	4.5	-	42.7	40.3	2.4	
04:35 AM - 04:40 AM	43.9	41.5	2.4	4.5	-	42.4	40.0	2.4	
04:40 AM - 04:45 AM	45.2	41.8	3.4	3.0	-	45.2	40.6	4.6	
04:45 AM - 04:50 AM	43.6	44.9	-1.3	7.0	-	39.6	41.0	-1.4	
04:50 AM - 04:55 AM	45.7	42.0	3.7	2.0	-	46.7	40.6	6.1	
04:55 AM - 05:00 AM	45.9	43.5	2.4	4.5	-	44.4	41.0	3.4	
05:00 AM - 05:05 AM	45.8	44.4	1.4	7.0	-	41.8	41.0	0.8	
05:05 AM - 05:10 AM	47.0	44.1	2.9	3.0	-	47.0	41.4	5.6	
05:10 AM - 05:15 AM	46.9	44.9	2.0	4.5	-	45.4	41.9	3.5	
05:15 AM - 05:20 AM	47.5	45.5	2.0	4.5	-	46.0	42.3	3.7	
05:20 AM - 05:25 AM	49.4	44.2	5.2	1.5	-	50.9	41.4	9.5	
05:25 AM - 05:30 AM	47.9	53.6	-5.7	7.0	-	43.9	41.8	2.1	
05:30 AM - 05:35 AM	47.3	46.2	1.1	7.0	-	43.9	43.3	0.6	
05:35 AM - 05:40 AM	47.9	44.5	3.4	3.0	-	47.9	42.0	5.9	
05:40 AM - 05:45 AM	49.4	46.0	3.4	3.0	-	49.4	42.7	6.7	
05:45 AM - 05:50 AM	47.1	48.3	-1.2	7.0	-	43.1	44.1	-1.0	
05:50 AM - 05:55 AM	47.3	45.0	2.3	4.5	-	45.8	43.5	2.3	
05:55 AM - 06:00 AM	48.2	45.9	2.3	4.5	-	46.7	43.6	3.1	
06:00 AM - 07:00 AM	50.6	48.3	2.3	4.5	46.1	-	43.4	2.7	
07:00 AM - 08:00 AM	50.8	54.0	-3.2	7.0	43.8	-	44.8	-1.0	
08:00 AM - 09:00 AM	49.2	49.3	-0.1	7.0	42.2	-	42.4	-0.2	
09:00 AM - 10:00 AM	48.8	48.3	0.5	7.0	41.8	-	42.0	-0.2	
10:00 AM - 11:00 AM	50.6	51.7	-1.1	7.0	43.6	-	43.8	-0.2	
11:00 AM - 12:00 PM	49.2	49.5	-0.3	7.0	42.2	-	42.8	-0.6	
12:00 PM - 01:00 PM	47.4	50.1	-2.7	7.0	40.4	-	38.8	1.6	
01:00 PM - 02:00 PM	50.3	50.2	0.1	7.0	43.3	-	42.9	0.4	
ค่ามาตรฐาน								≤ 10	

### Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการการและการรบกวนที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด ภายหลังการวัด วันที่ 19-20 ธันวาคม 2566
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-17 วันที่ตรวจวัด 19-20 ธันวาคม 2566)

Approved by

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872456-1

Page 1 of 3

Sample No. 23124326-18  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านข่อย 8 ตำบลหน้าดิน (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	
					กลางคืน	กลางวัน			
02:00 PM - 03:00 PM	51.5	51.3	0.2	7.0	44.5	-	44.4	0.1	
03:00 PM - 04:00 PM	52.3	52.0	0.3	7.0	45.3	-	45.2	0.1	
04:00 PM - 05:00 PM	54.2	53.6	0.6	7.0	47.2	-	48.3	-1.1	
05:00 PM - 06:00 PM	56.9	56.6	0.3	7.0	49.9	-	46.5	3.4	
06:00 PM - 07:00 PM	54.2	51.4	2.8	3.0	51.2	-	45.1	6.1	
07:00 PM - 08:00 PM	52.4	50.7	1.7	4.5	47.9	-	45.0	2.9	
08:00 PM - 09:00 PM	51.2	49.1	2.1	4.5	46.7	-	44.5	2.2	
09:00 PM - 10:00 PM	50.3	48.8	1.5	4.5	45.8	-	44.9	0.9	
10:00 PM - 10:05 PM	49.3	48.8	0.5	7.0	-	45.3	45.0	0.3	
10:05 PM - 10:10 PM	48.2	47.7	0.5	7.0	-	44.2	45.1	-0.9	
10:10 PM - 10:15 PM	48.5	45.4	3.1	3.0	-	48.5	44.6	3.9	
10:15 PM - 10:20 PM	48.3	45.6	2.7	3.0	-	48.3	43.4	4.9	
10:20 PM - 10:25 PM	47.9	46.7	1.2	7.0	-	43.9	45.0	-1.1	
10:25 PM - 10:30 PM	48.6	46.5	2.1	4.5	-	47.1	44.7	2.4	
10:30 PM - 10:35 PM	48.8	46.2	2.6	3.0	-	48.8	45.2	3.6	
10:35 PM - 10:40 PM	48.1	46.9	1.2	7.0	-	44.1	45.5	-1.4	
10:40 PM - 10:45 PM	49.3	45.7	3.6	2.0	-	50.3	44.6	5.7	
10:45 PM - 10:50 PM	49.1	45.4	3.7	2.0	-	50.1	43.5	6.6	
10:50 PM - 10:55 PM	49.6	44.2	5.4	1.5	-	51.1	42.7	8.4	
10:55 PM - 11:00 PM	48.9	45.8	3.1	3.0	-	48.9	42.8	6.1	
11:00 PM - 11:05 PM	48.7	44.2	4.5	1.5	-	50.2	42.6	7.6	
11:05 PM - 11:10 PM	49.5	44.2	5.3	1.5	-	51.0	42.5	8.5	
11:10 PM - 11:15 PM	49.7	53.9	-4.2	7.0	-	45.7	44.0	1.7	
11:15 PM - 11:20 PM	49.2	48.0	1.2	7.0	-	45.2	43.8	1.4	
11:20 PM - 11:25 PM	50.2	46.2	4.0	2.0	-	51.2	44.6	6.6	
11:25 PM - 11:30 PM	48.9	50.7	-1.8	7.0	-	44.9	43.6	1.3	
11:30 PM - 11:35 PM	48.5	45.7	2.8	3.0	-	48.5	43.3	5.2	
11:35 PM - 11:40 PM	51.4	45.8	5.6	1.5	-	52.9	43.9	9.0	
11:40 PM - 11:45 PM	50.1	48.7	1.4	7.0	-	46.1	44.7	1.4	
11:45 PM - 11:50 PM	49.2	46.3	2.9	3.0	-	49.2	45.0	4.2	
11:50 PM - 11:55 PM	48.4	46.0	2.4	4.5	-	46.9	44.2	2.7	
11:55 PM - 12:00 AM	48.6	45.4	3.2	3.0	-	48.6	43.6	5.0	
12:00 AM - 12:05 AM	49.2	46.7	2.5	3.0	-	49.2	44.4	4.8	
12:05 AM - 12:10 AM	47.3	45.4	1.9	4.5	-	45.8	43.2	2.6	
12:10 AM - 12:15 AM	48.2	44.0	4.2	2.0	-	49.2	43.1	6.1	
12:15 AM - 12:20 AM	48.9	44.9	4.0	2.0	-	49.9	43.5	6.4	
12:20 AM - 12:25 AM	48.0	45.7	2.3	4.5	-	46.5	43.7	2.8	
12:25 AM - 12:30 AM	46.6	44.8	1.8	4.5	-	45.1	43.2	1.9	
12:30 AM - 12:35 AM	46.9	44.2	2.7	3.0	-	46.9	42.4	4.5	
12:35 AM - 12:40 AM	47.4	43.6	3.8	2.0	-	48.4	42.1	6.3	

Approved by

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872456-1

Page 2 of 3

Sample No. 23124326-18  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลนาบึง (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

เวลา	ระดับเสียง (dB(A))						เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด			
					กลางวัน (A-C)	กลางคืน (A-C)		
12:40 AM - 12:45 AM	47.2	43.4	3.8	2.0	-	48.2	42.2	6.0
12:45 AM - 12:50 AM	48.3	43.6	4.7	1.5	-	49.8	42.2	7.6
12:50 AM - 12:55 AM	48.4	43.7	4.7	1.5	-	49.9	42.5	7.4
12:55 AM - 01:00 AM	48.5	42.8	5.7	1.5	-	50.0	41.6	8.4
01:00 AM - 01:05 AM	47.9	42.3	5.6	1.5	-	49.4	41.1	8.3
01:05 AM - 01:10 AM	47.8	42.0	5.8	1.5	-	49.3	40.8	8.5
01:10 AM - 01:15 AM	50.0	42.4	7.6	0.5	-	52.5	41.3	11.2
01:15 AM - 01:20 AM	49.3	49.8	-0.5	7.0	-	45.3	42.8	2.5
01:20 AM - 01:25 AM	48.5	43.9	4.6	1.5	-	50.0	42.7	7.3
01:25 AM - 01:30 AM	48.5	44.2	4.3	2.0	-	49.5	42.2	7.3
01:30 AM - 01:35 AM	47.4	44.0	3.4	3.0	-	47.4	42.4	5.0
01:35 AM - 01:40 AM	47.1	42.9	4.2	2.0	-	48.1	42.1	6.0
01:40 AM - 01:45 AM	47.2	43.5	3.7	2.0	-	48.2	42.5	5.7
01:45 AM - 01:50 AM	48.7	47.2	1.5	4.5	-	47.2	42.7	4.5
01:50 AM - 01:55 AM	47.1	48.0	-0.9	7.0	-	43.1	43.6	-0.5
01:55 AM - 02:00 AM	50.9	44.4	6.5	1.0	-	52.9	42.4	10.5
02:00 AM - 02:05 AM	46.7	47.2	-0.5	7.0	-	42.7	43.6	-0.9
02:05 AM - 02:10 AM	46.7	43.6	3.1	3.0	-	46.7	41.9	4.8
02:10 AM - 02:15 AM	48.7	44.2	4.5	1.5	-	50.2	43.1	7.1
02:15 AM - 02:20 AM	47.5	46.6	0.9	7.0	-	43.5	43.0	0.5
02:20 AM - 02:25 AM	47.8	44.3	3.5	2.0	-	48.8	43.0	5.8
02:25 AM - 02:30 AM	47.2	44.4	2.8	3.0	-	47.2	43.1	4.1
02:30 AM - 02:35 AM	47.0	45.5	1.5	4.5	-	45.5	42.9	2.6
02:35 AM - 02:40 AM	47.6	44.2	3.4	3.0	-	47.6	43.0	4.6
02:40 AM - 02:45 AM	47.5	44.5	3.0	3.0	-	47.5	43.1	4.4
02:45 AM - 02:50 AM	46.6	45.6	1.0	7.0	-	42.6	42.8	-0.2
02:50 AM - 02:55 AM	46.6	44.1	2.5	3.0	-	46.6	42.5	4.1
02:55 AM - 03:00 AM	48.0	43.7	4.3	2.0	-	49.0	42.5	6.5
03:00 AM - 03:05 AM	47.5	44.7	2.8	3.0	-	47.5	42.7	4.8
03:05 AM - 03:10 AM	47.0	44.4	2.6	3.0	-	47.0	42.8	4.2
03:10 AM - 03:15 AM	46.6	44.8	1.8	4.5	-	45.1	42.7	2.4
03:15 AM - 03:20 AM	45.4	44.1	1.3	7.0	-	41.4	42.6	-1.2
03:20 AM - 03:25 AM	44.8	43.8	1.0	7.0	-	40.8	42.3	-1.5
03:25 AM - 03:30 AM	45.2	43.7	1.5	4.5	-	43.7	42.2	1.5
03:30 AM - 03:35 AM	45.7	43.7	2.0	4.5	-	44.2	42.3	1.9
03:35 AM - 03:40 AM	46.3	44.5	1.8	4.5	-	44.8	42.5	2.3
03:40 AM - 03:45 AM	44.8	44.6	0.2	7.0	-	40.8	42.6	-1.8
03:45 AM - 03:50 AM	44.5	43.8	0.7	7.0	-	40.5	41.6	-1.1
03:50 AM - 03:55 AM	51.8	44.7	7.1	1.0	-	53.8	42.6	11.2
03:55 AM - 04:00 AM	45.4	50.3	-4.9	7.0	-	41.4	42.9	-1.5

The above results are valid only for the analyzed 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

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872456-1

Page 3 of 3

Sample No. 23124326-18  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลนาบึง (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))								ค่าระดับ การรบกวน
เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงหลังรวม	
					กลางวัน (A-C)	กลางคืน		
04:00 AM - 04:05 AM	45.1	45.1	0.0	7.0	-	41.1	42.7	-1.6
04:05 AM - 04:10 AM	45.2	44.9	0.3	7.0	-	41.2	42.9	-1.7
04:10 AM - 04:15 AM	45.2	44.6	0.6	7.0	-	41.2	42.5	-1.3
04:15 AM - 04:20 AM	46.2	44.2	2.0	4.5	-	44.7	42.7	2.0
04:20 AM - 04:25 AM	45.0	46.1	-1.1	7.0	-	41.0	43.2	-2.2
04:25 AM - 04:30 AM	46.7	44.8	1.9	4.5	-	45.2	43.0	2.2
04:30 AM - 04:35 AM	46.3	45.0	1.3	7.0	-	42.3	43.1	-0.8
04:35 AM - 04:40 AM	44.4	45.5	-1.1	7.0	-	40.4	42.6	-2.2
04:40 AM - 04:45 AM	46.1	43.4	2.7	3.0	-	46.1	41.5	4.6
04:45 AM - 04:50 AM	45.6	44.7	0.9	7.0	-	41.6	42.0	-0.4
04:50 AM - 04:55 AM	45.7	44.0	1.7	4.5	-	44.2	41.8	2.4
04:55 AM - 05:00 AM	45.8	44.4	1.4	7.0	-	41.8	42.4	-0.6
05:00 AM - 05:05 AM	45.5	44.9	0.6	7.0	-	41.5	42.1	-0.6
05:05 AM - 05:10 AM	44.7	44.1	0.6	7.0	-	40.7	41.9	-1.2
05:10 AM - 05:15 AM	46.1	44.3	1.8	4.5	-	44.6	42.1	2.5
05:15 AM - 05:20 AM	46.7	45.0	1.7	4.5	-	45.2	42.6	2.6
05:20 AM - 05:25 AM	50.2	45.4	4.8	1.5	-	51.7	42.8	8.9
05:25 AM - 05:30 AM	45.9	53.5	-7.6	7.0	-	41.9	43.9	-2.0
05:30 AM - 05:35 AM	46.9	44.5	2.4	4.5	-	45.4	42.3	3.1
05:35 AM - 05:40 AM	45.9	46.0	-0.1	7.0	-	41.9	41.8	0.1
05:40 AM - 05:45 AM	46.4	44.4	2.0	4.5	-	44.9	41.8	3.1
05:45 AM - 05:50 AM	46.4	43.8	2.6	3.0	-	46.4	42.0	4.4
05:50 AM - 05:55 AM	47.0	44.8	2.2	4.5	-	45.5	41.8	3.7
05:55 AM - 06:00 AM	47.1	45.9	1.2	7.0	-	43.1	42.0	1.1
06:00 AM - 07:00 AM	49.6	48.0	1.6	4.5	45.1	-	42.1	3.0
07:00 AM - 08:00 AM	51.7	53.1	-1.4	7.0	44.7	-	45.2	-0.5
08:00 AM - 09:00 AM	50.3	50.6	-0.3	7.0	43.3	-	43.8	-0.5
09:00 AM - 10:00 AM	50.6	50.5	0.1	7.0	43.6	-	43.3	0.3
10:00 AM - 11:00 AM	50.7	48.8	1.9	4.5	46.2	-	42.5	3.7
11:00 AM - 12:00 PM	49.4	49.6	-0.2	7.0	42.4	-	42.6	-0.2
12:00 PM - 01:00 PM	49.6	50.8	-1.2	7.0	42.6	-	40.9	1.7
01:00 PM - 02:00 PM	52.3	51.6	0.7	7.0	45.3	-	43.4	1.9
ค่ามาตรฐาน								± 1.0

ค่ามาตรฐาน

≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง มาตรการระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดการระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดมาตรฐานและขีดจำกัดเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561  
ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 20-21 ธันวาคม 2566  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-18 วันตรวจวัด 20-21 ธันวาคม 2566)

The above results are valid only for the analyzed 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

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872457-1

Sample No. 23124326-19  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านซอย 8 ตำบลพนาภิรมย์ (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 1 of 3

เวลา	ระดับเสียง (dB(A))				ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	กลางวัน	กลางคืน		
02:00 PM - 03:00 PM	51.0	50.6	0.4	7.0	44.0	-	43.8	0.2
03:00 PM - 04:00 PM	50.9	49.9	1.0	7.0	43.9	-	44.0	-0.1
04:00 PM - 05:00 PM	50.2	50.7	-0.5	7.0	43.2	-	42.6	0.6
05:00 PM - 06:00 PM	50.7	49.4	1.3	7.0	43.7	-	43.8	-0.1
06:00 PM - 07:00 PM	52.1	50.2	1.9	4.5	47.6	-	43.6	4.0
07:00 PM - 08:00 PM	51.5	50.4	1.1	7.0	44.5	-	46.5	-2.0
08:00 PM - 09:00 PM	50.0	48.7	1.3	7.0	43.0	-	44.0	-1.0
09:00 PM - 10:00 PM	50.2	47.9	2.3	4.5	45.7	-	43.6	2.1
10:00 PM - 10:05 PM	48.1	49.8	-1.7	7.0	-	44.1	43.0	1.1
10:05 PM - 10:10 PM	48.6	46.2	2.4	4.5	-	47.1	42.8	4.3
10:10 PM - 10:15 PM	48.8	44.9	3.9	2.0	-	49.8	42.7	7.1
10:15 PM - 10:20 PM	48.1	45.5	2.6	3.0	-	48.1	42.8	5.3
10:20 PM - 10:25 PM	48.2	46.8	1.4	7.0	-	44.2	42.4	1.8
10:25 PM - 10:30 PM	48.6	46.0	2.6	3.0	-	48.6	42.3	6.3
10:30 PM - 10:35 PM	47.6	45.0	2.6	3.0	-	47.6	42.3	5.3
10:35 PM - 10:40 PM	47.8	44.2	3.6	2.0	-	48.8	41.9	6.9
10:40 PM - 10:45 PM	47.3	43.6	3.7	2.0	-	48.3	41.9	6.4
10:45 PM - 10:50 PM	47.7	43.4	4.3	2.0	-	48.7	41.7	7.0
10:50 PM - 10:55 PM	47.5	42.7	4.8	1.5	-	49.0	40.3	8.7
10:55 PM - 11:00 PM	45.4	43.3	2.1	4.5	-	43.9	41.2	2.7
11:00 PM - 11:05 PM	46.6	43.4	3.2	3.0	-	46.6	40.7	5.9
11:05 PM - 11:10 PM	45.8	43.1	2.7	3.0	-	45.8	41.1	4.7
11:10 PM - 11:15 PM	56.4	43.2	13.2	0.0	-	50.4	41.6	17.8
11:15 PM - 11:20 PM	46.7	51.9	-5.2	7.0	-	42.7	41.8	0.9
11:20 PM - 11:25 PM	50.1	43.7	6.4	1.5	-	51.6	41.3	10.3
11:25 PM - 11:30 PM	47.4	54.8	-7.4	7.0	-	43.4	41.9	1.5
11:30 PM - 11:35 PM	47.4	45.9	1.5	4.5	-	45.9	41.7	4.2
11:35 PM - 11:40 PM	46.6	43.4	3.2	3.0	-	46.6	41.6	5.0
11:40 PM - 11:45 PM	46.2	43.4	2.8	3.0	-	46.2	41.0	5.2
11:45 PM - 11:50 PM	46.2	42.9	3.3	3.0	-	46.2	41.2	5.0
11:50 PM - 11:55 PM	46.2	42.5	3.7	2.0	-	47.2	40.7	6.5
11:55 PM - 12:00 AM	46.0	43.1	2.9	3.0	-	46.0	40.9	5.1
12:00 AM - 12:05 AM	47.0	42.3	4.7	1.5	-	48.5	40.6	7.9
12:05 AM - 12:10 AM	46.4	42.3	4.1	2.0	-	47.4	40.7	6.7
12:10 AM - 12:15 AM	47.2	44.9	2.3	4.5	-	45.7	41.1	4.6
12:15 AM - 12:20 AM	55.2	44.1	11.1	0.5	-	57.7	41.3	16.4
12:20 AM - 12:25 AM	47.4	53.8	-6.4	7.0	-	43.4	41.4	2.0
12:25 AM - 12:30 AM	48.0	44.1	3.9	2.0	-	49.0	42.0	7.0
12:30 AM - 12:35 AM	47.2	45.1	2.1	4.5	-	45.7	41.8	3.9
12:35 AM - 12:40 AM	47.1	44.2	2.9	3.0	-	47.1	41.6	5.5

Approved by

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872457-1

Sample No. 23124326-19  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านซอย 8 ตำบลพนาภิรมย์ (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 2 of 3

เวลา	ระดับเสียง (dB(A))				ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	กลางวัน	กลางคืน		
12:40 AM - 12:45 AM	46.6	44.1	2.5	3.0	-	46.6	41.0	5.6
12:45 AM - 12:50 AM	48.0	42.7	5.3	1.5	-	49.5	40.2	9.3
12:50 AM - 12:55 AM	46.6	43.6	3.0	3.0	-	46.6	40.9	5.7
12:55 AM - 01:00 AM	46.6	43.3	3.3	3.0	-	46.6	40.9	5.7
01:00 AM - 01:05 AM	46.3	43.0	3.3	3.0	-	46.3	41.2	5.1
01:05 AM - 01:10 AM	46.6	42.2	4.4	2.0	-	47.6	40.6	7.0
01:10 AM - 01:15 AM	47.2	42.4	4.8	1.5	-	48.7	40.4	8.3
01:15 AM - 01:20 AM	45.8	43.6	2.2	4.5	-	44.3	40.4	3.9
01:20 AM - 01:25 AM	45.6	42.9	2.7	3.0	-	45.6	40.4	5.2
01:25 AM - 01:30 AM	45.7	41.4	4.3	2.0	-	46.7	40.3	6.4
01:30 AM - 01:35 AM	45.4	41.4	4.0	2.0	-	46.4	40.3	6.1
01:35 AM - 01:40 AM	45.7	42.1	3.6	2.0	-	46.7	40.8	5.9
01:40 AM - 01:45 AM	46.3	42.6	3.7	2.0	-	47.3	41.6	5.7
01:45 AM - 01:50 AM	45.8	42.7	3.1	3.0	-	45.8	41.3	4.5
01:50 AM - 01:55 AM	46.5	43.7	2.8	3.0	-	46.5	41.8	4.7
01:55 AM - 02:00 AM	45.1	42.8	2.3	4.5	-	43.6	40.9	2.7
02:00 AM - 02:05 AM	46.0	42.9	3.1	3.0	-	46.0	40.7	5.3
02:05 AM - 02:10 AM	45.6	43.0	2.6	3.0	-	45.6	40.9	4.7
02:10 AM - 02:15 AM	45.9	41.9	4.0	2.0	-	46.9	40.7	6.2
02:15 AM - 02:20 AM	45.0	42.4	2.6	3.0	-	45.0	40.6	4.4
02:20 AM - 02:25 AM	45.7	40.1	5.6	1.5	-	47.2	38.7	8.5
02:25 AM - 02:30 AM	44.9	41.9	3.0	3.0	-	44.9	39.0	5.9
02:30 AM - 02:35 AM	45.1	41.1	4.0	2.0	-	46.1	39.3	6.8
02:35 AM - 02:40 AM	45.0	41.1	3.9	2.0	-	46.0	39.4	6.6
02:40 AM - 02:45 AM	46.1	41.7	4.4	2.0	-	47.1	39.8	7.3
02:45 AM - 02:50 AM	44.7	43.4	1.3	7.0	-	40.7	40.6	0.1
02:50 AM - 02:55 AM	44.0	42.2	1.8	4.5	-	42.5	40.8	1.7
02:55 AM - 03:00 AM	43.7	42.0	1.7	4.5	-	42.2	40.2	2.0
03:00 AM - 03:05 AM	43.2	40.1	3.1	3.0	-	43.2	38.4	4.8
03:05 AM - 03:10 AM	43.0	42.1	0.9	7.0	-	39.0	37.6	1.4
03:10 AM - 03:15 AM	42.1	39.7	2.4	4.5	-	40.6	37.2	3.4
03:15 AM - 03:20 AM	41.8	38.7	3.1	3.0	-	41.8	36.5	5.3
03:20 AM - 03:25 AM	41.2	40.1	1.1	7.0	-	37.2	38.5	-1.3
03:25 AM - 03:30 AM	42.8	38.7	3.1	3.0	-	42.8	37.8	5.0
03:30 AM - 03:35 AM	41.3	41.4	-0.1	7.0	-	37.3	38.6	-1.3
03:35 AM - 03:40 AM	43.5	41.2	2.3	4.5	-	42.0	40.1	1.9
03:40 AM - 03:45 AM	40.8	41.9	-1.1	7.0	-	36.8	40.4	-3.6
03:45 AM - 03:50 AM	41.1	41.8	-0.7	7.0	-	37.1	39.9	-2.8
03:50 AM - 03:55 AM	42.3	40.2	2.1	4.5	-	40.8	38.8	2.0
03:55 AM - 04:00 AM	45.6	39.4	6.2	1.5	-	47.1	38.2	8.9

Approved by

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872457-1

Page 3 of 3

Sample No. 23124326-19  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

เวลา	ระดับเสียง (dB(A))							
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ไม่มีการรบกวน	ผลต่าง ระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับ การรบกวน
					กลางวัน (A/C)	กลางคืน (A/C+1)		
04:00 AM - 04:05 AM	40.6	44.7	-4.1	7.0	-	36.6	38.9	-2.3
04:05 AM - 04:10 AM	42.1	39.8	2.3	4.5	-	40.6	38.3	2.3
04:10 AM - 04:15 AM	43.1	40.4	2.7	3.0	-	43.1	38.6	4.5
04:15 AM - 04:20 AM	44.1	42.4	1.7	4.5	-	42.6	38.5	4.1
04:20 AM - 04:25 AM	41.4	43.1	-1.7	7.0	-	37.4	39.2	-1.8
04:25 AM - 04:30 AM	42.4	41.0	1.4	7.0	-	38.4	39.3	-0.9
04:30 AM - 04:35 AM	43.6	41.7	1.9	4.5	-	42.1	39.7	2.4
04:35 AM - 04:40 AM	43.4	41.3	2.1	4.5	-	41.9	39.9	2.0
04:40 AM - 04:45 AM	42.6	43.1	-0.5	7.0	-	38.6	41.0	-2.4
04:45 AM - 04:50 AM	42.8	43.0	-0.2	7.0	-	38.8	40.8	-2.0
04:50 AM - 04:55 AM	44.0	42.5	1.5	4.5	-	42.5	40.3	2.2
04:55 AM - 05:00 AM	44.2	43.9	0.3	7.0	-	40.2	41.4	-1.2
05:00 AM - 05:05 AM	44.8	43.4	1.4	7.0	-	40.8	41.7	-0.9
05:05 AM - 05:10 AM	47.3	45.5	1.8	4.5	-	45.8	41.8	4.0
05:10 AM - 05:15 AM	43.7	44.9	-1.2	7.0	-	39.7	42.2	-2.5
05:15 AM - 05:20 AM	45.6	45.6	0.0	7.0	-	41.6	42.0	-0.4
05:20 AM - 05:25 AM	45.8	44.5	1.3	7.0	-	41.8	42.5	-0.7
05:25 AM - 05:30 AM	48.7	44.3	4.4	2.0	-	49.7	42.5	7.2
05:30 AM - 05:35 AM	45.5	52.9	-7.4	7.0	-	41.5	43.6	-2.1
05:35 AM - 05:40 AM	45.2	44.4	0.8	7.0	-	41.2	42.7	-1.5
05:40 AM - 05:45 AM	45.0	44.8	0.2	7.0	-	41.0	42.1	-1.1
05:45 AM - 05:50 AM	44.9	44.4	0.5	7.0	-	40.9	41.6	-0.7
05:50 AM - 05:55 AM	45.6	45.0	0.6	7.0	-	41.6	41.3	0.3
05:55 AM - 06:00 AM	46.6	45.3	1.3	7.0	-	42.6	42.2	0.4
06:00 AM - 07:00 AM	50.0	49.3	0.7	7.0	43.0	-	43.8	-0.8
07:00 AM - 08:00 AM	53.5	53.9	-0.4	7.0	46.5	-	46.9	-0.4
08:00 AM - 09:00 AM	51.2	50.6	0.6	7.0	44.2	-	45.0	-0.8
09:00 AM - 10:00 AM	52.3	51.3	1.2	7.0	45.3	-	44.8	0.5
10:00 AM - 11:00 AM	52.1	50.6	1.5	4.5	47.6	-	44.6	3.0
11:00 AM - 12:00 PM	47.8	47.3	0.5	7.0	40.8	-	41.1	-0.3
12:00 PM - 01:00 PM	48.0	47.0	1.0	7.0	41.0	-	40.8	0.2
01:00 PM - 02:00 PM	47.8	46.6	1.2	7.0	40.8	-	40.0	0.8

ค่าการรบกวน

≤ 10

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง ค่าเกณฑ์การประเมินเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานของเสียงรบกวนที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด หากการตรวจวัด วันที่ 21-22 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-19 วันที่ตรวจวัด 21-22 ธันวาคม 2566)

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) Limited is not responsible for this report if it is not reproduced exactly as full.

Approved by

*WibB.*

Witawan Borirak  
Manager

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

Life Services

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872458-1

Page 1 of 3

Sample No. 23124326-20  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
	(A)	(B)	(A-B)	(A-C)	กลางวัน	(A-C+1)	(B)	(B)
02:00 PM - 03:00 PM	48.4	46.8	1.6	4.5	43.9	-	41.4	2.5
03:00 PM - 04:00 PM	50.5	52.3	-1.8	7.0	43.5	-	42.7	0.8
04:00 PM - 05:00 PM	49.8	49.1	0.7	7.0	42.8	-	42.3	0.5
05:00 PM - 06:00 PM	51.8	50.4	1.4	7.0	44.8	-	43.9	0.9
06:00 PM - 07:00 PM	52.7	51.8	0.9	7.0	45.7	-	44.2	1.5
07:00 PM - 08:00 PM	52.4	49.3	3.1	3.0	49.4	-	43.0	6.4
08:00 PM - 09:00 PM	49.9	49.3	0.6	7.0	42.9	-	42.7	0.2
09:00 PM - 10:00 PM	49.3	47.6	1.7	4.5	44.8	-	41.4	3.4
10:00 PM - 10:05 PM	47.9	44.5	3.4	3.0	-	47.9	41.1	6.8
10:05 PM - 10:10 PM	47.6	43.2	4.4	2.0	-	46.6	40.8	7.8
10:10 PM - 10:15 PM	48.5	44.7	3.8	2.0	-	49.5	41.1	8.4
10:15 PM - 10:20 PM	46.9	43.2	3.7	2.0	-	47.9	40.9	7.0
10:20 PM - 10:25 PM	46.8	43.7	3.1	3.0	-	46.8	40.7	6.1
10:25 PM - 10:30 PM	48.1	43.5	4.6	1.5	-	49.6	40.6	9.0
10:30 PM - 10:35 PM	46.6	43.1	3.5	2.0	-	47.6	40.5	7.1
10:35 PM - 10:40 PM	48.9	44.7	4.2	2.0	-	49.9	40.7	9.2
10:40 PM - 10:45 PM	46.7	53.3	-6.6	7.0	-	42.7	41.0	1.7
10:45 PM - 10:50 PM	45.3	43.2	2.1	4.5	-	43.8	40.7	3.1
10:50 PM - 10:55 PM	45.1	42.0	3.1	3.0	-	45.1	39.8	5.3
10:55 PM - 11:00 PM	44.5	41.4	3.1	3.0	-	44.5	39.5	5.0
11:00 PM - 11:05 PM	45.5	41.5	4.0	2.0	-	46.5	39.6	6.9
11:05 PM - 11:10 PM	45.9	41.6	4.3	2.0	-	46.9	39.5	7.4
11:10 PM - 11:15 PM	49.2	43.0	6.2	1.5	-	50.7	39.4	11.3
11:15 PM - 11:20 PM	45.6	53.7	-8.1	7.0	-	41.6	39.5	2.1
11:20 PM - 11:25 PM	45.1	43.5	1.6	4.5	-	43.6	39.5	4.1
11:25 PM - 11:30 PM	43.7	41.7	2.0	4.5	-	42.2	39.1	3.1
11:30 PM - 11:35 PM	43.5	39.9	3.6	2.0	-	44.5	37.9	6.6
11:35 PM - 11:40 PM	42.8	39.9	2.9	3.0	-	42.8	38.0	4.8
11:40 PM - 11:45 PM	44.2	39.8	4.4	2.0	-	45.2	38.0	7.2
11:45 PM - 11:50 PM	43.6	41.9	1.7	4.5	-	42.1	38.1	4.0
11:50 PM - 11:55 PM	44.8	39.0	5.8	1.5	-	46.3	37.9	8.4
11:55 PM - 12:00 AM	44.3	41.0	3.3	3.0	-	44.3	37.9	6.4
12:00 AM - 12:05 AM	44.6	40.4	4.2	2.0	-	45.6	37.9	7.7
12:05 AM - 12:10 AM	44.4	41.2	3.2	3.0	-	44.4	38.0	6.4
12:10 AM - 12:15 AM	44.4	43.0	1.4	7.0	-	40.4	38.3	2.1
12:15 AM - 12:20 AM	47.8	41.5	6.3	1.5	-	49.3	38.1	11.2
12:20 AM - 12:25 AM	45.1	45.8	-0.7	7.0	-	41.1	37.8	3.3
12:25 AM - 12:30 AM	45.5	41.9	3.6	2.0	-	46.5	38.6	7.9
12:30 AM - 12:35 AM	45.4	41.3	4.1	2.0	-	46.4	38.7	7.7
12:35 AM - 12:40 AM	43.9	40.6	3.3	3.0	-	43.9	37.3	6.6

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) Limited is not responsible for this report if it is not reproduced exactly as full.

Approved by

*WibB.*

Witawan Borirak  
Manager

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

Life Services

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124326

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report Number :** 2872458-1

Page 2 of 3

**Sample No.** 23124326-20  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00900074

เวลา	ระดับเสียง (dB(A))					การคำนวณ	
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับ
					กลางคืน	กลางวัน	
12:40 AM - 12:45 AM	45.1	40.8	4.3	2.0	-	46.1	8.7
12:45 AM - 12:50 AM	43.1	41.2	1.9	4.5	-	41.6	4.1
12:50 AM - 12:55 AM	45.7	39.1	6.6	1.0	-	47.7	10.6
12:55 AM - 01:00 AM	43.3	40.1	3.2	3.0	-	43.3	5.8
01:00 AM - 01:05 AM	43.0	40.6	2.4	4.5	-	41.5	4.8
01:05 AM - 01:10 AM	42.9	40.8	2.1	4.5	-	41.4	3.2
01:10 AM - 01:15 AM	41.8	40.4	1.4	7.0	-	37.8	-0.1
01:15 AM - 01:20 AM	41.3	40.1	1.2	7.0	-	37.3	-1.2
01:20 AM - 01:25 AM	40.8	39.8	1.0	7.0	-	36.8	-1.5
01:25 AM - 01:30 AM	42.7	39.4	3.3	3.0	-	42.7	4.5
01:30 AM - 01:35 AM	42.3	40.2	2.1	4.5	-	40.8	2.7
01:35 AM - 01:40 AM	42.3	40.4	1.9	4.5	-	40.8	2.7
01:40 AM - 01:45 AM	41.2	40.5	0.7	7.0	-	37.2	-1.1
01:45 AM - 01:50 AM	41.1	39.3	1.8	4.5	-	39.6	3.2
01:50 AM - 01:55 AM	44.0	37.7	6.3	1.5	-	45.5	9.5
01:55 AM - 02:00 AM	42.2	41.9	0.3	7.0	-	38.2	1.5
02:00 AM - 02:05 AM	41.0	39.3	1.7	4.5	-	39.5	2.7
02:05 AM - 02:10 AM	40.9	38.9	2.0	4.5	-	39.4	2.7
02:10 AM - 02:15 AM	41.4	38.7	2.7	3.0	-	41.4	4.4
02:15 AM - 02:20 AM	41.4	38.9	2.5	3.0	-	41.4	4.5
02:20 AM - 02:25 AM	40.9	39.8	1.1	7.0	-	36.9	-0.1
02:25 AM - 02:30 AM	42.5	38.2	4.3	2.0	-	43.5	6.8
02:30 AM - 02:35 AM	41.1	39.1	2.0	4.5	-	39.6	3.1
02:35 AM - 02:40 AM	42.0	38.7	3.3	3.0	-	42.0	5.2
02:40 AM - 02:45 AM	41.1	39.0	2.1	4.5	-	39.6	2.5
02:45 AM - 02:50 AM	39.8	39.0	0.8	7.0	-	35.8	-1.2
02:50 AM - 02:55 AM	41.2	38.1	3.1	3.0	-	41.2	5.1
02:55 AM - 03:00 AM	43.2	37.9	5.3	1.5	-	44.7	8.8
03:00 AM - 03:05 AM	46.0	38.2	7.8	0.5	-	48.5	12.0
03:05 AM - 03:10 AM	41.2	47.4	-6.2	7.0	-	37.2	-0.6
03:10 AM - 03:15 AM	41.0	39.5	1.5	4.5	-	39.5	2.6
03:15 AM - 03:20 AM	45.6	38.1	7.5	0.5	-	48.1	11.6
03:20 AM - 03:25 AM	41.2	40.4	0.8	7.0	-	37.2	-0.3
03:25 AM - 03:30 AM	44.0	51.0	-7.0	7.0	-	40.0	1.8
03:30 AM - 03:35 AM	44.8	40.1	4.7	1.5	-	46.3	6.2
03:35 AM - 03:40 AM	42.6	49.5	-6.9	7.0	-	38.6	-0.7
03:40 AM - 03:45 AM	42.5	41.4	1.1	7.0	-	38.5	0.7
03:45 AM - 03:50 AM	42.1	40.6	1.5	4.5	-	40.6	2.2
03:50 AM - 03:55 AM	45.3	39.9	5.4	1.5	-	46.8	9.3
03:55 AM - 04:00 AM	44.2	43.2	1.0	7.0	-	40.2	2.1

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. The rest 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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124326

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report Number :** 2872458-1

Page 3 of 3

**Sample No.** 23124326-20  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 2 บ้านคลอง 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00900074

เวลา	ระดับเสียง (dB(A))					การคำนวณ	
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับ
					กลางคืน	กลางวัน	
04:00 AM - 04:05 AM	44.1	40.5	3.6	2.0	-	45.1	6.9
04:05 AM - 04:10 AM	45.1	42.9	2.2	4.5	-	43.6	5.1
04:10 AM - 04:15 AM	43.9	41.6	2.3	4.5	-	42.4	3.9
04:15 AM - 04:20 AM	44.2	40.9	3.3	3.0	-	44.2	5.7
04:20 AM - 04:25 AM	44.3	43.6	0.7	7.0	-	40.3	1.1
04:25 AM - 04:30 AM	45.3	40.7	4.6	1.5	-	46.8	8.2
04:30 AM - 04:35 AM	44.9	42.1	2.8	3.0	-	44.9	5.3
04:35 AM - 04:40 AM	44.8	41.7	3.1	3.0	-	44.8	5.1
04:40 AM - 04:45 AM	45.3	41.8	3.5	2.0	-	46.3	6.6
04:45 AM - 04:50 AM	45.7	42.6	3.1	3.0	-	45.7	5.6
04:50 AM - 04:55 AM	47.3	42.0	5.3	1.5	-	48.8	9.2
04:55 AM - 05:00 AM	43.3	44.6	-1.3	7.0	-	39.3	1.3
05:00 AM - 05:05 AM	44.9	44.2	0.7	7.0	-	40.9	3.2
05:05 AM - 05:10 AM	43.3	41.9	1.4	7.0	-	39.3	1.1
05:10 AM - 05:15 AM	45.0	44.8	0.2	7.0	-	41.0	1.4
05:15 AM - 05:20 AM	43.5	41.0	2.5	3.0	-	43.5	4.5
05:20 AM - 05:25 AM	48.2	43.8	4.4	2.0	-	49.2	10.0
05:25 AM - 05:30 AM	47.0	42.3	4.7	1.5	-	48.5	9.6
05:30 AM - 05:35 AM	45.9	53.0	-7.1	7.0	-	41.9	1.4
05:35 AM - 05:40 AM	44.5	43.4	1.1	7.0	-	40.5	0.9
05:40 AM - 05:45 AM	45.2	44.8	0.4	7.0	-	41.2	1.5
05:45 AM - 05:50 AM	50.7	45.5	5.2	1.5	-	52.2	11.6
05:50 AM - 05:55 AM	45.6	43.8	1.8	4.5	-	44.1	3.9
05:55 AM - 06:00 AM	44.1	47.1	-3.0	7.0	-	40.1	-1.1
06:00 AM - 07:00 AM	47.8	46.3	1.5	4.5	43.3	-	41.8
07:00 AM - 08:00 AM	52.2	52.4	-0.2	7.0	45.2	-	45.2
08:00 AM - 09:00 AM	51.1	49.8	1.3	7.0	44.1	-	45.1
09:00 AM - 10:00 AM	50.1	49.0	1.1	7.0	43.1	-	44.4
10:00 AM - 11:00 AM	49.3	49.3	0.0	7.0	42.3	-	42.8
11:00 AM - 12:00 PM	48.2	49.0	-0.8	7.0	41.2	-	41.7
12:00 PM - 01:00 PM	47.2	46.9	0.3	7.0	40.2	-	40.1
01:00 PM - 02:00 PM	48.8	50.1	-1.3	7.0	41.8	-	40.8

ค่ามาตรฐาน

Reference Method :

1. ISO 1996-1

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

หมายเหตุ :

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงรบกวนที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ที่ทำการตรวจวัด วันที่ 22-23 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-20 วันที่ตรวจวัด 22-23 ธันวาคม 2566)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. The rest 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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872459-1

Sample No. 23124326-21  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรมย์ (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 1 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (dBG)	กลางคืน (dBC)		
02:00 PM - 03:00 PM	49.8	49.4	0.4	7.0	42.8	-	42.5	0.3
03:00 PM - 04:00 PM	50.5	50.2	0.3	7.0	43.5	-	44.3	-0.8
04:00 PM - 05:00 PM	52.1	52.2	-0.1	7.0	45.1	-	44.2	0.9
05:00 PM - 06:00 PM	51.7	51.3	0.4	7.0	44.7	-	45.0	-0.3
06:00 PM - 07:00 PM	54.2	52.5	1.7	4.5	49.7	-	45.6	4.1
07:00 PM - 08:00 PM	54.1	50.8	3.3	3.0	51.1	-	46.4	4.7
08:00 PM - 09:00 PM	52.5	51.2	1.3	7.0	45.5	-	45.7	-0.2
09:00 PM - 10:00 PM	51.5	48.0	3.5	2.0	49.5	-	44.0	5.5
10:00 PM - 10:05 PM	56.4	45.5	4.9	1.5	-	51.9	42.3	9.6
10:05 PM - 10:10 PM	52.3	46.1	6.2	1.5	-	53.8	42.8	11.0
10:10 PM - 10:15 PM	51.0	48.1	2.9	3.0	-	51.0	42.4	8.6
10:15 PM - 10:20 PM	50.6	47.6	3.0	3.0	-	50.6	43.2	7.4
10:20 PM - 10:25 PM	51.3	47.4	3.9	2.0	-	52.3	44.0	8.3
10:25 PM - 10:30 PM	51.7	46.6	5.1	1.5	-	53.2	42.7	10.5
10:30 PM - 10:35 PM	50.9	45.6	5.3	1.5	-	52.4	41.8	10.6
10:35 PM - 10:40 PM	50.5	47.1	3.4	3.0	-	50.5	42.2	8.3
10:40 PM - 10:45 PM	50.5	45.6	4.9	1.5	-	52.0	42.1	9.9
10:45 PM - 10:50 PM	53.7	46.4	7.3	1.0	-	55.7	43.3	12.4
10:50 PM - 10:55 PM	53.7	46.0	7.7	0.5	-	56.2	41.8	14.4
10:55 PM - 11:00 PM	50.9	49.6	1.3	7.0	-	46.9	44.3	2.6
11:00 PM - 11:05 PM	54.0	46.8	7.2	1.0	-	56.0	42.8	13.2
11:05 PM - 11:10 PM	50.8	46.9	3.9	2.0	-	51.8	43.3	8.5
11:10 PM - 11:15 PM	50.1	48.3	1.8	4.5	-	48.5	43.0	5.6
11:15 PM - 11:20 PM	53.2	44.6	8.6	0.5	-	55.7	40.7	15.0
11:20 PM - 11:25 PM	53.1	44.4	8.7	0.5	-	55.6	42.3	13.3
11:25 PM - 11:30 PM	53.7	45.8	7.9	0.5	-	56.2	42.6	13.6
11:30 PM - 11:35 PM	53.2	46.9	6.3	1.5	-	54.7	42.5	12.2
11:35 PM - 11:40 PM	52.3	46.4	5.9	1.5	-	53.8	43.1	10.7
11:40 PM - 11:45 PM	53.1	43.4	9.7	0.5	-	55.6	42.1	13.5
11:45 PM - 11:50 PM	52.6	44.2	8.4	0.5	-	55.1	42.0	13.1
11:50 PM - 11:55 PM	52.8	42.9	9.9	0.5	-	55.3	41.1	14.2
11:55 PM - 12:00 AM	52.6	42.5	10.1	0.5	-	55.1	40.4	14.7
12:00 AM - 12:05 AM	53.4	44.1	9.3	0.5	-	55.9	41.9	14.0
12:05 AM - 12:10 AM	53.3	44.8	8.5	0.5	-	55.8	42.1	13.7
12:10 AM - 12:15 AM	53.4	46.5	6.9	1.0	-	55.4	42.1	13.3
12:15 AM - 12:20 AM	53.2	44.6	8.6	0.5	-	55.7	41.8	13.9
12:20 AM - 12:25 AM	52.9	43.4	9.5	0.5	-	55.4	41.6	13.8
12:25 AM - 12:30 AM	52.8	43.5	9.3	0.5	-	55.3	41.4	13.9
12:30 AM - 12:35 AM	52.7	44.7	8.0	0.5	-	55.2	41.6	13.6
12:35 AM - 12:40 AM	53.0	43.2	9.8	0.5	-	55.5	40.9	14.6

The above results are valid only for the analyzed item(s) as indicated in this report. No part of this report or its contents may be reproduced in any form without written consent from the Laboratory, ALS Laboratory Group (Thailand). Strongly recommended that this report is not reproduced except in full.

Approved by

*WibB.*  
Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872459-1

Sample No. 23124326-21  
Parameter เสียงรบกวน  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรมย์ (N3) (GPS 47P 0731772, 1424767)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900074

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (dBG)	กลางคืน (dBC)		
12:40 AM - 12:45 AM	52.8	45.0	7.8	0.5	-	55.3	41.5	13.8
12:45 AM - 12:50 AM	52.7	44.7	8.0	0.5	-	55.2	41.6	13.6
12:50 AM - 12:55 AM	55.1	45.2	9.9	0.5	-	57.6	40.8	16.8
12:55 AM - 01:00 AM	52.7	49.6	3.1	3.0	-	52.7	40.9	11.8
01:00 AM - 01:05 AM	53.5	45.8	7.7	0.5	-	56.0	40.4	15.6
01:05 AM - 01:10 AM	53.5	50.8	2.7	3.0	-	53.5	40.4	13.1
01:10 AM - 01:15 AM	52.7	49.3	3.4	3.0	-	52.7	41.5	11.2
01:15 AM - 01:20 AM	52.5	43.6	8.9	0.5	-	55.0	40.6	14.4
01:20 AM - 01:25 AM	52.6	45.2	7.4	1.0	-	54.6	39.6	15.0
01:25 AM - 01:30 AM	52.9	43.4	9.5	0.5	-	55.4	40.0	15.4
01:30 AM - 01:35 AM	53.7	41.6	12.1	0.5	-	56.2	40.0	16.2
01:35 AM - 01:40 AM	52.5	41.9	10.6	0.5	-	55.0	40.0	15.0
01:40 AM - 01:45 AM	49.8	43.0	6.8	1.0	-	51.8	40.6	11.2
01:45 AM - 01:50 AM	55.4	44.9	10.5	0.5	-	57.9	40.3	17.6
01:50 AM - 01:55 AM	45.4	44.3	1.1	7.0	-	41.4	39.8	1.6
01:55 AM - 02:00 AM	44.3	50.1	-5.8	7.0	-	40.3	39.0	1.3
02:00 AM - 02:05 AM	46.0	40.8	4.2	2.0	-	46.0	38.5	7.5
02:05 AM - 02:10 AM	47.3	44.0	3.3	3.0	-	47.3	38.2	9.1
02:10 AM - 02:15 AM	47.5	41.7	5.8	1.5	-	49.0	38.2	10.8
02:15 AM - 02:20 AM	53.7	40.9	12.8	0.0	-	56.7	38.6	18.1
02:20 AM - 02:25 AM	48.9	41.5	7.4	1.0	-	50.9	39.5	11.4
02:25 AM - 02:30 AM	45.4	42.8	2.6	3.0	-	45.4	39.3	6.1
02:30 AM - 02:35 AM	50.7	40.6	10.1	0.5	-	53.2	38.2	15.0
02:35 AM - 02:40 AM	52.4	41.0	11.4	0.5	-	54.9	39.1	15.8
02:40 AM - 02:45 AM	52.7	42.1	10.6	0.5	-	55.2	39.6	15.6
02:45 AM - 02:50 AM	52.1	41.6	10.5	0.5	-	54.6	40.1	14.5
02:50 AM - 02:55 AM	52.0	42.9	9.1	0.5	-	54.5	38.4	16.1
02:55 AM - 03:00 AM	52.1	40.8	11.3	0.5	-	54.6	39.2	15.4
03:00 AM - 03:05 AM	52.1	41.5	10.6	0.5	-	54.6	39.2	15.4
03:05 AM - 03:10 AM	52.2	40.1	12.1	0.5	-	54.7	38.8	15.9
03:10 AM - 03:15 AM	51.7	40.5	11.2	0.5	-	54.2	38.8	15.4
03:15 AM - 03:20 AM	50.8	40.2	10.6	0.5	-	53.3	38.2	15.1
03:20 AM - 03:25 AM	51.1	39.9	11.2	0.5	-	53.6	37.3	16.3
03:25 AM - 03:30 AM	51.2	41.9	9.3	0.5	-	53.7	37.7	16.0
03:30 AM - 03:35 AM	50.3	39.3	11.0	0.5	-	52.8	37.8	15.0
03:35 AM - 03:40 AM	51.1	39.3	11.8	0.5	-	53.6	37.2	16.4
03:40 AM - 03:45 AM	52.7	38.3	14.4	0.0	-	55.7	37.0	18.7
03:45 AM - 03:50 AM	50.5	39.7	10.8	0.5	-	53.0	38.0	15.0
03:50 AM - 03:55 AM	50.6	40.1	10.5	0.5	-	53.1	37.4	15.7
03:55 AM - 04:00 AM	48.2	41.5	6.7	1.0	-	50.2	37.8	12.4

The above results are valid only for the analyzed item(s) as indicated in this report. No part of this report or its contents may be reproduced in any form without written consent from the Laboratory, ALS Laboratory Group (Thailand). Strongly recommended that this report is not reproduced except in full.

Approved by

*WibB.*  
Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0042

**Lot ID:** 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872459-1

**Sample No.** 23124326-21  
**Parameter** เสียงรบกวน  
**Location** หมู่ที่ 2 บ้านข่อย 8 ตำบลพนาธิคม (N3) (GPS 47P 0731772, 1424767)  
**Measurement Date** Dec 23 - 24, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00900074

Page 3 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
04:00 AM - 04:05 AM	43.6	45.1	-1.5	7.0	-	39.6	37.4	2.2
04:05 AM - 04:10 AM	48.0	37.8	10.2	0.5	-	50.5	36.0	14.5
04:10 AM - 04:15 AM	50.4	38.5	11.9	0.5	-	52.9	36.6	16.3
04:15 AM - 04:20 AM	50.7	40.3	10.4	0.5	-	53.2	38.2	15.0
04:20 AM - 04:25 AM	50.5	41.6	8.9	0.5	-	53.0	39.5	13.5
04:25 AM - 04:30 AM	49.4	40.2	9.2	0.5	-	51.9	39.0	12.9
04:30 AM - 04:35 AM	41.9	40.6	1.3	7.0	-	37.9	38.5	-0.6
04:35 AM - 04:40 AM	45.9	41.2	4.7	1.5	-	47.4	37.7	9.7
04:40 AM - 04:45 AM	48.2	38.6	9.6	0.5	-	50.7	37.2	13.5
04:45 AM - 04:50 AM	52.9	41.8	11.1	0.5	-	55.4	39.4	16.0
04:50 AM - 04:55 AM	52.4	42.2	10.2	0.5	-	54.9	38.9	16.0
04:55 AM - 05:00 AM	51.4	40.8	10.6	0.5	-	53.9	38.6	15.3
05:00 AM - 05:05 AM	42.0	40.3	1.7	4.5	-	40.5	37.8	2.7
05:05 AM - 05:10 AM	40.9	43.1	-2.2	7.0	-	36.9	38.5	-1.6
05:10 AM - 05:15 AM	46.9	39.8	7.1	1.0	-	48.9	37.9	11.0
05:15 AM - 05:20 AM	45.8	41.2	4.6	1.5	-	47.3	38.0	9.3
05:20 AM - 05:25 AM	48.7	40.4	8.3	0.5	-	51.2	38.6	12.6
05:25 AM - 05:30 AM	48.3	40.7	7.6	0.5	-	50.8	38.6	12.2
05:30 AM - 05:35 AM	47.6	41.4	6.2	1.5	-	49.1	39.3	9.8
05:35 AM - 05:40 AM	52.2	42.8	9.4	0.5	-	54.7	39.6	15.1
05:40 AM - 05:45 AM	51.9	43.5	8.4	0.5	-	54.4	40.7	13.7
05:45 AM - 05:50 AM	51.5	43.0	8.5	0.5	-	54.0	40.7	13.3
05:50 AM - 05:55 AM	49.0	41.7	7.3	1.0	-	51.0	40.0	11.0
05:55 AM - 06:00 AM	43.3	42.7	0.6	7.0	-	39.3	40.4	-1.1
06:00 AM - 07:00 AM	47.2	47.4	-0.2	7.0	40.2	-	39.7	0.5
07:00 AM - 08:00 AM	47.8	48.6	-0.8	7.0	40.8	-	41.7	-0.9
08:00 AM - 09:00 AM	48.5	49.9	-1.4	7.0	41.5	-	42.0	-0.5
09:00 AM - 10:00 AM	50.2	48.4	1.8	4.5	45.7	-	41.4	4.3
10:00 AM - 11:00 AM	52.3	47.4	4.9	1.5	50.8	-	41.1	9.7
11:00 AM - 12:00 PM	47.3	50.0	-2.7	7.0	40.3	-	42.5	-2.2
12:00 PM - 01:00 PM	48.0	50.3	-2.3	7.0	41.0	-	42.2	-1.2
01:00 PM - 02:00 PM	47.6	49.2	-1.6	7.0	40.6	-	40.6	0.0
ค่ามาตรฐาน								
≤ 10								

### Reference Method :

- ISO 1996-1
  - ประกาศกระทรวงสาธารณสุข เรื่อง 16การตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด ค่าการตรวจวัด วันที่ 23-24 ธันวาคม 2566  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-21 วันที่ตรวจวัด 23-24 ธันวาคม 2566)

Approved by

Wilwan Borik  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0042

**Lot ID:** 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872460-1

**Sample No.** 23124326-22  
**Parameter** เสียงรบกวน  
**Location** บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันตก (N4) (GPS 47P 0731031, 1424112)  
**Measurement Date** Dec 17 - 18, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296516

Page 1 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
01:00 PM - 02:00 PM	53.7	52.2	1.5	4.5	49.2	-	43.5	5.7
02:00 PM - 03:00 PM	52.2	51.9	0.3	7.0	45.2	-	43.6	1.6
03:00 PM - 04:00 PM	53.2	53.5	-0.3	7.0	46.2	-	45.6	0.6
04:00 PM - 05:00 PM	56.4	55.5	0.9	7.0	49.4	-	48.5	0.9
05:00 PM - 06:00 PM	56.7	56.1	0.6	7.0	49.7	-	51.8	-2.1
06:00 PM - 07:00 PM	57.4	56.6	0.8	7.0	50.4	-	50.4	0.0
07:00 PM - 08:00 PM	55.9	54.8	1.1	7.0	48.9	-	47.3	1.6
08:00 PM - 09:00 PM	53.8	52.0	1.8	4.5	49.3	-	45.3	4.0
09:00 PM - 10:00 PM	53.1	50.9	2.2	4.5	48.6	-	44.4	4.2
10:00 PM - 10:05 PM	50.1	51.9	-1.8	7.0	-	46.1	43.1	3.0
10:05 PM - 10:10 PM	51.1	56.6	-5.5	7.0	-	47.1	43.9	3.2
10:10 PM - 10:15 PM	49.9	50.5	-0.6	7.0	-	45.9	44.0	1.9
10:15 PM - 10:20 PM	52.9	49.5	3.4	3.0	-	52.9	44.3	8.6
10:20 PM - 10:25 PM	58.3	48.5	9.8	0.5	-	60.8	43.3	17.5
10:25 PM - 10:30 PM	51.4	51.6	-0.2	7.0	-	47.4	43.6	3.8
10:30 PM - 10:35 PM	49.3	48.0	1.3	7.0	-	45.3	43.3	2.0
10:35 PM - 10:40 PM	48.8	50.6	-1.8	7.0	-	44.8	43.5	1.3
10:40 PM - 10:45 PM	53.4	53.4	0.0	7.0	-	49.4	42.1	7.3
10:45 PM - 10:50 PM	48.3	49.2	-0.9	7.0	-	44.3	42.1	2.2
10:50 PM - 10:55 PM	53.3	50.7	2.6	3.0	-	53.3	43.2	10.1
10:55 PM - 11:00 PM	55.6	47.6	8.0	0.5	-	58.1	41.1	17.0
11:00 PM - 11:05 PM	50.2	46.8	3.4	3.0	-	50.2	39.9	10.3
11:05 PM - 11:10 PM	53.1	54.9	-1.8	7.0	-	49.1	43.6	5.5
11:10 PM - 11:15 PM	49.8	49.7	0.1	7.0	-	45.8	42.3	3.5
11:15 PM - 11:20 PM	47.6	49.6	-2.0	7.0	-	43.6	41.4	2.2
11:20 PM - 11:25 PM	57.2	49.0	8.2	0.5	-	59.7	39.8	19.9
11:25 PM - 11:30 PM	50.8	49.3	1.5	4.5	-	49.3	41.0	8.3
11:30 PM - 11:35 PM	50.1	48.5	1.6	4.5	-	48.6	40.5	8.1
11:35 PM - 11:40 PM	50.0	49.6	0.4	7.0	-	46.0	41.8	4.2
11:40 PM - 11:45 PM	50.7	47.1	3.6	2.0	-	51.7	40.1	11.6
11:45 PM - 11:50 PM	49.1	47.3	1.8	4.5	-	47.6	39.9	7.7
11:50 PM - 11:55 PM	51.5	47.1	4.4	2.0	-	52.5	39.0	13.5
11:55 PM - 12:00 AM	47.3	51.4	-4.1	7.0	-	43.3	39.0	4.3
12:00 AM - 12:05 AM	48.3	45.0	3.3	3.0	-	48.3	37.8	10.5
12:05 AM - 12:10 AM	48.1	50.4	-2.3	7.0	-	44.1	41.2	2.9
12:10 AM - 12:15 AM	52.7	47.9	4.8	1.5	-	54.2	39.7	14.5
12:15 AM - 12:20 AM	44.5	44.4	0.1	7.0	-	40.5	36.6	3.9
12:20 AM - 12:25 AM	52.7	43.7	9.0	0.5	-	55.2	36.7	18.5
12:25 AM - 12:30 AM	48.7	44.0	4.7	1.5	-	50.2	37.4	12.8
12:30 AM - 12:35 AM	47.7	51.4	-3.7	7.0	-	43.7	38.3	5.4

Approved by

Wilwan Borik  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872460-1

Page 2 of 3

Sample No. 23124326-22  
Parameter เลื่อนรถขน  
Location บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางคืน (A/C)	กลางวัน (A/C)			
12:35 AM - 12:40 AM	45.6	45.4	0.2	7.0	-	41.6	37.6	4.0	
12:40 AM - 12:45 AM	43.1	42.5	0.6	7.0	-	39.1	36.1	3.0	
12:45 AM - 12:50 AM	53.9	43.2	10.7	0.5	-	56.4	36.1	20.3	
12:50 AM - 12:55 AM	47.5	52.7	-5.2	7.0	-	43.5	37.2	6.3	
12:55 AM - 01:00 AM	44.7	44.1	0.6	7.0	-	40.7	37.7	3.0	
01:00 AM - 01:05 AM	45.0	45.6	-0.6	7.0	-	41.0	36.7	4.3	
01:05 AM - 01:10 AM	54.6	45.2	9.4	0.5	-	57.1	36.5	20.6	
01:10 AM - 01:15 AM	46.1	45.8	0.3	7.0	-	42.1	37.2	4.9	
01:15 AM - 01:20 AM	46.6	44.4	2.2	4.5	-	45.1	37.4	7.7	
01:20 AM - 01:25 AM	48.6	42.8	5.8	1.5	-	50.1	36.3	13.8	
01:25 AM - 01:30 AM	47.2	46.1	1.1	7.0	-	43.2	35.9	7.3	
01:30 AM - 01:35 AM	45.6	47.3	-1.7	7.0	-	41.6	36.6	5.0	
01:35 AM - 01:40 AM	44.8	42.4	2.4	4.5	-	43.3	36.1	7.2	
01:40 AM - 01:45 AM	48.2	49.8	-1.6	7.0	-	44.2	37.2	7.0	
01:45 AM - 01:50 AM	49.4	41.7	7.7	0.5	-	51.9	36.9	15.0	
01:50 AM - 01:55 AM	39.9	45.0	-5.1	7.0	-	35.9	36.6	-0.7	
01:55 AM - 02:00 AM	51.5	47.7	3.8	2.0	-	52.5	37.5	15.0	
02:00 AM - 02:05 AM	41.7	45.6	-3.9	7.0	-	37.7	37.8	-0.1	
02:05 AM - 02:10 AM	47.2	43.5	3.7	2.0	-	48.2	37.1	11.1	
02:10 AM - 02:15 AM	49.4	41.5	7.9	0.5	-	51.9	37.1	14.8	
02:15 AM - 02:20 AM	46.5	37.9	8.6	0.5	-	49.0	35.8	13.2	
02:20 AM - 02:25 AM	45.5	48.5	-3.0	7.0	-	41.5	36.6	4.9	
02:25 AM - 02:30 AM	42.3	45.5	-3.2	7.0	-	38.3	37.2	1.1	
02:30 AM - 02:35 AM	37.2	45.8	-8.6	7.0	-	33.2	37.5	-4.3	
02:35 AM - 02:40 AM	49.8	47.5	2.3	4.5	-	48.3	36.7	11.6	
02:40 AM - 02:45 AM	47.3	46.8	0.5	7.0	-	43.3	36.4	6.9	
02:45 AM - 02:50 AM	46.8	44.8	2.0	4.5	-	45.3	36.7	8.6	
02:50 AM - 02:55 AM	49.5	42.9	6.6	1.0	-	51.5	36.1	15.4	
02:55 AM - 03:00 AM	47.4	45.7	1.7	4.5	-	45.9	36.6	9.3	
03:00 AM - 03:05 AM	45.5	44.9	0.6	7.0	-	41.5	37.1	4.4	
03:05 AM - 03:10 AM	44.1	40.9	3.2	3.0	-	44.1	36.7	7.4	
03:10 AM - 03:15 AM	47.0	43.2	3.8	2.0	-	48.0	37.8	10.2	
03:15 AM - 03:20 AM	46.2	45.0	1.2	7.0	-	42.2	37.4	4.8	
03:20 AM - 03:25 AM	40.5	42.6	-2.1	7.0	-	36.5	37.4	-0.9	
03:25 AM - 03:30 AM	42.8	48.1	-5.3	7.0	-	38.8	38.4	0.4	
03:30 AM - 03:35 AM	46.8	44.2	2.6	3.0	-	46.8	39.3	7.5	
03:35 AM - 03:40 AM	43.4	45.0	-1.6	7.0	-	39.4	39.7	-0.3	
03:40 AM - 03:45 AM	49.2	47.1	2.1	4.5	-	47.7	40.9	6.8	
03:45 AM - 03:50 AM	44.6	48.5	-3.9	7.0	-	40.6	41.3	-0.7	
03:50 AM - 03:55 AM	46.5	46.7	-0.2	7.0	-	42.5	41.9	0.6	

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) Group's recommendation that this report is not reproduced except in full.

Approved by

Wiwann Bonrak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872460-1

Page 3 of 3

Sample No. 23124326-22  
Parameter เลื่อนรถขน  
Location บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

ระดับเสียง (dB(A))									
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน	ค่าระดับการรบกวน
					กลางคืน (A/C)	กลางวัน (A/C)			
03:55 AM - 04:00 AM	48.4	47.4	1.0	7.0	-	44.4	42.2	2.2	
04:00 AM - 04:05 AM	49.1	47.6	1.5	4.5	-	47.6	42.8	4.8	
04:05 AM - 04:10 AM	46.5	54.3	-7.8	7.0	-	42.5	43.2	-0.7	
04:10 AM - 04:15 AM	46.1	51.4	-5.3	7.0	-	42.1	42.9	-0.8	
04:15 AM - 04:20 AM	45.7	49.8	-4.1	7.0	-	41.7	44.4	-2.7	
04:20 AM - 04:25 AM	55.6	51.7	3.9	2.0	-	56.6	45.0	11.6	
04:25 AM - 04:30 AM	52.2	50.9	1.3	7.0	-	48.2	46.1	2.1	
04:30 AM - 04:35 AM	49.5	51.3	-1.8	7.0	-	45.5	46.6	-1.1	
04:35 AM - 04:40 AM	52.3	51.9	0.4	7.0	-	48.3	47.2	1.1	
04:40 AM - 04:45 AM	51.2	51.0	0.2	7.0	-	47.2	47.2	0.0	
04:45 AM - 04:50 AM	51.4	54.6	-3.2	7.0	-	47.4	47.7	-0.3	
04:50 AM - 04:55 AM	52.2	55.7	-3.5	7.0	-	48.2	48.2	0.0	
04:55 AM - 05:00 AM	51.2	50.2	1.0	7.0	-	47.2	47.6	-0.4	
05:00 AM - 05:05 AM	55.9	53.7	2.2	4.5	-	54.4	47.8	6.6	
05:05 AM - 05:10 AM	58.4	54.0	4.4	2.0	-	59.4	48.9	10.5	
05:10 AM - 05:15 AM	48.9	50.8	-1.9	7.0	-	44.9	48.8	-3.9	
05:15 AM - 05:20 AM	55.3	53.0	2.3	4.5	-	53.8	48.8	5.0	
05:20 AM - 05:25 AM	54.8	51.7	3.1	3.0	-	54.8	49.1	5.7	
05:25 AM - 05:30 AM	50.5	52.6	-2.1	7.0	-	46.5	49.5	-3.0	
05:30 AM - 05:35 AM	52.2	54.3	-2.1	7.0	-	48.2	49.8	-1.6	
05:35 AM - 05:40 AM	52.4	53.3	-0.9	7.0	-	48.4	50.1	-1.7	
05:40 AM - 05:45 AM	53.3	54.2	-0.9	7.0	-	49.3	49.3	0.0	
05:45 AM - 05:50 AM	55.4	52.7	2.7	3.0	-	55.4	49.0	6.4	
05:50 AM - 05:55 AM	53.8	53.3	0.5	7.0	-	49.8	49.1	0.7	
05:55 AM - 06:00 AM	55.8	51.9	3.9	2.0	-	56.8	49.7	7.1	
06:00 AM - 07:00 AM	54.7	52.3	2.4	4.5	50.2	-	49.1	1.1	
07:00 AM - 08:00 AM	53.4	51.9	1.5	4.5	48.9	-	47.6	1.3	
08:00 AM - 09:00 AM	52.2	51.4	0.8	7.0	45.2	-	45.0	0.2	
09:00 AM - 10:00 AM	50.5	50.1	0.4	7.0	43.5	-	44.3	-0.8	
10:00 AM - 11:00 AM	51.3	50.0	1.3	7.0	44.3	-	44.2	0.1	
11:00 AM - 12:00 PM	51.0	49.8	1.2	7.0	44.0	-	42.3	1.7	
12:00 PM - 01:00 PM	49.9	51.9	-2.0	7.0	42.9	-	44.0	-1.1	

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
  - ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561
- ระดับเสียงจากแหล่งกำเนิด จากการตรวจวัด วันที่ 17-18 ธันวาคม 2566
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-22 วันที่ตรวจวัด 17-18 ธันวาคม 2566)

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) Group's recommendation that this report is not reproduced except in full.

Approved by

Wiwann Bonrak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872461-1

Sample No. 23124326-23  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 1 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
01:00 PM - 02:00 PM	50.7	48.9	1.8	4.5	46.2	-	42.7	3.5
02:00 PM - 03:00 PM	50.8	48.5	2.3	4.5	46.3	-	43.6	2.7
03:00 PM - 04:00 PM	52.3	53.1	-0.8	7.0	45.3	-	44.6	0.7
04:00 PM - 05:00 PM	54.3	54.0	0.3	7.0	47.3	-	48.3	-1.0
05:00 PM - 06:00 PM	56.2	56.1	0.1	7.0	49.2	-	50.9	-1.7
06:00 PM - 07:00 PM	55.8	55.8	0.0	7.0	48.8	-	51.4	-2.6
07:00 PM - 08:00 PM	56.5	57.0	-0.5	7.0	49.5	-	52.1	-2.6
08:00 PM - 09:00 PM	53.2	52.0	1.2	7.0	46.2	-	46.7	-0.5
09:00 PM - 10:00 PM	52.8	54.6	-1.8	7.0	45.8	-	46.8	-1.0
10:00 PM - 10:05 PM	49.5	54.4	-4.9	7.0	-	45.5	48.7	-3.2
10:05 PM - 10:10 PM	47.5	54.2	-6.7	7.0	-	43.5	46.4	-2.9
10:10 PM - 10:15 PM	62.8	55.6	7.2	1.0	-	64.8	50.6	14.2
10:15 PM - 10:20 PM	48.1	55.2	-7.1	7.0	-	44.1	47.2	-3.1
10:20 PM - 10:25 PM	51.7	53.2	-1.5	7.0	-	47.7	44.6	3.1
10:25 PM - 10:30 PM	48.9	50.2	-1.3	7.0	-	44.9	41.5	3.4
10:30 PM - 10:35 PM	50.6	56.3	-5.7	7.0	-	46.6	42.3	4.3
10:35 PM - 10:40 PM	46.3	49.8	-3.5	7.0	-	42.3	42.7	-0.4
10:40 PM - 10:45 PM	46.1	50.3	-4.2	7.0	-	42.1	41.0	1.1
10:45 PM - 10:50 PM	56.2	49.9	6.3	1.5	-	57.7	43.6	14.1
10:50 PM - 10:55 PM	48.1	56.8	-8.7	7.0	-	44.1	44.1	0.0
10:55 PM - 11:00 PM	50.9	50.7	0.2	7.0	-	46.9	44.2	2.7
11:00 PM - 11:05 PM	48.6	50.2	-1.6	7.0	-	44.6	43.8	0.8
11:05 PM - 11:10 PM	58.8	55.2	3.6	2.0	-	59.8	41.3	18.5
11:10 PM - 11:15 PM	52.0	49.7	2.3	4.5	-	49.7	50.5	-0.8
11:15 PM - 11:20 PM	51.9	50.3	1.6	4.5	-	50.4	45.0	5.4
11:20 PM - 11:25 PM	57.3	49.4	7.9	0.5	-	59.8	45.1	14.7
11:25 PM - 11:30 PM	49.2	48.8	0.4	7.0	-	45.2	45.1	0.1
11:30 PM - 11:35 PM	50.2	52.4	-2.2	7.0	-	46.2	45.1	1.1
11:35 PM - 11:40 PM	46.1	52.0	-5.9	7.0	-	42.1	45.0	-2.9
11:40 PM - 11:45 PM	50.0	60.0	-10.0	7.0	-	46.0	45.5	0.5
11:45 PM - 11:50 PM	53.9	53.3	0.6	7.0	-	49.9	44.7	5.2
11:50 PM - 11:55 PM	53.4	50.0	3.4	3.0	-	53.4	44.6	8.8
11:55 PM - 12:00 AM	61.7	52.2	9.5	0.5	-	64.2	44.4	19.8
12:00 AM - 12:05 AM	54.6	46.9	7.7	0.5	-	57.1	43.9	13.2
12:05 AM - 12:10 AM	50.9	46.7	4.2	2.0	-	51.9	37.8	14.1
12:10 AM - 12:15 AM	53.5	48.7	4.8	1.5	-	55.0	39.3	15.7
12:15 AM - 12:20 AM	45.0	42.5	2.5	3.0	-	45.0	37.8	7.2
12:20 AM - 12:25 AM	46.5	47.8	-1.3	7.0	-	42.5	37.6	4.9
12:25 AM - 12:30 AM	48.5	52.0	-3.5	7.0	-	44.5	39.3	5.2
12:30 AM - 12:35 AM	47.3	46.8	0.5	7.0	-	43.3	38.6	4.7

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

Approved by

Wilawan Borirak  
Manager

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

Like Scientists

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872461-1

Sample No. 23124326-23  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
12:35 AM - 12:40 AM	45.0	47.5	-2.5	7.0	-	41.0	39.0	2.0
12:40 AM - 12:45 AM	54.4	49.9	4.5	1.5	-	55.9	40.0	15.9
12:45 AM - 12:50 AM	47.6	44.6	3.0	3.0	-	47.6	37.9	9.7
12:50 AM - 12:55 AM	48.8	47.9	0.9	7.0	-	44.8	37.9	6.9
12:55 AM - 01:00 AM	51.9	47.2	4.7	1.5	-	53.4	38.1	15.3
01:00 AM - 01:05 AM	47.0	55.0	-8.0	7.0	-	43.0	37.8	5.2
01:05 AM - 01:10 AM	49.7	47.4	2.3	4.5	-	48.2	38.5	9.7
01:10 AM - 01:15 AM	48.7	47.0	1.7	4.5	-	47.2	38.1	9.1
01:15 AM - 01:20 AM	57.4	47.5	9.9	0.5	-	59.9	38.1	21.8
01:20 AM - 01:25 AM	48.8	48.3	0.5	7.0	-	44.8	37.8	7.0
01:25 AM - 01:30 AM	48.2	47.3	0.9	7.0	-	44.2	38.0	6.2
01:30 AM - 01:35 AM	49.4	48.5	0.9	7.0	-	45.4	37.6	7.8
01:35 AM - 01:40 AM	48.8	47.8	1.0	7.0	-	44.8	39.0	5.8
01:40 AM - 01:45 AM	50.1	42.3	7.8	0.5	-	52.6	38.4	14.2
01:45 AM - 01:50 AM	50.3	42.1	8.2	0.5	-	52.8	37.4	15.4
01:50 AM - 01:55 AM	47.9	45.0	2.9	3.0	-	47.9	38.6	9.3
01:55 AM - 02:00 AM	42.7	42.2	0.5	7.0	-	38.7	37.7	1.0
02:00 AM - 02:05 AM	40.8	45.9	-5.1	7.0	-	36.8	39.8	-3.0
02:05 AM - 02:10 AM	45.9	46.9	-1.0	7.0	-	41.9	41.4	0.5
02:10 AM - 02:15 AM	42.5	44.2	-1.7	7.0	-	38.5	41.5	-3.0
02:15 AM - 02:20 AM	46.3	45.9	0.4	7.0	-	42.3	41.6	0.7
02:20 AM - 02:25 AM	47.3	44.2	3.1	3.0	-	47.3	41.8	5.5
02:25 AM - 02:30 AM	42.6	47.5	-4.9	7.0	-	38.6	42.5	-3.9
02:30 AM - 02:35 AM	45.6	40.7	4.9	7.0	-	41.6	42.2	-0.6
02:35 AM - 02:40 AM	38.5	47.1	-8.6	7.0	-	34.5	43.0	-8.5
02:40 AM - 02:45 AM	48.2	44.9	3.3	3.0	-	48.2	42.2	6.0
02:45 AM - 02:50 AM	39.5	45.1	-5.6	7.0	-	35.5	42.6	-7.1
02:50 AM - 02:55 AM	44.8	47.3	-2.5	7.0	-	40.8	43.0	-2.2
02:55 AM - 03:00 AM	44.1	44.9	-0.8	7.0	-	40.1	42.2	-2.1
03:00 AM - 03:05 AM	43.2	44.2	-1.0	7.0	-	39.2	41.9	-2.7
03:05 AM - 03:10 AM	46.9	43.7	3.2	3.0	-	46.9	39.8	7.1
03:10 AM - 03:15 AM	42.6	45.2	-2.6	7.0	-	38.6	38.6	0.0
03:15 AM - 03:20 AM	42.2	47.8	-5.6	7.0	-	38.2	38.1	0.1
03:20 AM - 03:25 AM	39.8	48.3	-8.5	7.0	-	35.8	38.3	-2.5
03:25 AM - 03:30 AM	45.3	44.1	1.2	7.0	-	41.3	39.0	2.3
03:30 AM - 03:35 AM	49.2	44.5	4.7	1.5	-	50.7	39.1	11.6
03:35 AM - 03:40 AM	49.9	46.9	3.0	3.0	-	49.9	39.7	10.2
03:40 AM - 03:45 AM	45.2	46.3	-1.1	7.0	-	41.2	40.6	0.6
03:45 AM - 03:50 AM	45.6	44.7	0.9	7.0	-	41.6	41.3	0.3
03:50 AM - 03:55 AM	48.2	45.1	3.1	3.0	-	48.2	42.2	6.0

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

Approved by

Wilawan Borirak  
Manager

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

Like Scientists

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872461-1

Page 3 of 3

Sample No. 23124326-23  
Parameter เลือกรบกวน  
Location รั้ววัดโครงการฟาร์มไก่สุพรรณทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรมการ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
03:55 AM - 04:00 AM	47.7	48.7	-1.0	7.0	-	43.7	42.9	0.8
04:00 AM - 04:05 AM	45.0	48.2	-3.2	7.0	-	41.0	42.9	-1.9
04:05 AM - 04:10 AM	42.3	49.7	-7.4	7.0	-	38.3	43.5	-5.2
04:10 AM - 04:15 AM	49.7	51.4	-1.7	7.0	-	45.7	44.9	0.8
04:15 AM - 04:20 AM	48.0	50.7	-2.7	7.0	-	44.0	45.2	-1.2
04:20 AM - 04:25 AM	50.2	51.2	-1.0	7.0	-	46.2	44.4	1.8
04:25 AM - 04:30 AM	52.1	51.4	0.7	7.0	-	48.1	45.8	2.3
04:30 AM - 04:35 AM	51.0	51.0	0.0	7.0	-	47.0	46.4	0.6
04:35 AM - 04:40 AM	51.4	52.6	-1.2	7.0	-	47.4	48.1	-0.7
04:40 AM - 04:45 AM	51.8	52.5	-0.7	7.0	-	47.8	47.7	0.1
04:45 AM - 04:50 AM	51.6	52.8	-1.2	7.0	-	47.6	47.9	-0.3
04:50 AM - 04:55 AM	53.5	56.5	-3.0	7.0	-	49.5	48.9	0.6
04:55 AM - 05:00 AM	52.4	52.3	0.1	7.0	-	48.4	48.8	-0.4
05:00 AM - 05:05 AM	54.0	52.6	1.4	7.0	-	50.0	49.4	0.6
05:05 AM - 05:10 AM	58.3	52.7	5.6	1.5	-	59.8	49.8	10.0
05:10 AM - 05:15 AM	52.1	54.0	-1.9	7.0	-	48.1	50.7	-2.6
05:15 AM - 05:20 AM	52.8	54.2	-1.4	7.0	-	48.8	50.5	-1.7
05:20 AM - 05:25 AM	53.2	58.4	-5.2	7.0	-	49.2	50.9	-1.7
05:25 AM - 05:30 AM	54.5	56.6	-2.1	7.0	-	50.5	50.6	-0.1
05:30 AM - 05:35 AM	54.9	55.0	-0.1	7.0	-	50.9	51.2	-0.3
05:35 AM - 05:40 AM	59.6	54.3	5.3	1.5	-	61.1	49.9	11.2
05:40 AM - 05:45 AM	57.6	56.5	1.1	7.0	-	53.6	50.9	2.7
05:45 AM - 05:50 AM	55.4	54.4	1.0	7.0	-	51.4	49.9	1.5
05:50 AM - 05:55 AM	55.1	56.3	-1.2	7.0	-	51.1	50.9	0.2
05:55 AM - 06:00 AM	58.2	57.3	0.9	7.0	-	54.2	49.5	4.7
06:00 AM - 07:00 AM	58.0	54.9	3.1	3.0	55.0	-	49.4	5.6
07:00 AM - 08:00 AM	54.0	52.5	1.5	4.5	49.5	-	46.2	3.3
08:00 AM - 09:00 AM	53.2	54.4	-1.2	7.0	46.2	-	46.3	-0.1
09:00 AM - 10:00 AM	51.6	51.0	0.6	7.0	44.6	-	44.9	-0.3
10:00 AM - 11:00 AM	50.5	50.5	0.0	7.0	43.5	-	42.9	0.6
11:00 AM - 12:00 PM	51.3	54.8	-3.5	7.0	44.3	-	41.8	2.5
12:00 PM - 01:00 PM	50.7	50.1	0.6	7.0	43.7	-	43.2	0.5

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง มาตรการควบคุมเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

หมายเหตุ :

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด หากตรวจวัด วันที่ 18-19 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-23 วันที่ตรวจวัด 18-19 ธันวาคม 2566)

The above results are valid only for the analysis/detection specified 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) Limited or its subsidiaries. This report is not for reproduction except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LINE: @alslab1616

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872461-1

Page 1 of 3

Sample No. 23124326-24  
Parameter เลือกรบกวน  
Location รั้ววัดโครงการฟาร์มไก่สุพรรณทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรมการ	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
01:00 PM - 02:00 PM	52.4	48.7	3.7	2.0	50.4	-	43.0	7.4
02:00 PM - 03:00 PM	51.0	49.7	1.3	7.0	44.0	-	42.9	1.1
03:00 PM - 04:00 PM	51.7	50.5	1.2	7.0	44.7	-	44.0	0.7
04:00 PM - 05:00 PM	55.7	56.5	-0.8	7.0	48.7	-	49.5	-0.8
05:00 PM - 06:00 PM	57.5	55.4	2.1	4.5	53.0	-	50.3	2.7
06:00 PM - 07:00 PM	59.4	58.9	0.5	7.0	52.4	-	51.2	1.2
07:00 PM - 08:00 PM	54.9	54.2	0.7	7.0	47.9	-	47.4	0.5
08:00 PM - 09:00 PM	54.7	52.9	1.8	4.5	50.2	-	46.2	4.0
09:00 PM - 10:00 PM	53.2	51.4	1.8	4.5	48.7	-	45.6	3.1
10:00 PM - 10:05 PM	48.0	52.5	-4.5	7.0	-	44.0	43.4	0.6
10:05 PM - 10:10 PM	47.3	47.6	-0.3	7.0	-	43.3	42.7	0.6
10:10 PM - 10:15 PM	55.5	48.6	6.9	1.0	-	57.5	42.2	15.3
10:15 PM - 10:20 PM	54.0	48.8	5.2	1.5	-	55.5	41.4	14.1
10:20 PM - 10:25 PM	48.7	50.3	-1.6	7.0	-	44.7	41.9	2.8
10:25 PM - 10:30 PM	49.9	48.0	1.9	4.5	-	48.4	41.6	6.8
10:30 PM - 10:35 PM	50.3	50.8	-0.5	7.0	-	46.3	43.0	3.3
10:35 PM - 10:40 PM	52.3	49.0	3.3	3.0	-	52.3	44.2	8.1
10:40 PM - 10:45 PM	49.1	48.7	0.4	7.0	-	45.1	43.8	1.3
10:45 PM - 10:50 PM	52.2	49.9	2.3	4.5	-	50.7	44.3	6.4
10:50 PM - 10:55 PM	49.3	54.2	-4.9	7.0	-	45.3	41.9	3.4
10:55 PM - 11:00 PM	47.5	47.9	-0.4	7.0	-	43.5	41.9	1.6
11:00 PM - 11:05 PM	50.3	48.5	1.8	4.5	-	48.8	41.8	7.0
11:05 PM - 11:10 PM	56.3	48.5	7.8	0.5	-	58.8	42.7	16.1
11:10 PM - 11:15 PM	49.1	48.1	1.0	7.0	-	45.1	40.8	4.3
11:15 PM - 11:20 PM	49.7	49.5	0.2	7.0	-	45.7	41.1	4.6
11:20 PM - 11:25 PM	49.9	54.5	-4.6	7.0	-	45.9	41.7	4.2
11:25 PM - 11:30 PM	48.3	48.4	-0.1	7.0	-	44.3	42.3	2.0
11:30 PM - 11:35 PM	51.4	49.8	1.6	4.5	-	49.9	42.7	7.2
11:35 PM - 11:40 PM	56.5	50.1	6.4	1.5	-	58.0	42.3	15.7
11:40 PM - 11:45 PM	49.5	50.3	-0.8	7.0	-	45.5	46.1	-0.6
11:45 PM - 11:50 PM	50.3	53.7	-3.4	7.0	-	46.3	46.1	0.2
11:50 PM - 11:55 PM	51.3	49.3	2.0	4.5	-	49.8	45.4	4.4
11:55 PM - 12:00 AM	50.3	55.3	-5.0	7.0	-	46.3	45.4	0.9
12:00 AM - 12:05 AM	55.2	53.1	2.1	4.5	-	53.7	45.9	7.8
12:05 AM - 12:10 AM	47.7	47.8	-0.1	7.0	-	43.7	45.1	-1.4
12:10 AM - 12:15 AM	57.1	47.1	10.0	0.5	-	59.6	45.1	14.5
12:15 AM - 12:20 AM	54.2	47.4	6.8	1.0	-	56.2	41.3	14.9
12:20 AM - 12:25 AM	45.8	48.8	-3.0	7.0	-	41.8	44.1	-2.3
12:25 AM - 12:30 AM	42.6	48.4	-5.8	7.0	-	38.6	44.3	-5.7
12:30 AM - 12:35 AM	45.6	49.2	-3.6	7.0	-	41.6	44.7	-3.1

The above results are valid only for the analysis/detection specified 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) Limited or its subsidiaries. This report is not for reproduction except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LINE: @alslab1616

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124326

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number : 2872462-1

Page 2 of 3

Sample No. 23124326-24  
Parameter เสียงรบกวน  
Location หน้าโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (dC)	กลางคืน (dCN)		
12:35 AM - 12:40 AM	49.5	48.8	0.7	7.0	-	45.5	44.6	0.9
12:40 AM - 12:45 AM	45.9	47.9	-2.0	7.0	-	41.9	44.0	-2.1
12:45 AM - 12:50 AM	48.3	48.5	-0.2	7.0	-	44.3	44.6	-0.3
12:50 AM - 12:55 AM	47.3	47.4	-0.1	7.0	-	43.3	42.7	0.6
12:55 AM - 01:00 AM	45.7	48.8	-3.1	7.0	-	41.7	42.4	-0.7
01:00 AM - 01:05 AM	46.9	49.7	-2.8	7.0	-	42.9	45.7	-2.8
01:05 AM - 01:10 AM	44.7	48.9	-4.2	7.0	-	40.7	44.9	-4.2
01:10 AM - 01:15 AM	48.3	61.0	-12.7	7.0	-	44.3	45.1	-0.8
01:15 AM - 01:20 AM	49.3	48.5	0.8	7.0	-	45.3	45.3	0.0
01:20 AM - 01:25 AM	47.9	47.0	0.9	7.0	-	43.9	44.3	-0.4
01:25 AM - 01:30 AM	62.9	59.6	3.3	3.0	-	62.9	44.6	18.3
01:30 AM - 01:35 AM	53.7	50.8	2.9	3.0	-	53.7	45.2	8.5
01:35 AM - 01:40 AM	41.5	48.3	-6.8	7.0	-	37.5	44.9	-7.4
01:40 AM - 01:45 AM	62.2	50.3	11.9	0.5	-	64.7	45.3	19.4
01:45 AM - 01:50 AM	50.7	47.8	2.9	3.0	-	50.7	44.2	6.5
01:50 AM - 01:55 AM	45.5	50.9	-5.4	7.0	-	41.5	45.0	-3.5
01:55 AM - 02:00 AM	50.0	47.1	2.9	3.0	-	50.0	44.1	5.9
02:00 AM - 02:05 AM	44.1	54.6	-10.5	7.0	-	40.1	44.5	-4.4
02:05 AM - 02:10 AM	51.1	57.2	-6.1	7.0	-	47.1	43.5	3.6
02:10 AM - 02:15 AM	43.2	50.5	-7.3	7.0	-	39.2	44.6	-5.4
02:15 AM - 02:20 AM	42.7	49.4	-6.7	7.0	-	38.7	44.8	-6.1
02:20 AM - 02:25 AM	61.2	51.6	9.6	0.5	-	63.7	46.6	17.1
02:25 AM - 02:30 AM	50.6	49.5	1.1	7.0	-	46.6	45.6	1.0
02:30 AM - 02:35 AM	47.2	50.0	-2.8	7.0	-	43.2	45.8	-2.6
02:35 AM - 02:40 AM	51.3	50.9	0.4	7.0	-	47.3	45.3	2.0
02:40 AM - 02:45 AM	45.4	47.5	-2.1	7.0	-	41.4	44.5	-3.1
02:45 AM - 02:50 AM	49.1	49.6	-0.5	7.0	-	45.1	44.9	0.2
02:50 AM - 02:55 AM	50.6	51.2	-0.6	7.0	-	46.6	48.6	-2.0
02:55 AM - 03:00 AM	43.2	51.2	-8.2	7.0	-	39.2	48.8	-9.6
03:00 AM - 03:05 AM	40.6	50.8	-10.2	7.0	-	36.6	48.2	-11.6
03:05 AM - 03:10 AM	46.8	51.3	-4.5	7.0	-	42.8	48.4	-5.6
03:10 AM - 03:15 AM	45.0	52.0	-7.0	7.0	-	41.0	49.2	-8.2
03:15 AM - 03:20 AM	40.7	53.5	-12.8	7.0	-	36.7	49.3	-12.6
03:20 AM - 03:25 AM	44.0	52.4	-8.4	7.0	-	40.0	49.6	-9.6
03:25 AM - 03:30 AM	47.6	51.0	-3.4	7.0	-	43.6	47.9	-4.3
03:30 AM - 03:35 AM	51.7	51.9	-0.2	7.0	-	47.7	49.0	-1.3
03:35 AM - 03:40 AM	48.3	51.5	-3.2	7.0	-	44.3	48.8	-4.5
03:40 AM - 03:45 AM	46.9	51.8	-4.9	7.0	-	42.9	49.3	-6.4
03:45 AM - 03:50 AM	48.8	52.3	-3.5	7.0	-	44.8	49.8	-5.0
03:50 AM - 03:55 AM	45.7	52.5	-6.8	7.0	-	41.7	49.9	-8.2

The above results are valid only for the unaltered 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) Limited. It is recommended that this report is not reproduced except in full.

Approved by

Wiwann Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124326

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report Number : 2872462-1

Page 3 of 3

Sample No. 23124326-24  
Parameter เสียงรบกวน  
Location หน้าโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (dC)	กลางคืน (dCN)		
03:55 AM - 04:00 AM	44.1	52.3	-8.2	7.0	-	40.1	50.0	-9.9
04:00 AM - 04:05 AM	47.7	52.3	-4.6	7.0	-	43.7	50.2	-6.5
04:05 AM - 04:10 AM	47.1	52.1	-5.0	7.0	-	43.1	50.2	-7.1
04:10 AM - 04:15 AM	46.3	52.4	-6.1	7.0	-	42.3	50.3	-8.0
04:15 AM - 04:20 AM	45.7	49.6	-3.9	7.0	-	41.7	45.1	-3.4
04:20 AM - 04:25 AM	47.2	52.5	-5.3	7.0	-	43.2	46.0	-2.8
04:25 AM - 04:30 AM	49.0	50.5	-1.5	7.0	-	45.0	46.9	-1.9
04:30 AM - 04:35 AM	48.5	51.7	-3.2	7.0	-	44.5	47.1	-2.6
04:35 AM - 04:40 AM	53.5	51.1	2.4	4.5	-	52.0	47.9	4.1
04:40 AM - 04:45 AM	49.9	54.7	-4.8	7.0	-	45.9	48.7	-2.8
04:45 AM - 04:50 AM	52.2	55.7	-3.5	7.0	-	48.2	53.4	-5.2
04:50 AM - 04:55 AM	50.6	60.4	-9.8	7.0	-	46.6	54.0	-7.4
04:55 AM - 05:00 AM	53.8	55.6	-1.8	7.0	-	49.8	53.0	-3.2
05:00 AM - 05:05 AM	52.6	54.7	-2.1	7.0	-	48.6	50.5	-1.9
05:05 AM - 05:10 AM	61.0	53.5	7.5	0.5	-	63.5	49.9	13.6
05:10 AM - 05:15 AM	50.9	56.2	-5.3	7.0	-	46.9	49.7	-2.8
05:15 AM - 05:20 AM	51.3	53.9	-2.6	7.0	-	47.3	50.2	-2.9
05:20 AM - 05:25 AM	54.4	54.3	0.1	7.0	-	50.4	50.9	-0.5
05:25 AM - 05:30 AM	56.9	54.4	2.5	3.0	-	56.9	50.2	6.7
05:30 AM - 05:35 AM	55.3	55.1	0.2	7.0	-	51.3	50.2	1.1
05:35 AM - 05:40 AM	55.6	56.8	-1.2	7.0	-	51.6	50.5	1.1
05:40 AM - 05:45 AM	54.8	56.8	-2.0	7.0	-	50.8	50.5	0.3
05:45 AM - 05:50 AM	53.6	54.7	0.9	7.0	-	51.6	49.0	2.6
05:50 AM - 05:55 AM	57.6	55.8	1.8	4.5	-	56.1	49.1	7.0
05:55 AM - 06:00 AM	58.9	55.3	3.6	2.0	-	59.9	49.5	10.4
06:00 AM - 07:00 AM	57.3	54.2	3.1	3.0	54.3	-	49.1	5.2
07:00 AM - 08:00 AM	54.3	51.5	2.8	3.0	51.3	-	46.6	4.7
08:00 AM - 09:00 AM	54.0	51.9	2.1	4.5	49.5	-	45.2	4.3
09:00 AM - 10:00 AM	53.0	51.1	1.9	4.5	48.5	-	44.2	4.3
10:00 AM - 11:00 AM	53.1	51.1	2.0	4.5	48.6	-	44.4	4.2
11:00 AM - 12:00 PM	53.5	52.4	1.1	7.0	46.5	-	43.3	3.2
12:00 PM - 01:00 PM	53.1	52.3	0.8	7.0	46.1	-	44.6	1.5

ค่ามาตรฐาน

Reference Method :

1. ISO 1996-1
2. ประกาศกรมอุตุนิยมวิทยา เรื่อง วิธีการตรวจวัดเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดระดับเสียงจากการประกอบกิจการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงจากแหล่งกำเนิดเสียงจากอาคารประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ที่ทำการตรวจวัด วันที่ 19-20 ธันวาคม 2566  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-24 วันที่ตรวจวัด 19-20 ธันวาคม 2566)

The above results are valid only for the unaltered 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) Limited. It is recommended that this report is not reproduced except in full.

Approved by

Wiwann Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872463-1

Sample No. 23124326-25  
Parameter เสียงรบกวน  
Location จังหวัดราชบุรีใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 1 of 3

(เวลา)	ระดับเสียง (dB(A))					การประเมิน	
	เสียงจากแหล่งกำเนิด	เสียงรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (06:00-18:00)	กลางคืน (18:00-06:00)	
01:00 PM - 02:00 PM	52.7	53.8	-1.1	7.0	45.7	-	0.2
02:00 PM - 03:00 PM	53.6	53.5	0.1	7.0	46.6	-	1.7
03:00 PM - 04:00 PM	54.1	55.4	-1.3	7.0	47.1	-	0.3
04:00 PM - 05:00 PM	58.2	56.3	1.9	4.5	53.7	-	3.6
05:00 PM - 06:00 PM	56.1	55.9	0.2	7.0	49.1	-	-0.4
06:00 PM - 07:00 PM	56.7	55.3	1.4	7.0	49.7	-	3.1
07:00 PM - 08:00 PM	55.9	55.7	0.2	7.0	48.9	-	1.5
08:00 PM - 09:00 PM	53.7	55.5	-1.8	7.0	46.7	-	1.1
09:00 PM - 10:00 PM	51.8	53.6	-1.8	7.0	44.8	-	2.7
10:00 PM - 10:05 PM	50.4	48.8	1.6	4.5	-	48.9	9.1
10:05 PM - 10:10 PM	50.9	48.8	2.1	4.5	-	49.4	8.2
10:10 PM - 10:15 PM	50.4	51.2	-0.8	7.0	-	46.4	6.9
10:15 PM - 10:20 PM	50.6	48.8	1.8	4.5	-	49.1	10.2
10:20 PM - 10:25 PM	50.4	46.4	4.0	2.0	-	51.4	12.3
10:25 PM - 10:30 PM	50.6	48.1	2.5	3.0	-	50.6	11.0
10:30 PM - 10:35 PM	54.2	42.5	11.7	0.5	-	56.7	17.7
10:35 PM - 10:40 PM	51.4	46.0	5.4	1.5	-	52.9	13.1
10:40 PM - 10:45 PM	51.6	45.0	6.6	1.0	-	53.6	14.3
10:45 PM - 10:50 PM	50.9	56.5	-5.6	7.0	-	46.9	6.3
10:50 PM - 10:55 PM	51.1	49.4	1.7	4.5	-	49.6	10.0
10:55 PM - 11:00 PM	52.5	49.9	2.6	3.0	-	52.5	12.8
11:00 PM - 11:05 PM	51.9	48.0	3.9	2.0	-	52.9	13.3
11:05 PM - 11:10 PM	52.1	47.3	4.8	1.5	-	53.6	14.5
11:10 PM - 11:15 PM	54.5	52.4	2.1	4.5	-	53.0	13.3
11:15 PM - 11:20 PM	52.3	44.6	7.7	0.5	-	54.8	16.3
11:20 PM - 11:25 PM	52.5	47.6	4.9	1.5	-	54.0	14.7
11:25 PM - 11:30 PM	54.0	53.4	0.6	7.0	-	50.0	10.7
11:30 PM - 11:35 PM	52.0	45.7	6.3	1.5	-	53.5	14.4
11:35 PM - 11:40 PM	52.6	47.6	5.0	1.5	-	54.1	15.1
11:40 PM - 11:45 PM	53.1	51.6	1.5	4.5	-	51.6	12.3
11:45 PM - 11:50 PM	53.0	44.8	8.2	0.5	-	55.5	16.3
11:50 PM - 11:55 PM	53.1	45.3	7.8	0.5	-	55.6	16.6
11:55 PM - 12:00 AM	52.9	43.7	9.2	0.5	-	55.4	16.3
12:00 AM - 12:05 AM	52.4	47.1	5.3	1.5	-	53.9	14.8
12:05 AM - 12:10 AM	52.4	42.8	9.6	0.5	-	54.9	15.9
12:10 AM - 12:15 AM	52.7	45.0	7.7	0.5	-	55.2	15.9
12:15 AM - 12:20 AM	51.7	45.7	6.0	1.5	-	53.2	14.6
12:20 AM - 12:25 AM	51.8	41.9	9.9	0.5	-	54.3	15.8
12:25 AM - 12:30 AM	52.1	44.3	7.8	0.5	-	54.6	16.2
12:30 AM - 12:35 AM	50.4	45.1	5.3	1.5	-	51.9	13.8

Approved by

*Wilawan Borirak*  
Wilawan Borirak  
Manager

The above results are valid only for the analyzed item(s) as indicated in this report. No part of this report or its findings 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. Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872463-1

Sample No. 23124326-25  
Parameter เสียงรบกวน  
Location จังหวัดราชบุรีใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 2 of 3

(เวลา)	ระดับเสียง (dB(A))					การประเมิน	
	เสียงจากแหล่งกำเนิด	เสียงรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน (06:00-18:00)	กลางคืน (18:00-06:00)	
12:35 AM - 12:40 AM	50.2	48.7	1.5	4.5	-	48.7	9.6
12:40 AM - 12:45 AM	52.3	43.9	8.4	0.5	-	54.8	16.4
12:45 AM - 12:50 AM	50.2	42.3	7.9	0.5	-	52.7	15.0
12:50 AM - 12:55 AM	50.6	42.5	8.1	0.5	-	53.1	15.6
12:55 AM - 01:00 AM	49.6	51.7	-2.1	7.0	-	45.6	8.0
01:00 AM - 01:05 AM	49.4	45.5	3.9	2.0	-	50.4	12.3
01:05 AM - 01:10 AM	47.2	43.7	3.5	2.0	-	48.2	10.1
01:10 AM - 01:15 AM	47.3	45.5	1.8	4.5	-	45.8	8.1
01:15 AM - 01:20 AM	48.4	49.4	-1.0	7.0	-	44.4	39.3
01:20 AM - 01:25 AM	47.5	45.6	1.9	4.5	-	46.0	38.6
01:25 AM - 01:30 AM	46.8	45.2	1.6	4.5	-	45.3	37.7
01:30 AM - 01:35 AM	46.0	47.8	-1.8	7.0	-	42.0	37.7
01:35 AM - 01:40 AM	47.7	44.9	2.8	3.0	-	47.7	37.0
01:40 AM - 01:45 AM	52.1	43.4	8.7	0.5	-	54.6	37.5
01:45 AM - 01:50 AM	45.8	42.0	3.8	2.0	-	46.8	36.8
01:50 AM - 01:55 AM	48.4	48.3	0.1	7.0	-	44.4	36.9
01:55 AM - 02:00 AM	43.3	44.8	-1.5	7.0	-	39.3	36.9
02:00 AM - 02:05 AM	44.9	53.8	-8.9	7.0	-	40.9	37.7
02:05 AM - 02:10 AM	45.0	50.3	-5.3	7.0	-	41.0	38.1
02:10 AM - 02:15 AM	46.8	39.0	7.8	0.5	-	49.3	37.6
02:15 AM - 02:20 AM	46.5	43.9	2.6	3.0	-	46.5	38.3
02:20 AM - 02:25 AM	44.1	42.4	1.7	4.5	-	42.6	37.5
02:25 AM - 02:30 AM	40.7	44.8	-4.1	7.0	-	36.7	38.0
02:30 AM - 02:35 AM	41.9	46.2	-4.3	7.0	-	37.9	37.3
02:35 AM - 02:40 AM	42.5	45.7	-3.2	7.0	-	38.5	37.5
02:40 AM - 02:45 AM	45.9	39.5	6.4	1.5	-	47.4	37.1
02:45 AM - 02:50 AM	46.7	41.0	5.7	1.5	-	47.6	37.4
02:50 AM - 02:55 AM	46.1	41.6	4.5	1.5	-	47.6	38.2
02:55 AM - 03:00 AM	46.1	39.9	6.2	1.5	-	47.6	37.4
03:00 AM - 03:05 AM	46.8	39.4	7.4	1.0	-	48.8	37.3
03:05 AM - 03:10 AM	49.8	40.4	9.4	0.5	-	52.3	36.9
03:10 AM - 03:15 AM	48.1	45.9	2.2	4.5	-	46.6	37.7
03:15 AM - 03:20 AM	46.6	47.2	-0.6	7.0	-	42.6	37.9
03:20 AM - 03:25 AM	45.8	44.5	1.3	7.0	-	41.8	38.8
03:25 AM - 03:30 AM	45.9	44.1	1.8	4.5	-	44.4	37.7
03:30 AM - 03:35 AM	45.0	44.1	0.9	7.0	-	41.0	37.6
03:35 AM - 03:40 AM	47.3	44.4	2.9	3.0	-	47.3	38.2
03:40 AM - 03:45 AM	45.8	45.5	0.3	7.0	-	41.8	37.8
03:45 AM - 03:50 AM	45.3	42.2	3.1	3.0	-	45.3	37.9
03:50 AM - 03:55 AM	46.4	48.2	-1.8	7.0	-	42.4	38.9

Approved by

*Wilawan Borirak*  
Wilawan Borirak  
Manager

The above results are valid only for the analyzed item(s) as indicated in this report. No part of this report or its findings 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. Phrakdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Sample No. :** 23124326-25  
**Parameter :** เสียงรบกวน  
**Location :** รั้วโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
**Measurement Date :** Dec 20 - 21, 2023  
**Measurement by :** Satcha Phetsawaeng  
**Sound Level Meter :** 00296516

Page 3 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
03:55 AM - 04:00 AM	45.8	45.8	0.0	7.0	-	41.8	38.8	3.0
04:00 AM - 04:05 AM	45.3	43.4	1.9	4.5	-	43.8	37.9	5.9
04:05 AM - 04:10 AM	46.9	45.2	1.7	4.5	-	45.4	38.1	7.3
04:10 AM - 04:15 AM	47.9	43.6	4.3	2.0	-	48.9	38.2	10.7
04:15 AM - 04:20 AM	46.1	41.0	5.1	1.5	-	47.6	37.8	9.8
04:20 AM - 04:25 AM	45.8	44.0	1.8	4.5	-	44.3	37.9	6.4
04:25 AM - 04:30 AM	46.9	47.3	-0.4	7.0	-	42.9	40.2	2.7
04:30 AM - 04:35 AM	46.6	46.5	0.1	7.0	-	42.6	40.0	2.6
04:35 AM - 04:40 AM	48.9	46.5	3.4	3.0	-	48.9	40.8	8.1
04:40 AM - 04:45 AM	49.6	47.1	2.5	3.0	-	49.6	41.1	8.5
04:45 AM - 04:50 AM	50.1	47.0	3.1	3.0	-	50.1	40.3	9.8
04:50 AM - 04:55 AM	52.2	48.4	3.8	2.0	-	53.2	39.5	13.7
04:55 AM - 05:00 AM	51.8	47.7	4.1	2.0	-	52.8	41.1	11.7
05:00 AM - 05:05 AM	52.5	48.5	4.0	2.0	-	53.5	41.8	11.7
05:05 AM - 05:10 AM	52.1	53.2	-1.1	7.0	-	48.1	42.2	5.9
05:10 AM - 05:15 AM	50.5	49.2	1.3	7.0	-	46.5	42.6	3.9
05:15 AM - 05:20 AM	50.8	49.1	1.7	4.5	-	49.3	44.0	5.3
05:20 AM - 05:25 AM	51.0	49.4	1.6	4.5	-	49.5	43.8	5.7
05:25 AM - 05:30 AM	51.4	49.4	2.0	4.5	-	49.9	43.0	6.9
05:30 AM - 05:35 AM	51.5	49.8	1.7	4.5	-	50.0	44.2	5.8
05:35 AM - 05:40 AM	52.8	50.4	2.4	4.5	-	51.3	44.3	7.0
05:40 AM - 05:45 AM	52.1	51.0	1.1	7.0	-	48.1	45.3	2.8
05:45 AM - 05:50 AM	52.5	52.0	0.5	7.0	-	48.5	46.4	2.1
05:50 AM - 05:55 AM	50.4	53.2	-2.8	7.0	-	46.4	46.3	0.1
05:55 AM - 06:00 AM	50.5	54.0	-3.5	7.0	-	46.5	47.8	-1.3
06:00 AM - 07:00 AM	51.5	53.3	-1.8	7.0	44.5	-	47.9	-3.4
07:00 AM - 08:00 AM	52.1	54.5	-2.4	7.0	45.1	-	48.4	-3.3
08:00 AM - 09:00 AM	51.7	53.2	-1.5	7.0	44.7	-	47.2	-2.5
09:00 AM - 10:00 AM	54.6	53.3	1.3	7.0	47.6	-	46.5	1.1
10:00 AM - 11:00 AM	55.6	55.4	0.2	7.0	48.6	-	47.4	1.2
11:00 AM - 12:00 PM	53.3	52.1	1.2	7.0	46.3	-	45.3	1.0
12:00 PM - 01:00 PM	53.2	53.3	-0.1	7.0	46.2	-	45.5	0.7
ค่ามาตรฐาน								
≤ 10								

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- มาตรฐาน
  - ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงจากการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
  - ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

The above results are valid only for the said certified sample(s) as indicated in the 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

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

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Sample No. :** 23124326-26  
**Parameter :** เสียงรบกวน  
**Location :** รั้วโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
**Measurement Date :** Dec 21 - 22, 2023  
**Measurement by :** Satcha Phetsawaeng  
**Sound Level Meter :** 00296516

Page 1 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
01:00 PM - 02:00 PM	53.1	51.1	2.0	4.5	48.6	-	44.7	3.9
02:00 PM - 03:00 PM	52.4	51.2	1.2	7.0	45.4	-	45.1	0.3
03:00 PM - 04:00 PM	55.3	52.9	2.4	4.5	50.8	-	46.3	4.5
04:00 PM - 05:00 PM	53.5	52.0	1.5	4.5	49.0	-	47.8	1.2
05:00 PM - 06:00 PM	53.0	51.4	1.6	4.5	48.5	-	48.4	0.1
06:00 PM - 07:00 PM	52.7	50.7	2.0	4.5	48.2	-	46.4	1.8
07:00 PM - 08:00 PM	51.7	50.1	1.6	4.5	47.2	-	45.5	1.7
08:00 PM - 09:00 PM	52.9	52.4	0.5	7.0	45.9	-	47.1	-1.2
09:00 PM - 10:00 PM	49.5	52.9	-3.4	7.0	42.5	-	48.9	-6.4
10:00 PM - 10:05 PM	46.6	49.1	-2.5	7.0	-	42.6	45.1	-2.5
10:05 PM - 10:10 PM	46.9	49.0	-2.1	7.0	-	42.9	44.0	-1.1
10:10 PM - 10:15 PM	45.6	48.7	-3.1	7.0	-	41.6	41.6	0.0
10:15 PM - 10:20 PM	45.7	49.9	-4.2	7.0	-	41.7	43.5	-1.8
10:20 PM - 10:25 PM	45.0	48.7	-3.7	7.0	-	41.0	43.7	-2.7
10:25 PM - 10:30 PM	45.2	47.9	-2.7	7.0	-	41.2	42.4	-1.2
10:30 PM - 10:35 PM	52.0	47.9	4.1	2.0	-	53.0	43.8	9.2
10:35 PM - 10:40 PM	43.9	49.1	-5.2	7.0	-	39.9	46.0	-6.1
10:40 PM - 10:45 PM	47.7	48.7	-1.0	7.0	-	40.7	45.5	-4.8
10:45 PM - 10:50 PM	45.3	50.5	-5.2	7.0	-	41.3	47.3	-6.0
10:50 PM - 10:55 PM	43.8	49.1	-5.3	7.0	-	39.8	45.8	-6.0
10:55 PM - 11:00 PM	43.9	48.3	-4.4	7.0	-	39.9	45.3	-5.4
11:00 PM - 11:05 PM	47.6	49.5	-1.9	7.0	-	43.6	46.0	-2.4
11:05 PM - 11:10 PM	47.4	48.2	-0.8	7.0	-	43.4	44.1	-0.7
11:10 PM - 11:15 PM	45.4	49.7	-4.3	7.0	-	41.4	44.0	-2.6
11:15 PM - 11:20 PM	42.4	48.7	-6.3	7.0	-	38.4	43.7	-5.3
11:20 PM - 11:25 PM	46.1	50.0	-3.9	7.0	-	42.1	45.8	-3.7
11:25 PM - 11:30 PM	45.0	46.5	-1.5	7.0	-	41.0	42.2	-1.2
11:30 PM - 11:35 PM	48.4	48.9	-0.5	7.0	-	44.4	43.4	1.0
11:35 PM - 11:40 PM	47.2	48.0	-0.8	7.0	-	43.2	43.4	-0.2
11:40 PM - 11:45 PM	48.2	49.3	-1.1	7.0	-	44.2	45.2	-1.0
11:45 PM - 11:50 PM	47.1	48.4	-1.3	7.0	-	43.1	43.1	0.0
11:50 PM - 11:55 PM	47.5	46.7	0.8	7.0	-	43.5	42.4	1.1
11:55 PM - 12:00 AM	46.3	48.0	-1.7	7.0	-	42.3	43.5	-1.2
12:00 AM - 12:05 AM	45.4	48.1	-2.7	7.0	-	41.4	43.2	-1.8
12:05 AM - 12:10 AM	45.4	48.5	-3.1	7.0	-	41.4	43.1	-1.7
12:10 AM - 12:15 AM	45.1	46.6	-1.5	7.0	-	41.1	42.1	-1.0
12:15 AM - 12:20 AM	44.5	45.0	-0.5	7.0	-	40.5	40.3	0.2
12:20 AM - 12:25 AM	45.2	44.2	1.0	7.0	-	41.2	40.5	0.7
12:25 AM - 12:30 AM	47.3	46.1	1.2	7.0	-	43.3	41.0	2.3
12:30 AM - 12:35 AM	44.9	44.0	0.9	7.0	-	40.9	40.7	0.2

The above results are valid only for the said certified sample(s) as indicated in the 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

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

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872464-1

Sample No. 23124326-26  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 2 of 3

เวลา	ระดับเสียง (dB(A))						
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน
					กลางวัน	กลางคืน	
12:35 AM - 12:40 AM	43.0	43.6	-0.6	7.0	-	39.0	40.8
12:40 AM - 12:45 AM	46.0	44.7	1.3	7.0	-	42.0	41.2
12:45 AM - 12:50 AM	44.4	44.8	-0.4	7.0	-	40.4	41.2
12:50 AM - 12:55 AM	41.6	43.5	-1.9	7.0	-	37.6	39.1
12:55 AM - 01:00 AM	43.1	43.9	-0.8	7.0	-	39.1	39.3
01:00 AM - 01:05 AM	44.5	44.5	0.0	7.0	-	40.5	40.1
01:05 AM - 01:10 AM	43.9	45.4	-1.5	7.0	-	39.9	40.1
01:10 AM - 01:15 AM	42.2	43.3	-1.1	7.0	-	38.2	38.7
01:15 AM - 01:20 AM	39.8	43.1	-3.3	7.0	-	35.8	38.0
01:20 AM - 01:25 AM	44.4	41.0	3.4	3.0	-	44.4	37.6
01:25 AM - 01:30 AM	42.7	39.6	3.1	3.0	-	42.7	37.5
01:30 AM - 01:35 AM	38.8	40.4	-1.6	7.0	-	34.8	37.5
01:35 AM - 01:40 AM	44.0	43.2	0.8	7.0	-	40.0	37.4
01:40 AM - 01:45 AM	41.9	39.6	2.3	4.5	-	40.4	37.2
01:45 AM - 01:50 AM	40.7	39.8	0.9	7.0	-	36.7	37.4
01:50 AM - 01:55 AM	42.4	45.2	-2.8	7.0	-	38.4	38.8
01:55 AM - 02:00 AM	44.1	40.9	3.2	3.0	-	44.1	37.6
02:00 AM - 02:05 AM	40.6	41.3	-0.7	7.0	-	36.6	38.2
02:05 AM - 02:10 AM	46.7	41.6	5.1	1.5	-	48.2	38.2
02:10 AM - 02:15 AM	44.2	41.6	2.6	3.0	-	44.2	37.2
02:15 AM - 02:20 AM	41.3	39.6	1.7	4.5	-	39.8	37.3
02:20 AM - 02:25 AM	40.6	40.5	0.1	7.0	-	36.6	37.2
02:25 AM - 02:30 AM	43.1	44.0	-0.9	7.0	-	39.1	38.0
02:30 AM - 02:35 AM	40.8	42.7	-1.9	7.0	-	36.8	38.5
02:35 AM - 02:40 AM	39.3	41.3	-2.0	7.0	-	35.3	37.9
02:40 AM - 02:45 AM	43.2	43.7	-0.5	7.0	-	39.2	38.0
02:45 AM - 02:50 AM	45.6	40.2	5.4	1.5	-	47.1	37.5
02:50 AM - 02:55 AM	42.9	44.5	-1.6	7.0	-	38.9	38.7
02:55 AM - 03:00 AM	45.6	55.1	-9.5	7.0	-	41.6	51.5
03:00 AM - 03:05 AM	40.4	55.0	-14.6	7.0	-	36.4	51.5
03:05 AM - 03:10 AM	39.6	54.8	-15.2	7.0	-	35.6	51.1
03:10 AM - 03:15 AM	45.4	55.4	-10.0	7.0	-	41.4	51.9
03:15 AM - 03:20 AM	46.8	55.3	-8.5	7.0	-	42.8	51.6
03:20 AM - 03:25 AM	46.3	55.2	-8.9	7.0	-	42.3	51.7
03:25 AM - 03:30 AM	46.8	54.9	-8.1	7.0	-	42.8	51.5
03:30 AM - 03:35 AM	46.0	55.3	-9.3	7.0	-	42.0	51.9
03:35 AM - 03:40 AM	47.3	55.4	-8.1	7.0	-	43.3	51.8
03:40 AM - 03:45 AM	46.3	55.8	-9.5	7.0	-	42.3	52.2
03:45 AM - 03:50 AM	45.8	55.5	-9.7	7.0	-	41.8	51.7
03:50 AM - 03:55 AM	47.6	55.3	-7.7	7.0	-	43.6	51.7

Approved by

Wilawan Borirak  
Manager

The above results are valid only for the test method sample(s) as indicated in this report. No part of this report or results 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. Phatthadung Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872464-1

Sample No. 23124326-26  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 21 - 22, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296516

Page 3 of 3

เวลา	ระดับเสียง (dB(A))						
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน
					กลางวัน	กลางคืน	
03:55 AM - 04:00 AM	47.4	56.7	-9.3	7.0	-	43.4	52.6
04:00 AM - 04:05 AM	51.5	58.1	-6.6	7.0	-	47.5	54.0
04:05 AM - 04:10 AM	45.8	57.8	-12.0	7.0	-	41.8	53.6
04:10 AM - 04:15 AM	45.7	56.1	-10.4	7.0	-	41.7	45.8
04:15 AM - 04:20 AM	45.6	48.1	-2.5	7.0	-	41.6	45.4
04:20 AM - 04:25 AM	47.1	47.5	-0.4	7.0	-	43.1	43.8
04:25 AM - 04:30 AM	47.0	52.1	-5.1	7.0	-	43.0	46.1
04:30 AM - 04:35 AM	49.1	53.1	-4.0	7.0	-	45.1	47.5
04:35 AM - 04:40 AM	48.4	50.9	-2.5	7.0	-	44.4	45.2
04:40 AM - 04:45 AM	47.6	53.8	-6.2	7.0	-	43.6	49.6
04:45 AM - 04:50 AM	48.3	54.2	-5.9	7.0	-	44.3	49.0
04:50 AM - 04:55 AM	48.9	53.9	-5.0	7.0	-	44.9	50.0
04:55 AM - 05:00 AM	48.5	55.1	-6.6	7.0	-	44.5	48.7
05:00 AM - 05:05 AM	49.9	53.2	-3.3	7.0	-	45.9	47.2
05:05 AM - 05:10 AM	51.5	50.1	1.4	7.0	-	47.5	46.8
05:10 AM - 05:15 AM	48.5	47.9	0.6	7.0	-	44.5	45.3
05:15 AM - 05:20 AM	52.5	48.2	4.3	2.0	-	53.5	45.7
05:20 AM - 05:25 AM	48.7	51.4	-2.7	7.0	-	44.7	46.5
05:25 AM - 05:30 AM	49.0	50.0	-1.0	7.0	-	45.0	46.0
05:30 AM - 05:35 AM	47.9	50.0	-2.1	7.0	-	43.9	45.3
05:35 AM - 05:40 AM	49.3	50.5	-1.2	7.0	-	45.3	46.2
05:40 AM - 05:45 AM	52.7	49.3	3.4	3.0	-	52.7	45.3
05:45 AM - 05:50 AM	49.8	50.0	-0.2	7.0	-	45.8	46.2
05:50 AM - 05:55 AM	51.8	50.7	1.1	7.0	-	47.8	47.9
05:55 AM - 06:00 AM	52.1	49.5	2.6	3.0	-	52.1	46.9
06:00 AM - 07:00 AM	53.3	51.5	1.8	4.5	48.8	-	47.6
07:00 AM - 08:00 AM	54.2	53.6	0.6	7.0	47.2	-	48.9
08:00 AM - 09:00 AM	54.2	53.3	0.9	7.0	47.2	-	48.8
09:00 AM - 10:00 AM	54.1	53.1	1.0	7.0	47.1	-	48.3
10:00 AM - 11:00 AM	53.7	52.3	1.4	7.0	46.7	-	48.0
11:00 AM - 12:00 PM	52.5	51.1	1.4	7.0	45.5	-	44.9
12:00 PM - 01:00 PM	53.7	54.3	-0.6	7.0	46.7	-	48.1

ค่ามาตรฐาน

≤ 10

Reference Method :

1. ISO 1996-1

2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด จากการตรวจวัด วันที่ 21-22 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-26 วันที่ตรวจวัด 21-22 ธันวาคม 2566)

Approved by

Wilawan Borirak  
Manager

The above results are valid only for the test method sample(s) as indicated in this report. No part of this report or results 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. Phatthadung Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025

**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124326**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872465-1

**Sample No.** 23124326-27  
**Parameter** เสียงรบกวน  
**Location** บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296516

Page 1 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ฐาน	การรบกวน	ค่าระดับ
					กลางคืน	กลางวัน		
01:00 PM - 02:00 PM	53.2	52.6	0.6	7.0	46.2	-	47.9	-1.7
02:00 PM - 03:00 PM	53.5	52.2	1.3	7.0	46.5	-	47.7	-1.2
03:00 PM - 04:00 PM	53.2	52.2	1.0	7.0	46.2	-	47.5	-1.3
04:00 PM - 05:00 PM	53.3	51.5	1.8	4.5	48.8	-	48.2	0.6
05:00 PM - 06:00 PM	52.8	50.9	1.9	4.5	48.3	-	47.5	0.8
06:00 PM - 07:00 PM	52.5	51.3	1.2	7.0	45.5	-	47.1	-1.6
07:00 PM - 08:00 PM	51.7	50.3	1.4	7.0	44.7	-	46.5	-1.8
08:00 PM - 09:00 PM	50.4	49.4	1.0	7.0	43.4	-	44.5	-1.1
09:00 PM - 10:00 PM	50.2	48.5	1.7	4.5	45.7	-	43.5	2.2
10:00 PM - 10:05 PM	48.5	45.3	3.2	3.0	-	48.5	41.7	6.8
10:05 PM - 10:10 PM	47.1	46.1	1.0	7.0	-	43.1	41.9	1.2
10:10 PM - 10:15 PM	45.9	47.5	-1.6	7.0	-	41.9	41.5	0.4
10:15 PM - 10:20 PM	49.1	46.1	3.0	3.0	-	49.1	42.1	7.0
10:20 PM - 10:25 PM	46.4	45.6	0.8	7.0	-	42.4	41.2	1.2
10:25 PM - 10:30 PM	49.9	45.7	4.2	2.0	-	50.9	41.8	9.1
10:30 PM - 10:35 PM	44.9	45.3	-0.4	7.0	-	40.9	41.1	-0.2
10:35 PM - 10:40 PM	46.5	44.4	2.1	4.5	-	45.0	41.0	4.0
10:40 PM - 10:45 PM	44.7	45.0	-0.3	7.0	-	40.7	41.1	-0.4
10:45 PM - 10:50 PM	45.5	46.2	-0.7	7.0	-	41.5	41.6	-0.1
10:50 PM - 10:55 PM	45.7	44.4	1.3	7.0	-	41.7	40.9	0.8
10:55 PM - 11:00 PM	44.9	49.6	-4.7	7.0	-	40.9	42.8	-1.9
11:00 PM - 11:05 PM	47.4	51.0	-3.6	7.0	-	43.4	42.3	1.1
11:05 PM - 11:10 PM	45.7	49.6	-3.9	7.0	-	41.7	43.7	-2.0
11:10 PM - 11:15 PM	46.1	48.1	-2.0	7.0	-	42.1	43.1	-1.0
11:15 PM - 11:20 PM	52.6	49.8	2.8	3.0	-	52.6	43.4	9.2
11:20 PM - 11:25 PM	47.8	48.5	-0.7	7.0	-	43.8	44.0	-0.2
11:25 PM - 11:30 PM	47.4	49.3	-1.9	7.0	-	43.4	43.0	0.4
11:30 PM - 11:35 PM	47.4	48.3	-0.9	7.0	-	43.4	43.7	1.7
11:35 PM - 11:40 PM	45.9	48.6	-2.7	7.0	-	41.9	41.3	0.6
11:40 PM - 11:45 PM	47.3	49.8	-2.5	7.0	-	43.3	41.4	1.9
11:45 PM - 11:50 PM	44.1	48.1	-4.0	7.0	-	40.1	41.1	-1.0
11:50 PM - 11:55 PM	42.4	48.8	-6.4	7.0	-	38.4	41.8	-3.4
11:55 PM - 12:00 AM	44.7	49.3	-4.6	7.0	-	40.7	42.6	-1.9
12:00 AM - 12:05 AM	50.6	47.9	2.7	3.0	-	50.6	41.4	9.2
12:05 AM - 12:10 AM	43.0	46.3	-3.3	7.0	-	39.0	40.1	-1.1
12:10 AM - 12:15 AM	47.8	44.4	3.4	3.0	-	47.8	40.2	7.6
12:15 AM - 12:20 AM	46.5	41.9	4.6	1.5	-	48.0	39.2	8.8
12:20 AM - 12:25 AM	47.7	43.6	4.1	2.0	-	48.7	39.6	9.1
12:25 AM - 12:30 AM	45.7	43.8	1.9	4.5	-	44.2	39.7	4.5
12:30 AM - 12:35 AM	45.0	47.9	-2.9	7.0	-	41.0	39.4	1.6

Approved by

Wilawan Borirak  
Manager

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

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

Life Solutions

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025

**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124326**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872465-1

**Sample No.** 23124326-27  
**Parameter** เสียงรบกวน  
**Location** บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296516

Page 2 of 3

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ฐาน	การรบกวน	ค่าระดับ
					กลางคืน	กลางวัน		
12:35 AM - 12:40 AM	43.2	46.4	-3.2	7.0	-	39.2	39.4	-0.2
12:40 AM - 12:45 AM	45.0	41.5	3.5	2.0	-	46.0	38.6	7.4
12:45 AM - 12:50 AM	43.3	45.5	-2.2	7.0	-	39.3	39.2	0.1
12:50 AM - 12:55 AM	51.6	43.2	8.4	0.5	-	54.1	40.4	13.7
12:55 AM - 01:00 AM	44.9	47.5	-2.6	7.0	-	40.9	40.2	0.7
01:00 AM - 01:05 AM	42.0	44.7	-2.7	7.0	-	38.0	41.0	-3.0
01:05 AM - 01:10 AM	47.3	46.9	0.4	7.0	-	43.3	40.8	2.5
01:10 AM - 01:15 AM	48.2	47.8	0.4	7.0	-	44.2	39.5	4.7
01:15 AM - 01:20 AM	47.1	46.1	1.0	7.0	-	43.1	37.5	5.6
01:20 AM - 01:25 AM	46.0	42.4	3.6	2.0	-	47.0	37.9	9.1
01:25 AM - 01:30 AM	50.9	42.4	8.5	0.5	-	53.4	38.4	15.0
01:30 AM - 01:35 AM	45.5	43.8	1.7	4.5	-	44.0	40.5	3.5
01:35 AM - 01:40 AM	48.4	43.9	4.5	1.5	-	49.9	40.2	9.7
01:40 AM - 01:45 AM	42.5	45.5	-3.0	7.0	-	38.5	40.3	-1.8
01:45 AM - 01:50 AM	43.3	43.7	-0.4	7.0	-	39.3	39.9	-0.6
01:50 AM - 01:55 AM	44.5	44.3	0.2	7.0	-	40.5	40.2	0.3
01:55 AM - 02:00 AM	42.5	40.4	2.1	4.5	-	41.0	37.2	3.8
02:00 AM - 02:05 AM	47.2	41.1	6.1	1.5	-	48.7	37.7	11.0
02:05 AM - 02:10 AM	44.8	44.7	0.1	7.0	-	40.8	39.0	1.8
02:10 AM - 02:15 AM	41.2	43.4	-2.2	7.0	-	37.2	37.9	-0.7
02:15 AM - 02:20 AM	40.9	42.7	-1.8	7.0	-	36.9	37.6	-0.7
02:20 AM - 02:25 AM	42.7	41.7	1.0	7.0	-	38.7	37.6	1.1
02:25 AM - 02:30 AM	45.0	40.9	4.1	2.0	-	46.0	37.0	9.0
02:30 AM - 02:35 AM	42.8	43.9	-1.1	7.0	-	38.8	38.2	0.6
02:35 AM - 02:40 AM	43.5	41.1	2.4	4.5	-	42.0	37.7	4.3
02:40 AM - 02:45 AM	39.5	42.1	-2.6	7.0	-	35.5	37.1	-1.6
02:45 AM - 02:50 AM	43.9	42.7	1.2	7.0	-	39.9	37.8	2.1
02:50 AM - 02:55 AM	44.2	42.6	1.6	4.5	-	42.7	38.1	4.6
02:55 AM - 03:00 AM	42.3	42.1	0.2	7.0	-	38.3	38.2	0.1
03:00 AM - 03:05 AM	43.4	42.6	0.8	7.0	-	39.4	37.8	1.6
03:05 AM - 03:10 AM	42.9	44.5	-1.6	7.0	-	38.9	38.8	0.1
03:10 AM - 03:15 AM	43.6	41.2	2.4	4.5	-	42.1	37.8	4.3
03:15 AM - 03:20 AM	43.2	43.8	-0.6	7.0	-	39.2	39.4	-0.2
03:20 AM - 03:25 AM	45.2	44.5	0.7	7.0	-	41.2	38.6	2.6
03:25 AM - 03:30 AM	43.6	43.6	0.0	7.0	-	39.6	38.6	1.0
03:30 AM - 03:35 AM	42.1	43.3	-1.2	7.0	-	38.1	38.9	-0.8
03:35 AM - 03:40 AM	47.9	52.8	-4.9	7.0	-	43.9	47.7	-3.8
03:40 AM - 03:45 AM	45.6	53.7	-8.1	7.0	-	41.6	49.3	-7.7
03:45 AM - 03:50 AM	44.2	54.2	-10.0	7.0	-	40.2	49.9	-9.7
03:50 AM - 03:55 AM	44.2	55.1	-10.9	7.0	-	40.2	48.1	-7.9

Approved by

Wilawan Borirak  
Manager

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

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

Life Solutions

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872465-1

Page 3 of 3

Sample No. 23124326-27  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Saticha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
03:55 AM - 04:00 AM	46.4	54.4	-8.0	7.0	-	42.4	50.5	-8.1
04:00 AM - 04:05 AM	44.6	54.3	-9.7	7.0	-	40.6	50.2	-9.6
04:05 AM - 04:10 AM	54.7	55.9	-1.2	7.0	-	50.7	51.6	-0.9
04:10 AM - 04:15 AM	44.1	55.7	-11.6	7.0	-	40.1	51.5	-11.4
04:15 AM - 04:20 AM	46.9	55.1	-8.2	7.0	-	42.9	50.6	-7.7
04:20 AM - 04:25 AM	48.0	55.3	-7.3	7.0	-	44.0	50.9	-6.9
04:25 AM - 04:30 AM	49.5	55.4	-5.9	7.0	-	45.5	51.2	-5.7
04:30 AM - 04:35 AM	46.8	54.8	-8.0	7.0	-	42.8	49.7	-6.9
04:35 AM - 04:40 AM	47.1	54.1	-7.0	7.0	-	43.1	49.4	-6.3
04:40 AM - 04:45 AM	47.9	54.3	-6.4	7.0	-	43.9	48.8	-4.9
04:45 AM - 04:50 AM	47.9	54.9	-7.0	7.0	-	43.9	50.2	-6.3
04:50 AM - 04:55 AM	47.8	54.4	-6.6	7.0	-	43.8	49.0	-5.2
04:55 AM - 05:00 AM	48.9	54.7	-5.8	7.0	-	44.9	49.7	-4.8
05:00 AM - 05:05 AM	48.9	53.5	-4.6	7.0	-	44.9	45.0	-0.1
05:05 AM - 05:10 AM	50.6	47.4	3.2	3.0	-	50.6	42.9	7.7
05:10 AM - 05:15 AM	46.8	47.4	-0.6	7.0	-	42.8	43.7	-0.9
05:15 AM - 05:20 AM	49.7	48.5	1.2	7.0	-	45.7	43.6	2.1
05:20 AM - 05:25 AM	53.1	49.7	3.4	3.0	-	53.1	45.0	8.1
05:25 AM - 05:30 AM	48.9	49.5	-0.6	7.0	-	44.9	43.7	1.2
05:30 AM - 05:35 AM	49.6	50.8	-1.2	7.0	-	45.6	46.0	-0.4
05:35 AM - 05:40 AM	50.1	51.3	-1.2	7.0	-	46.1	45.9	0.2
05:40 AM - 05:45 AM	52.9	49.6	3.3	3.0	-	52.9	45.2	7.7
05:45 AM - 05:50 AM	52.0	48.7	3.3	3.0	-	52.0	45.5	6.5
05:50 AM - 05:55 AM	51.8	50.0	1.8	4.5	-	50.3	45.4	4.9
05:55 AM - 06:00 AM	53.7	50.0	3.7	2.0	-	54.7	46.7	8.0
06:00 AM - 07:00 AM	53.9	52.8	1.1	7.0	46.9	-	48.4	-1.5
07:00 AM - 08:00 AM	54.0	52.5	1.5	4.5	49.5	-	48.9	0.6
08:00 AM - 09:00 AM	53.3	52.6	0.7	7.0	46.3	-	48.9	-2.6
09:00 AM - 10:00 AM	53.0	51.7	1.3	7.0	46.0	-	47.8	-1.8
10:00 AM - 11:00 AM	52.7	51.4	1.3	7.0	45.7	-	46.7	-1.0
11:00 AM - 12:00 PM	52.1	52.8	-0.7	7.0	45.1	-	46.2	-1.1
12:00 PM - 01:00 PM	53.6	57.0	-3.4	7.0	46.6	-	48.3	-1.7

ค่ามาตรฐาน

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง 10วิธีการวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานและขีดจำกัดเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด พิจารณาจากวันที่ 22-23 ธันวาคม 2566

ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.23124327-27 วันที่ตรวจวัด 22-23 ธันวาคม 2566)

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

Approved by

*WibB.*

Witawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report Number : 2872466-1

Page 1 of 3

Sample No. 23124326-28  
Parameter เสียงรบกวน  
Location บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Saticha Phetsawaeng  
Sound Level Meter 00296516

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงพื้นฐาน	ค่าระดับการรบกวน
					กลางวัน	กลางคืน		
01:00 PM - 02:00 PM	52.9	53.3	-0.4	7.0	45.9	-	47.3	-1.4
02:00 PM - 03:00 PM	52.4	52.1	0.3	7.0	45.4	-	47.4	-2.0
03:00 PM - 04:00 PM	52.7	52.0	0.7	7.0	45.7	-	47.1	-1.4
04:00 PM - 05:00 PM	53.8	52.5	1.3	7.0	46.8	-	48.4	-1.6
05:00 PM - 06:00 PM	53.9	51.7	2.2	4.5	49.4	-	48.4	1.0
06:00 PM - 07:00 PM	56.0	57.1	-1.1	7.0	49.0	-	53.4	-4.4
07:00 PM - 08:00 PM	52.6	55.0	-2.4	7.0	45.6	-	52.4	-6.8
08:00 PM - 09:00 PM	51.1	54.7	-3.6	7.0	44.1	-	51.9	-7.8
09:00 PM - 10:00 PM	50.5	58.0	-7.5	7.0	43.5	-	46.3	-2.8
10:00 PM - 10:05 PM	51.8	49.3	2.5	3.0	-	51.8	46.5	5.3
10:05 PM - 10:10 PM	50.1	58.4	-8.3	7.0	-	46.1	47.7	-1.6
10:10 PM - 10:15 PM	48.4	51.5	-3.1	7.0	-	44.4	48.1	-3.7
10:15 PM - 10:20 PM	50.4	49.7	0.7	7.0	-	46.4	47.0	-0.6
10:20 PM - 10:25 PM	49.5	53.6	-4.1	7.0	-	45.5	46.8	-1.3
10:25 PM - 10:30 PM	52.6	50.3	2.3	4.5	-	51.1	46.4	4.7
10:30 PM - 10:35 PM	50.6	48.3	2.3	4.5	-	49.1	45.8	3.3
10:35 PM - 10:40 PM	55.3	46.7	8.6	0.5	-	57.8	44.3	13.5
10:40 PM - 10:45 PM	49.6	47.1	2.5	3.0	-	49.6	44.6	5.0
10:45 PM - 10:50 PM	49.7	48.3	1.4	7.0	-	45.7	44.8	0.9
10:50 PM - 10:55 PM	48.5	46.8	1.7	4.5	-	47.0	44.3	2.7
10:55 PM - 11:00 PM	44.9	47.8	-2.9	7.0	-	40.9	44.7	-3.8
11:00 PM - 11:05 PM	48.6	50.9	-2.3	7.0	-	44.6	44.3	0.3
11:05 PM - 11:10 PM	46.8	48.2	-1.4	7.0	-	42.8	45.0	-2.2
11:10 PM - 11:15 PM	48.2	49.2	-1.0	7.0	-	44.2	45.8	-1.6
11:15 PM - 11:20 PM	52.0	48.5	3.5	2.0	-	53.0	44.3	8.7
11:20 PM - 11:25 PM	47.9	47.8	0.1	7.0	-	43.9	43.8	0.1
11:25 PM - 11:30 PM	49.6	52.3	-2.7	7.0	-	45.6	45.2	0.4
11:30 PM - 11:35 PM	50.6	48.7	1.9	4.5	-	49.1	43.9	5.2
11:35 PM - 11:40 PM	47.3	47.2	0.1	7.0	-	43.3	44.3	-1.0
11:40 PM - 11:45 PM	47.4	48.2	-0.8	7.0	-	43.4	45.0	-1.6
11:45 PM - 11:50 PM	54.4	47.2	7.2	1.0	-	56.4	44.3	12.1
11:50 PM - 11:55 PM	49.1	44.3	4.8	1.5	-	50.6	40.8	9.8
11:55 PM - 12:00 AM	49.0	45.7	3.3	3.0	-	49.0	41.1	7.9
12:00 AM - 12:05 AM	48.2	44.9	3.3	3.0	-	48.2	40.3	7.9
12:05 AM - 12:10 AM	46.2	45.8	0.4	7.0	-	42.2	42.4	-0.2
12:10 AM - 12:15 AM	46.8	47.3	-0.5	7.0	-	42.8	42.9	-0.1
12:15 AM - 12:20 AM	46.6	44.3	2.3	4.5	-	45.1	40.4	4.7
12:20 AM - 12:25 AM	43.6	44.5	-0.9	7.0	-	39.6	40.7	-1.1
12:25 AM - 12:30 AM	47.4	43.3	4.1	2.0	-	48.4	39.2	9.2
12:30 AM - 12:35 AM	48.6	44.9	3.7	2.0	-	49.6	40.1	9.5

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

Approved by

*WibB.*

Witawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872466-1

Sample No. : 23124326-28  
Parameter : เสียงรบกวน  
Location : บริเวณโครงการที่อยู่อาศัยชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date : Dec 23 - 24, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296516

Page 2 of 3

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน	กลางคืน	
12:35 AM - 12:40 AM	42.9	44.9	-2.0	7.0	-	38.9	39.7
12:40 AM - 12:45 AM	45.2	44.3	0.9	7.0	-	41.2	39.0
12:45 AM - 12:50 AM	45.6	43.4	2.2	4.5	-	44.1	39.7
12:50 AM - 12:55 AM	43.1	50.1	-7.2	7.0	-	39.1	39.3
12:55 AM - 01:00 AM	46.7	42.6	4.1	2.0	-	47.7	38.6
01:00 AM - 01:05 AM	44.3	43.6	0.7	7.0	-	40.3	39.2
01:05 AM - 01:10 AM	43.6	44.3	-0.7	7.0	-	39.6	39.0
01:10 AM - 01:15 AM	52.9	44.0	8.9	0.5	-	55.4	39.7
01:15 AM - 01:20 AM	43.6	42.6	1.0	7.0	-	39.6	39.0
01:20 AM - 01:25 AM	43.7	43.5	0.2	7.0	-	39.7	38.6
01:25 AM - 01:30 AM	43.9	48.3	-4.4	7.0	-	39.9	39.6
01:30 AM - 01:35 AM	44.7	43.0	1.7	4.5	-	43.2	38.6
01:35 AM - 01:40 AM	43.0	44.1	-1.1	7.0	-	39.0	39.1
01:40 AM - 01:45 AM	44.2	42.5	1.7	4.5	-	42.7	39.1
01:45 AM - 01:50 AM	50.4	43.8	6.6	1.0	-	52.4	40.7
01:50 AM - 01:55 AM	43.4	43.1	0.3	7.0	-	39.4	39.8
01:55 AM - 02:00 AM	44.4	43.9	0.5	7.0	-	40.4	39.2
02:00 AM - 02:05 AM	43.1	43.2	-0.1	7.0	-	39.1	39.6
02:05 AM - 02:10 AM	43.8	44.0	-0.2	7.0	-	39.8	39.3
02:10 AM - 02:15 AM	43.7	41.5	2.2	4.5	-	42.2	36.8
02:15 AM - 02:20 AM	43.2	42.1	1.1	7.0	-	39.2	37.9
02:20 AM - 02:25 AM	42.8	41.0	1.8	4.5	-	41.3	37.9
02:25 AM - 02:30 AM	43.0	44.6	-1.6	7.0	-	39.0	40.0
02:30 AM - 02:35 AM	42.9	43.7	-0.8	7.0	-	38.9	39.4
02:35 AM - 02:40 AM	41.3	43.4	-2.1	7.0	-	37.3	38.6
02:40 AM - 02:45 AM	40.5	41.5	-1.0	7.0	-	36.5	38.2
02:45 AM - 02:50 AM	45.5	46.1	-0.6	7.0	-	41.5	39.9
02:50 AM - 02:55 AM	41.9	46.6	-4.7	7.0	-	37.9	38.0
02:55 AM - 03:00 AM	43.0	41.5	1.5	4.5	-	41.5	37.8
03:00 AM - 03:05 AM	41.5	45.6	-4.1	7.0	-	37.5	37.5
03:05 AM - 03:10 AM	49.5	42.5	7.0	1.0	-	51.5	38.3
03:10 AM - 03:15 AM	48.2	42.7	5.5	1.5	-	49.7	38.2
03:15 AM - 03:20 AM	45.6	47.3	-1.7	7.0	-	41.6	39.7
03:20 AM - 03:25 AM	41.4	44.2	-2.8	7.0	-	37.4	40.4
03:25 AM - 03:30 AM	41.9	42.6	-0.7	7.0	-	37.9	38.5
03:30 AM - 03:35 AM	48.3	44.2	4.1	2.0	-	49.3	39.7
03:35 AM - 03:40 AM	48.1	44.5	3.6	2.0	-	49.1	41.2
03:40 AM - 03:45 AM	45.0	44.0	1.0	7.0	-	41.0	41.2
03:45 AM - 03:50 AM	41.0	46.4	-5.4	7.0	-	37.0	43.0
03:50 AM - 03:55 AM	43.1	46.1	-3.0	7.0	-	39.1	42.1

The above report is valid only for the analyzed 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) and recommends that this report is not reproduced except in full.

Approved by

Wilawan Borikak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124326  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report Number : 2872466-1

Sample No. : 23124326-28  
Parameter : เสียงรบกวน  
Location : บริเวณโครงการที่อยู่อาศัยชุมชนทางทิศตะวันออก (N4) (GPS 47P 0731031, 1424112)  
Measurement Date : Dec 23 - 24, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00296516

Page 3 of 3

ระดับเสียง (dB(A))							
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		ค่าระดับการรบกวน
					กลางวัน	กลางคืน	
03:55 AM - 04:00 AM	42.7	45.2	-2.5	7.0	-	38.7	42.5
04:00 AM - 04:05 AM	47.0	45.5	1.5	4.5	-	45.5	42.9
04:05 AM - 04:10 AM	47.1	50.6	-3.5	7.0	-	43.1	41.1
04:10 AM - 04:15 AM	44.5	57.1	-12.6	7.0	-	40.5	51.2
04:15 AM - 04:20 AM	41.0	58.4	-17.4	7.0	-	37.0	54.2
04:20 AM - 04:25 AM	42.2	57.7	-15.5	7.0	-	38.2	54.0
04:25 AM - 04:30 AM	45.3	56.7	-11.4	7.0	-	41.3	48.5
04:30 AM - 04:35 AM	48.7	56.4	-7.7	7.0	-	44.7	52.1
04:35 AM - 04:40 AM	52.9	55.6	-2.7	7.0	-	48.9	51.8
04:40 AM - 04:45 AM	47.3	56.2	-8.9	7.0	-	43.3	52.5
04:45 AM - 04:50 AM	48.3	55.9	-7.6	7.0	-	44.3	52.4
04:50 AM - 04:55 AM	50.7	55.5	-4.8	7.0	-	46.7	51.3
04:55 AM - 05:00 AM	47.0	54.8	-7.8	7.0	-	43.0	51.3
05:00 AM - 05:05 AM	49.2	55.2	-6.0	7.0	-	45.2	50.9
05:05 AM - 05:10 AM	49.3	50.1	-0.8	7.0	-	45.3	46.6
05:10 AM - 05:15 AM	47.9	48.0	-0.1	7.0	-	43.9	45.1
05:15 AM - 05:20 AM	45.7	47.6	-1.9	7.0	-	41.7	45.5
05:20 AM - 05:25 AM	45.8	46.9	-1.1	7.0	-	41.8	44.4
05:25 AM - 05:30 AM	46.1	47.5	-1.4	7.0	-	42.1	45.0
05:30 AM - 05:35 AM	48.6	47.4	1.2	7.0	-	44.6	44.7
05:35 AM - 05:40 AM	47.8	50.3	-2.7	7.0	-	43.8	44.8
05:40 AM - 05:45 AM	49.8	50.3	-0.9	7.0	-	45.8	45.5
05:45 AM - 05:50 AM	47.7	52.8	-5.1	7.0	-	43.7	46.7
05:50 AM - 05:55 AM	48.3	51.0	-2.7	7.0	-	44.3	46.0
05:55 AM - 06:00 AM	52.1	47.7	4.4	2.0	-	53.1	44.0
06:00 AM - 07:00 AM	51.5	50.3	1.2	7.0	44.5	-	45.7
07:00 AM - 08:00 AM	53.7	52.5	1.2	7.0	46.7	-	46.9
08:00 AM - 09:00 AM	53.5	53.3	0.2	7.0	46.5	-	47.3
09:00 AM - 10:00 AM	52.1	53.3	-1.2	7.0	45.1	-	46.4
10:00 AM - 11:00 AM	51.8	53.3	-1.5	7.0	44.8	-	46.6
11:00 AM - 12:00 PM	51.2	54.6	-3.4	7.0	44.2	-	45.4
12:00 PM - 01:00 PM	52.6	54.4	-1.8	7.0	45.6	-	46.7
ค่ามาตรฐาน							≤ 10

Reference Method :

1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

มาตรฐาน

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงและค่าเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 23-24 ธันวาคม 2566

ระดับเสียงรบกวนและระดับเสียงขณะไม่มีการรบกวน (Sample No.23124327-28 วันที่ตรวจวัด 23-24 ธันวาคม 2566)

The above report is valid only for the analyzed 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) and recommends that this report is not reproduced except in full.

Approved by

Wilawan Borikak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872468-1

Page 1 of 3

Sample No. 23124327-1  
Parameter Noise  
Location หมู่ที่ 1 บ้านบ่อ 12 ตำบลหนองแขก (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	50.9	76.2	43.4
12:00 PM - 01:00 PM	47.3	71.5	41.6
01:00 PM - 02:00 PM	46.1	68.4	42.2
02:00 PM - 03:00 PM	53.1	89.0	43.6
03:00 PM - 04:00 PM	50.7	75.6	42.1
04:00 PM - 05:00 PM	49.0	69.8	43.0
05:00 PM - 06:00 PM	45.7	67.9	41.9
06:00 PM - 07:00 PM	44.6	72.8	42.2
07:00 PM - 08:00 PM	47.5	68.7	42.8
08:00 PM - 09:00 PM	45.2	62.2	42.1
09:00 PM - 10:00 PM	45.9	66.4	42.7
10:00 PM - 10:05 PM	42.8	47.8	41.7
10:05 PM - 10:10 PM	44.0	53.4	41.8
10:10 PM - 10:15 PM	45.7	55.9	41.8
10:15 PM - 10:20 PM	42.5	51.1	40.8
10:20 PM - 10:25 PM	46.5	55.0	43.7
10:25 PM - 10:30 PM	48.1	56.4	45.4
10:30 PM - 10:35 PM	48.3	63.3	41.5
10:35 PM - 10:40 PM	45.6	54.0	41.2
10:40 PM - 10:45 PM	45.0	57.5	41.7
10:45 PM - 10:50 PM	44.4	52.8	41.3
10:50 PM - 10:55 PM	45.5	57.6	41.8
10:55 PM - 11:00 PM	48.1	60.7	42.3
11:00 PM - 11:05 PM	46.2	59.0	41.9
11:05 PM - 11:10 PM	45.4	58.6	39.5
11:10 PM - 11:15 PM	43.4	57.7	39.1
11:15 PM - 11:20 PM	43.4	58.0	39.9
11:20 PM - 11:25 PM	42.8	54.8	39.0
11:25 PM - 11:30 PM	42.0	53.7	39.4
11:30 PM - 11:35 PM	48.7	64.3	39.0
11:35 PM - 11:40 PM	47.2	63.2	38.6
11:40 PM - 11:45 PM	43.0	58.1	38.3
11:45 PM - 11:50 PM	42.1	55.3	38.6
11:50 PM - 11:55 PM	41.7	54.0	38.5
11:55 PM - 12:00 AM	41.3	53.0	38.7
12:00 AM - 12:05 AM	43.2	53.8	38.8
12:05 AM - 12:10 AM	42.8	56.6	39.1
12:10 AM - 12:15 AM	43.5	57.4	39.3
12:15 AM - 12:20 AM	40.5	47.8	38.9
12:20 AM - 12:25 AM	39.5	45.2	38.5

The above results are valid only for the test and tested equipment 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

*Wilaw Borirak*  
Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872468-1

Page 2 of 3

Sample No. 23124327-1  
Parameter Noise  
Location หมู่ที่ 1 บ้านบ่อ 12 ตำบลหนองแขก (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	39.4	45.8	38.3
12:30 AM - 12:35 AM	41.4	53.0	39.0
12:35 AM - 12:40 AM	41.3	49.1	39.2
12:40 AM - 12:45 AM	41.1	49.9	39.1
12:45 AM - 12:50 AM	39.5	43.2	38.6
12:50 AM - 12:55 AM	41.8	59.5	38.8
12:55 AM - 01:00 AM	42.5	56.9	38.9
01:00 AM - 01:05 AM	41.0	50.2	38.9
01:05 AM - 01:10 AM	39.7	47.3	37.9
01:10 AM - 01:15 AM	46.1	60.0	37.2
01:15 AM - 01:20 AM	41.7	53.2	38.1
01:20 AM - 01:25 AM	44.1	56.2	37.6
01:25 AM - 01:30 AM	41.3	54.1	37.6
01:30 AM - 01:35 AM	40.2	51.9	37.8
01:35 AM - 01:40 AM	39.0	52.3	37.6
01:40 AM - 01:45 AM	38.6	53.3	37.4
01:45 AM - 01:50 AM	38.4	52.7	37.3
01:50 AM - 01:55 AM	40.9	51.8	37.2
01:55 AM - 02:00 AM	39.3	53.8	36.7
02:00 AM - 02:05 AM	39.5	48.5	37.5
02:05 AM - 02:10 AM	38.4	51.4	36.6
02:10 AM - 02:15 AM	38.1	48.1	36.6
02:15 AM - 02:20 AM	38.7	48.2	35.8
02:20 AM - 02:25 AM	36.4	47.8	35.3
02:25 AM - 02:30 AM	38.0	46.5	36.1
02:30 AM - 02:35 AM	47.5	60.7	38.0
02:35 AM - 02:40 AM	46.0	59.5	37.4
02:40 AM - 02:45 AM	43.2	57.4	37.4
02:45 AM - 02:50 AM	39.0	47.1	36.5
02:50 AM - 02:55 AM	42.4	60.8	35.7
02:55 AM - 03:00 AM	42.2	55.0	36.2
03:00 AM - 03:05 AM	42.2	69.0	35.3
03:05 AM - 03:10 AM	39.1	51.8	35.8
03:10 AM - 03:15 AM	37.9	55.9	35.7
03:15 AM - 03:20 AM	37.6	45.0	35.3
03:20 AM - 03:25 AM	40.0	55.9	35.5
03:25 AM - 03:30 AM	37.8	57.0	35.5
03:30 AM - 03:35 AM	45.9	70.6	36.2
03:35 AM - 03:40 AM	48.0	68.4	36.6
03:40 AM - 03:45 AM	37.9	56.0	36.2

The above results are valid only for the test and tested equipment 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

*Wilaw Borirak*  
Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872468-1

Page 3 of 3

**Sample No.** 23124327-1  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาภิรม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 17 - 18, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	42.0	63.2	37.2
03:50 AM - 03:55 AM	38.4	47.2	36.0
03:55 AM - 04:00 AM	38.3	43.8	35.9
04:00 AM - 04:05 AM	38.3	46.3	36.0
04:05 AM - 04:10 AM	39.3	50.7	37.5
04:10 AM - 04:15 AM	39.9	48.5	37.2
04:15 AM - 04:20 AM	40.4	49.4	38.4
04:20 AM - 04:25 AM	45.0	57.4	39.2
04:25 AM - 04:30 AM	39.6	47.9	37.8
04:30 AM - 04:35 AM	41.4	51.3	38.1
04:35 AM - 04:40 AM	41.7	52.7	39.0
04:40 AM - 04:45 AM	44.2	67.8	39.1
04:45 AM - 04:50 AM	44.8	61.6	41.6
04:50 AM - 04:55 AM	44.4	63.2	40.7
04:55 AM - 05:00 AM	46.5	68.2	41.2
05:00 AM - 05:05 AM	50.2	68.8	42.2
05:05 AM - 05:10 AM	69.6	91.9	42.2
05:10 AM - 05:15 AM	45.3	59.6	42.1
05:15 AM - 05:20 AM	49.1	62.2	41.8
05:20 AM - 05:25 AM	49.4	67.7	41.8
05:25 AM - 05:30 AM	53.0	71.8	42.8
05:30 AM - 05:35 AM	52.0	68.2	42.7
05:35 AM - 05:40 AM	46.9	63.3	43.7
05:40 AM - 05:45 AM	47.9	65.4	44.1
05:45 AM - 05:50 AM	47.1	59.5	44.3
05:50 AM - 05:55 AM	47.7	63.7	43.9
05:55 AM - 06:00 AM	46.3	56.7	43.9
06:00 AM - 07:00 AM	51.4	75.1	45.8
07:00 AM - 08:00 AM	50.0	73.8	44.6
08:00 AM - 09:00 AM	48.3	70.6	44.6
09:00 AM - 10:00 AM	50.9	72.2	43.8
10:00 AM - 11:00 AM	59.1	88.2	46.4

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดขึ้นจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the sample(s) tested 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*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872469-1

Page 1 of 3

**Sample No.** 23124327-2  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาภิรม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 18 - 19, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.5	65.8	44.3
12:00 PM - 01:00 PM	49.6	67.9	44.7
01:00 PM - 02:00 PM	49.6	69.2	45.3
02:00 PM - 03:00 PM	49.9	75.6	45.3
03:00 PM - 04:00 PM	52.4	80.0	45.2
04:00 PM - 05:00 PM	51.1	79.5	43.7
05:00 PM - 06:00 PM	45.7	67.4	42.5
06:00 PM - 07:00 PM	45.7	68.1	43.0
07:00 PM - 08:00 PM	45.5	68.3	42.8
08:00 PM - 09:00 PM	45.0	66.0	42.0
09:00 PM - 10:00 PM	43.5	62.7	40.3
10:00 PM - 10:05 PM	43.2	58.6	39.7
10:05 PM - 10:10 PM	42.9	58.6	39.1
10:10 PM - 10:15 PM	41.8	58.6	39.5
10:15 PM - 10:20 PM	43.2	51.0	39.1
10:20 PM - 10:25 PM	44.7	56.0	40.5
10:25 PM - 10:30 PM	46.0	56.0	39.4
10:30 PM - 10:35 PM	43.6	48.4	38.8
10:35 PM - 10:40 PM	40.8	57.0	39.0
10:40 PM - 10:45 PM	39.8	53.9	39.1
10:45 PM - 10:50 PM	40.7	49.2	38.5
10:50 PM - 10:55 PM	40.5	52.4	38.0
10:55 PM - 11:00 PM	43.0	53.3	38.9
11:00 PM - 11:05 PM	41.5	56.1	38.2
11:05 PM - 11:10 PM	39.7	55.9	38.9
11:10 PM - 11:15 PM	41.1	50.8	38.2
11:15 PM - 11:20 PM	41.3	52.2	37.9
11:20 PM - 11:25 PM	40.4	50.4	38.0
11:25 PM - 11:30 PM	39.6	50.5	37.8
11:30 PM - 11:35 PM	40.0	49.2	37.5
11:35 PM - 11:40 PM	41.3	47.8	38.0
11:40 PM - 11:45 PM	43.3	47.6	38.4
11:45 PM - 11:50 PM	42.6	56.4	37.6
11:50 PM - 11:55 PM	39.2	53.7	38.2
11:55 PM - 12:00 AM	41.4	50.5	36.8
12:00 AM - 12:05 AM	40.2	51.7	37.2
12:05 AM - 12:10 AM	38.7	53.1	37.3
12:10 AM - 12:15 AM	39.7	51.4	37.4
12:15 AM - 12:20 AM	38.5	51.3	37.1
12:20 AM - 12:25 AM	48.8	49.9	37.1
		64.5	37.7

The above results are valid only for the sample(s) tested 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*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124327**  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report No. :** 2872469-1

Page 2 of 3

**Sample No.** 23124327-2  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านรอบ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 18 - 19, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	39.3	52.5	36.6
12:30 AM - 12:35 AM	39.6	48.2	37.1
12:35 AM - 12:40 AM	39.9	57.0	36.5
12:40 AM - 12:45 AM	39.3	56.7	36.9
12:45 AM - 12:50 AM	38.5	45.3	36.8
12:50 AM - 12:55 AM	40.2	52.1	36.4
12:55 AM - 01:00 AM	37.6	52.4	36.1
01:00 AM - 01:05 AM	38.6	46.2	36.3
01:05 AM - 01:10 AM	38.3	49.9	36.8
01:10 AM - 01:15 AM	41.5	50.4	37.3
01:15 AM - 01:20 AM	39.2	56.8	36.9
01:20 AM - 01:25 AM	42.2	56.0	37.1
01:25 AM - 01:30 AM	39.8	57.2	36.3
01:30 AM - 01:35 AM	41.4	51.6	37.4
01:35 AM - 01:40 AM	38.4	45.0	36.8
01:40 AM - 01:45 AM	38.0	45.6	37.1
01:45 AM - 01:50 AM	38.2	46.9	37.0
01:50 AM - 01:55 AM	40.5	52.2	37.4
01:55 AM - 02:00 AM	39.6	53.5	37.9
02:00 AM - 02:05 AM	40.9	53.6	37.6
02:05 AM - 02:10 AM	38.2	48.2	37.3
02:10 AM - 02:15 AM	38.3	42.0	37.0
02:15 AM - 02:20 AM	37.9	43.8	37.1
02:20 AM - 02:25 AM	36.6	44.9	36.9
02:25 AM - 02:30 AM	37.6	42.6	36.8
02:30 AM - 02:35 AM	37.8	43.0	36.8
02:35 AM - 02:40 AM	37.2	42.3	36.1
02:40 AM - 02:45 AM	42.0	55.2	35.9
02:45 AM - 02:50 AM	37.6	48.3	36.0
02:50 AM - 02:55 AM	38.1	48.0	36.4
02:55 AM - 03:00 AM	38.1	47.2	36.4
03:00 AM - 03:05 AM	38.2	58.7	36.4
03:05 AM - 03:10 AM	38.4	45.3	36.9
03:10 AM - 03:15 AM	41.3	52.0	37.0
03:15 AM - 03:20 AM	37.0	47.5	35.3
03:20 AM - 03:25 AM	37.9	50.4	36.1
03:25 AM - 03:30 AM	38.9	53.5	36.8
03:30 AM - 03:35 AM	39.3	53.3	37.1
03:35 AM - 03:40 AM	38.3	48.9	36.6
03:40 AM - 03:45 AM	40.7	59.7	36.0

The above results are valid only for the analyzed 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

*Wilwan*

Wilwan Borirak  
Manager

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124327**  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report No. :** 2872469-1

Page 3 of 3

**Sample No.** 23124327-2  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านรอบ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 18 - 19, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	38.5	56.9	36.2
03:50 AM - 03:55 AM	40.0	65.9	35.7
03:55 AM - 04:00 AM	41.1	47.2	38.0
04:00 AM - 04:05 AM	40.5	57.7	36.8
04:05 AM - 04:10 AM	53.9	74.2	36.5
04:10 AM - 04:15 AM	43.7	73.4	38.1
04:15 AM - 04:20 AM	63.8	80.7	37.6
04:20 AM - 04:25 AM	42.2	60.2	36.4
04:25 AM - 04:30 AM	40.5	50.3	37.8
04:30 AM - 04:35 AM	42.2	51.6	38.4
04:35 AM - 04:40 AM	43.3	51.4	40.3
04:40 AM - 04:45 AM	42.7	51.4	40.2
04:45 AM - 04:50 AM	42.9	56.7	41.0
04:50 AM - 04:55 AM	41.8	50.3	40.2
04:55 AM - 05:00 AM	44.4	58.3	40.9
05:00 AM - 05:05 AM	49.0	61.8	42.0
05:05 AM - 05:10 AM	51.0	66.6	41.8
05:10 AM - 05:15 AM	47.4	62.7	42.0
05:15 AM - 05:20 AM	47.0	65.6	42.8
05:20 AM - 05:25 AM	48.0	61.0	43.2
05:25 AM - 05:30 AM	46.5	71.0	43.0
05:30 AM - 05:35 AM	47.7	65.3	41.8
05:35 AM - 05:40 AM	45.7	55.9	43.4
05:40 AM - 05:45 AM	46.0	57.9	43.5
05:45 AM - 05:50 AM	47.5	67.2	44.5
05:50 AM - 05:55 AM	50.5	66.9	45.2
05:55 AM - 06:00 AM	49.2	59.7	44.8
06:00 AM - 07:00 AM	51.6	70.5	46.5
07:00 AM - 08:00 AM	50.9	68.5	44.6
08:00 AM - 09:00 AM	51.2	70.3	45.5
09:00 AM - 10:00 AM	52.4	74.3	45.6
10:00 AM - 11:00 AM	50.0	70.9	44.4

### Reference Method :

1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และการประเมินเสียงสูงส่งที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed 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

*Wilwan*

Wilwan Borirak  
Manager

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

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872470-1

Page 1 of 3

**Sample No.** 23124327-3  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านระบือ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 19 - 20, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.4	69.3	42.7
12:00 PM - 01:00 PM	52.8	76.6	43.1
01:00 PM - 02:00 PM	55.7	90.6	43.7
02:00 PM - 03:00 PM	49.8	69.7	43.4
03:00 PM - 04:00 PM	53.2	80.2	44.0
04:00 PM - 05:00 PM	49.4	71.3	43.2
05:00 PM - 06:00 PM	47.0	70.2	42.8
06:00 PM - 07:00 PM	45.6	65.6	42.6
07:00 PM - 08:00 PM	46.3	66.9	43.0
08:00 PM - 09:00 PM	45.0	61.6	42.0
09:00 PM - 10:00 PM	48.1	61.2	44.4
10:00 PM - 10:05 PM	46.2	61.8	40.5
10:05 PM - 10:10 PM	44.3	54.9	39.4
10:10 PM - 10:15 PM	47.0	55.5	43.3
10:15 PM - 10:20 PM	48.0	53.6	45.5
10:20 PM - 10:25 PM	49.0	54.9	46.4
10:25 PM - 10:30 PM	49.1	56.2	46.4
10:30 PM - 10:35 PM	49.6	56.5	46.9
10:35 PM - 10:40 PM	46.8	55.5	41.6
10:40 PM - 10:45 PM	48.0	57.6	42.9
10:45 PM - 10:50 PM	43.9	54.9	41.0
10:50 PM - 10:55 PM	47.4	58.1	41.3
10:55 PM - 11:00 PM	46.5	59.0	42.5
11:00 PM - 11:05 PM	45.9	55.4	42.1
11:05 PM - 11:10 PM	45.9	58.3	42.5
11:10 PM - 11:15 PM	44.3	54.6	42.1
11:15 PM - 11:20 PM	43.2	49.8	39.8
11:20 PM - 11:25 PM	45.0	61.2	38.8
11:25 PM - 11:30 PM	40.8	45.8	39.4
11:30 PM - 11:35 PM	40.8	51.5	39.4
11:35 PM - 11:40 PM	41.5	53.4	38.8
11:40 PM - 11:45 PM	44.7	61.3	38.4
11:45 PM - 11:50 PM	41.5	59.9	38.3
11:50 PM - 11:55 PM	41.9	52.9	38.3
11:55 PM - 12:00 AM	47.0	61.4	38.0
12:00 AM - 12:05 AM	39.6	50.3	37.1
12:05 AM - 12:10 AM	38.9	48.6	36.3
12:10 AM - 12:15 AM	40.1	49.5	36.5
12:15 AM - 12:20 AM	40.3	48.8	36.4
12:20 AM - 12:25 AM	37.3	48.6	36.0

The above results are valid only for the analysis/checked 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) Limited is not responsible for any use of this report in a manner not intended by ALS.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872470-1

Page 2 of 3

**Sample No.** 23124327-3  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านระบือ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 19 - 20, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	38.7	48.4	37.5
12:30 AM - 12:35 AM	38.8	43.7	37.3
12:35 AM - 12:40 AM	39.8	48.2	37.4
12:40 AM - 12:45 AM	39.1	54.3	37.1
12:45 AM - 12:50 AM	39.8	48.5	37.5
12:50 AM - 12:55 AM	38.4	43.5	37.4
12:55 AM - 01:00 AM	38.6	47.4	37.0
01:00 AM - 01:05 AM	40.8	52.8	37.6
01:05 AM - 01:10 AM	41.0	53.3	37.9
01:10 AM - 01:15 AM	39.8	51.0	37.8
01:15 AM - 01:20 AM	40.4	53.3	37.7
01:20 AM - 01:25 AM	39.5	50.9	37.8
01:25 AM - 01:30 AM	39.1	52.2	37.5
01:30 AM - 01:35 AM	39.8	52.9	37.1
01:35 AM - 01:40 AM	43.2	54.6	37.6
01:40 AM - 01:45 AM	43.3	58.8	37.8
01:45 AM - 01:50 AM	39.9	52.5	37.3
01:50 AM - 01:55 AM	39.1	48.9	36.8
01:55 AM - 02:00 AM	40.9	52.3	37.7
02:00 AM - 02:05 AM	38.7	49.9	35.7
02:05 AM - 02:10 AM	43.0	55.4	37.2
02:10 AM - 02:15 AM	38.4	53.6	35.9
02:15 AM - 02:20 AM	37.9	49.6	35.4
02:20 AM - 02:25 AM	40.6	51.1	36.3
02:25 AM - 02:30 AM	39.2	50.1	36.3
02:30 AM - 02:35 AM	38.8	47.8	36.3
02:35 AM - 02:40 AM	40.5	52.6	35.8
02:40 AM - 02:45 AM	40.1	48.6	36.2
02:45 AM - 02:50 AM	38.7	53.9	35.4
02:50 AM - 02:55 AM	36.6	48.8	35.1
02:55 AM - 03:00 AM	37.6	45.1	35.9
03:00 AM - 03:05 AM	37.6	44.9	35.5
03:05 AM - 03:10 AM	38.1	45.2	35.6
03:10 AM - 03:15 AM	38.5	46.8	36.1
03:15 AM - 03:20 AM	37.1	55.3	35.1
03:20 AM - 03:25 AM	37.0	44.5	35.3
03:25 AM - 03:30 AM	42.1	55.2	36.9
03:30 AM - 03:35 AM	41.8	55.2	35.7
03:35 AM - 03:40 AM	40.9	49.9	36.0
03:40 AM - 03:45 AM	39.8	51.1	35.5

The above results are valid only for the analysis/checked 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) Limited is not responsible for any use of this report in a manner not intended by ALS.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872470-1

Sample No. 23124327-3  
Parameter Noise  
Location โรงฟ 1 บ้านระแวง 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Page 3 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	38.1	51.3	35.1
03:50 AM - 03:55 AM	39.3	46.4	36.7
03:55 AM - 04:00 AM	38.5	45.1	36.1
04:00 AM - 04:05 AM	38.9	50.0	36.3
04:05 AM - 04:10 AM	41.9	51.6	37.4
04:10 AM - 04:15 AM	42.0	52.0	38.0
04:15 AM - 04:20 AM	39.7	49.1	37.9
04:20 AM - 04:25 AM	40.7	49.1	38.1
04:25 AM - 04:30 AM	39.2	49.4	36.3
04:30 AM - 04:35 AM	39.8	47.6	36.4
04:35 AM - 04:40 AM	40.1	49.6	38.0
04:40 AM - 04:45 AM	41.3	50.0	38.8
04:45 AM - 04:50 AM	43.3	51.4	40.1
04:50 AM - 04:55 AM	46.6	65.0	40.8
04:55 AM - 05:00 AM	46.3	57.3	40.9
05:00 AM - 05:05 AM	45.2	67.0	40.2
05:05 AM - 05:10 AM	67.3	93.4	41.6
05:10 AM - 05:15 AM	47.5	57.6	42.2
05:15 AM - 05:20 AM	47.9	70.3	42.6
05:20 AM - 05:25 AM	45.8	57.1	42.0
05:25 AM - 05:30 AM	47.9	68.7	42.9
05:30 AM - 05:35 AM	47.1	63.4	43.2
05:35 AM - 05:40 AM	47.7	62.5	44.4
05:40 AM - 05:45 AM	47.0	60.1	43.0
05:45 AM - 05:50 AM	48.5	63.4	44.2
05:50 AM - 05:55 AM	49.8	66.8	44.0
05:55 AM - 06:00 AM	55.3	70.5	44.9
06:00 AM - 07:00 AM	51.3	76.2	46.2
07:00 AM - 08:00 AM	50.0	77.4	43.8
08:00 AM - 09:00 AM	48.8	70.4	44.2
09:00 AM - 10:00 AM	49.1	65.2	44.6
10:00 AM - 11:00 AM	49.1	69.1	44.9

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872471-1

Sample No. 23124327-4  
Parameter Noise  
Location โรงฟ 1 บ้านระแวง 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Page 1 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	49.1	68.1	43.6
12:00 PM - 01:00 PM	47.4	69.8	42.8
01:00 PM - 02:00 PM	45.3	67.7	41.4
02:00 PM - 03:00 PM	47.3	67.5	42.5
03:00 PM - 04:00 PM	49.0	70.7	43.7
04:00 PM - 05:00 PM	48.2	74.4	43.7
05:00 PM - 06:00 PM	46.9	69.8	43.5
06:00 PM - 07:00 PM	46.9	64.5	43.4
07:00 PM - 08:00 PM	45.5	59.4	43.0
08:00 PM - 09:00 PM	45.0	65.9	41.5
09:00 PM - 10:00 PM	44.2	65.7	40.6
10:00 PM - 10:05 PM	44.0	58.1	41.1
10:05 PM - 10:10 PM	43.4	50.1	41.5
10:10 PM - 10:15 PM	45.7	56.2	41.6
10:15 PM - 10:20 PM	44.6	52.3	41.8
10:20 PM - 10:25 PM	42.9	49.2	40.7
10:25 PM - 10:30 PM	44.0	62.2	40.1
10:30 PM - 10:35 PM	44.0	63.3	39.7
10:35 PM - 10:40 PM	42.4	52.1	40.5
10:40 PM - 10:45 PM	45.4	58.4	41.1
10:45 PM - 10:50 PM	43.2	57.9	39.6
10:50 PM - 10:55 PM	41.0	47.7	39.3
10:55 PM - 11:00 PM	44.5	63.6	39.4
11:00 PM - 11:05 PM	45.4	55.4	40.3
11:05 PM - 11:10 PM	44.1	50.5	41.5
11:10 PM - 11:15 PM	43.1	49.0	41.4
11:15 PM - 11:20 PM	44.5	55.1	40.5
11:20 PM - 11:25 PM	42.8	51.4	41.1
11:25 PM - 11:30 PM	45.4	56.8	41.7
11:30 PM - 11:35 PM	47.7	57.3	43.3
11:35 PM - 11:40 PM	48.1	57.2	42.6
11:40 PM - 11:45 PM	44.1	54.3	41.3
11:45 PM - 11:50 PM	47.7	62.4	43.0
11:50 PM - 11:55 PM	48.2	60.2	42.4
11:55 PM - 12:00 AM	44.9	57.6	41.6
12:00 AM - 12:05 AM	47.2	64.3	40.6
12:05 AM - 12:10 AM	44.0	50.4	41.5
12:10 AM - 12:15 AM	44.9	55.2	42.8
12:15 AM - 12:20 AM	45.8	53.1	42.6
12:20 AM - 12:25 AM	44.4	51.7	41.2

The above results are valid only for the analyzed/sampled period(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*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872471-1

Page 2 of 3

Sample No. 23124327-4  
Parameter Noise  
Location หมู่ที่ 1 บ้านชอ 12 ตำบลพนาภิรม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	42.8	52.3	40.6
12:30 AM - 12:35 AM	50.6	66.6	41.0
12:35 AM - 12:40 AM	44.4	51.1	40.7
12:40 AM - 12:45 AM	42.7	48.7	39.5
12:45 AM - 12:50 AM	42.7	51.5	39.7
12:50 AM - 12:55 AM	43.8	51.4	40.8
12:55 AM - 01:00 AM	42.5	48.8	40.2
01:00 AM - 01:05 AM	41.6	51.6	39.5
01:05 AM - 01:10 AM	40.0	51.0	38.5
01:10 AM - 01:15 AM	42.5	53.3	38.2
01:15 AM - 01:20 AM	39.0	44.9	36.9
01:20 AM - 01:25 AM	39.7	49.1	37.1
01:25 AM - 01:30 AM	41.2	58.4	37.1
01:30 AM - 01:35 AM	38.5	46.0	37.0
01:35 AM - 01:40 AM	39.2	48.5	37.1
01:40 AM - 01:45 AM	40.1	46.3	37.6
01:45 AM - 01:50 AM	41.4	49.1	38.6
01:50 AM - 01:55 AM	41.6	49.3	39.5
01:55 AM - 02:00 AM	44.7	54.9	41.0
02:00 AM - 02:05 AM	44.6	52.6	41.8
02:05 AM - 02:10 AM	44.6	51.1	41.5
02:10 AM - 02:15 AM	40.9	48.6	38.6
02:15 AM - 02:20 AM	39.3	48.7	37.1
02:20 AM - 02:25 AM	39.7	45.9	37.7
02:25 AM - 02:30 AM	39.0	48.2	37.2
02:30 AM - 02:35 AM	40.2	49.7	37.7
02:35 AM - 02:40 AM	38.7	43.9	37.2
02:40 AM - 02:45 AM	40.0	51.4	37.8
02:45 AM - 02:50 AM	40.4	47.7	37.7
02:50 AM - 02:55 AM	39.4	48.4	37.1
02:55 AM - 03:00 AM	38.8	46.7	37.1
03:00 AM - 03:05 AM	40.4	47.1	37.7
03:05 AM - 03:10 AM	39.9	49.4	37.3
03:10 AM - 03:15 AM	39.7	51.4	37.1
03:15 AM - 03:20 AM	38.4	44.0	37.2
03:20 AM - 03:25 AM	42.5	61.5	38.2
03:25 AM - 03:30 AM	39.2	45.7	38.1
03:30 AM - 03:35 AM	39.3	45.2	37.8
03:35 AM - 03:40 AM	39.2	49.8	37.6
03:40 AM - 03:45 AM	38.9	47.1	37.1

The above results are valid only for the analyzed 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*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872471-1

Page 3 of 3

Sample No. 23124327-4  
Parameter Noise  
Location หมู่ที่ 1 บ้านชอ 12 ตำบลพนาภิรม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	40.4	50.1	37.4
03:50 AM - 03:55 AM	40.0	53.1	37.8
03:55 AM - 04:00 AM	41.2	50.1	38.1
04:00 AM - 04:05 AM	41.8	53.3	38.5
04:05 AM - 04:10 AM	39.4	50.1	37.2
04:10 AM - 04:15 AM	40.0	46.9	38.0
04:15 AM - 04:20 AM	39.7	48.2	37.4
04:20 AM - 04:25 AM	39.4	47.3	37.4
04:25 AM - 04:30 AM	39.5	47.0	37.6
04:30 AM - 04:35 AM	43.7	54.2	37.6
04:35 AM - 04:40 AM	39.9	46.7	37.8
04:40 AM - 04:45 AM	41.1	45.6	39.0
04:45 AM - 04:50 AM	41.4	47.4	39.4
04:50 AM - 04:55 AM	42.4	50.1	40.2
04:55 AM - 05:00 AM	48.3	62.2	41.9
05:00 AM - 05:05 AM	46.0	56.5	42.1
05:05 AM - 05:10 AM	61.5	83.0	44.9
05:10 AM - 05:15 AM	65.5	86.9	44.4
05:15 AM - 05:20 AM	47.6	55.7	44.6
05:20 AM - 05:25 AM	46.9	55.9	44.2
05:25 AM - 05:30 AM	47.7	55.3	44.2
05:30 AM - 05:35 AM	47.9	65.8	44.4
05:35 AM - 05:40 AM	48.8	64.3	45.1
05:40 AM - 05:45 AM	49.1	67.5	45.0
05:45 AM - 05:50 AM	46.8	58.1	44.2
05:50 AM - 05:55 AM	48.9	65.7	46.0
05:55 AM - 06:00 AM	47.9	63.4	45.2
06:00 AM - 07:00 AM	51.7	71.7	47.5
07:00 AM - 08:00 AM	52.7	72.9	47.7
08:00 AM - 09:00 AM	50.6	67.7	46.5
09:00 AM - 10:00 AM	52.7	75.9	45.6
10:00 AM - 11:00 AM	50.4	70.0	45.1

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และการประเมินผลกระทบจากกิจกรรมการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed 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*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872472-1

Page 1 of 3

**Sample No.** 23124327-5

**Parameter** Noise

**Location** หมู่ที่ 1 บ้านระบือ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)

**Measurement Date** Dec 21 - 22, 2023

**Measurement by** Satcha Phetsawaeng

**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	47.6	65.2	43.4
12:00 PM - 01:00 PM	50.6	75.7	43.2
01:00 PM - 02:00 PM	50.4	74.0	44.3
02:00 PM - 03:00 PM	49.6	68.3	45.5
03:00 PM - 04:00 PM	52.6	77.9	44.9
04:00 PM - 05:00 PM	52.1	76.9	45.9
05:00 PM - 06:00 PM	49.7	68.7	45.5
06:00 PM - 07:00 PM	57.9	89.5	45.3
07:00 PM - 08:00 PM	54.0	72.5	45.3
08:00 PM - 09:00 PM	48.7	72.0	44.2
09:00 PM - 10:00 PM	51.4	75.6	47.1
10:00 PM - 10:05 PM	52.1	59.6	48.8
10:05 PM - 10:10 PM	52.0	58.7	48.6
10:10 PM - 10:15 PM	51.2	61.0	48.1
10:15 PM - 10:20 PM	50.1	59.9	46.3
10:20 PM - 10:25 PM	50.3	61.4	47.1
10:25 PM - 10:30 PM	50.9	64.6	44.8
10:30 PM - 10:35 PM	51.0	61.6	45.4
10:35 PM - 10:40 PM	52.2	63.1	47.2
10:40 PM - 10:45 PM	50.4	57.8	44.9
10:45 PM - 10:50 PM	52.7	61.3	44.8
10:50 PM - 10:55 PM	50.1	59.7	46.1
10:55 PM - 11:00 PM	55.2	70.3	47.1
11:00 PM - 11:05 PM	53.5	59.9	49.3
11:05 PM - 11:10 PM	52.9	62.0	47.5
11:10 PM - 11:15 PM	53.5	65.8	50.1
11:15 PM - 11:20 PM	55.1	68.5	47.8
11:20 PM - 11:25 PM	51.4	59.0	48.5
11:25 PM - 11:30 PM	53.0	59.5	49.0
11:30 PM - 11:35 PM	53.3	65.9	49.4
11:35 PM - 11:40 PM	52.3	58.5	46.6
11:40 PM - 11:45 PM	51.4	62.1	47.4
11:45 PM - 11:50 PM	53.0	61.6	44.2
11:50 PM - 11:55 PM	51.6	68.6	46.9
11:55 PM - 12:00 AM	49.1	55.1	44.9
12:00 AM - 12:05 AM	52.1	58.8	46.4
12:05 AM - 12:10 AM	49.8	56.0	45.9
12:10 AM - 12:15 AM	50.7	58.3	43.2
12:15 AM - 12:20 AM	46.8	63.7	42.6
12:20 AM - 12:25 AM	42.7	49.4	40.0

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 or ALS Laboratory Group (Thailand). Strongly recommended that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 618/10 Moo 5 T. Maenam Khu A. Phrakdeang Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8550  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872472-1

Page 2 of 3

**Sample No.** 23124327-5

**Parameter** Noise

**Location** หมู่ที่ 1 บ้านระบือ 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)

**Measurement Date** Dec 21 - 22, 2023

**Measurement by** Satcha Phetsawaeng

**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	40.7	47.6	38.6
12:30 AM - 12:35 AM	39.5	47.8	37.2
12:35 AM - 12:40 AM	38.8	43.3	37.4
12:40 AM - 12:45 AM	36.6	46.8	35.6
12:45 AM - 12:50 AM	37.6	44.1	36.4
12:50 AM - 12:55 AM	39.5	47.1	35.8
12:55 AM - 01:00 AM	38.3	46.2	35.3
01:00 AM - 01:05 AM	36.9	52.8	34.8
01:05 AM - 01:10 AM	39.2	49.3	35.1
01:10 AM - 01:15 AM	39.1	45.3	37.0
01:15 AM - 01:20 AM	43.2	59.6	38.3
01:20 AM - 01:25 AM	43.7	50.8	39.8
01:25 AM - 01:30 AM	44.5	56.0	40.5
01:30 AM - 01:35 AM	47.0	57.8	42.0
01:35 AM - 01:40 AM	45.2	58.2	42.2
01:40 AM - 01:45 AM	45.8	53.6	43.0
01:45 AM - 01:50 AM	46.1	51.9	42.9
01:50 AM - 01:55 AM	46.1	51.3	42.5
01:55 AM - 02:00 AM	45.7	51.7	41.7
02:00 AM - 02:05 AM	48.2	62.3	41.2
02:05 AM - 02:10 AM	48.2	57.2	44.5
02:10 AM - 02:15 AM	47.3	53.7	42.7
02:15 AM - 02:20 AM	50.2	54.7	46.4
02:20 AM - 02:25 AM	47.0	55.4	41.8
02:25 AM - 02:30 AM	46.3	53.5	41.7
02:30 AM - 02:35 AM	45.8	53.2	41.6
02:35 AM - 02:40 AM	45.9	53.3	42.5
02:40 AM - 02:45 AM	47.1	57.2	41.4
02:45 AM - 02:50 AM	50.5	65.5	43.9
02:50 AM - 02:55 AM	51.3	71.5	44.3
02:55 AM - 03:00 AM	47.9	66.9	42.6
03:00 AM - 03:05 AM	49.4	58.8	45.4
03:05 AM - 03:10 AM	48.4	56.0	45.4
03:10 AM - 03:15 AM	46.7	52.7	43.6
03:15 AM - 03:20 AM	47.4	57.7	42.7
03:20 AM - 03:25 AM	49.1	56.4	45.3
03:25 AM - 03:30 AM	52.1	64.1	47.8
03:30 AM - 03:35 AM	51.0	61.4	45.7
03:35 AM - 03:40 AM	49.3	55.9	45.0
03:40 AM - 03:45 AM	50.5	61.8	46.8

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 or ALS Laboratory Group (Thailand). Strongly recommended that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 618/10 Moo 5 T. Maenam Khu A. Phrakdeang Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8550  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872472-1

Page 1 of 3

**Sample No.** 23124327-5  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านชอบ 12 ตำบลพนาธิม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	47.4	53.0	43.7
03:50 AM - 03:55 AM	47.3	61.6	43.0
03:55 AM - 04:00 AM	50.8	59.8	45.2
04:00 AM - 04:05 AM	49.5	56.4	44.7
04:05 AM - 04:10 AM	53.7	69.8	46.7
04:10 AM - 04:15 AM	51.4	62.1	46.4
04:15 AM - 04:20 AM	51.2	59.0	47.4
04:20 AM - 04:25 AM	50.6	60.1	44.7
04:25 AM - 04:30 AM	50.3	57.6	45.7
04:30 AM - 04:35 AM	52.8	67.5	47.3
04:35 AM - 04:40 AM	50.5	60.0	43.7
04:40 AM - 04:45 AM	51.0	59.7	47.6
04:45 AM - 04:50 AM	49.9	59.7	46.5
04:50 AM - 04:55 AM	52.0	65.8	46.9
04:55 AM - 05:00 AM	55.3	69.9	48.6
05:00 AM - 05:05 AM	54.9	68.3	48.5
05:05 AM - 05:10 AM	56.4	71.2	49.5
05:10 AM - 05:15 AM	55.7	63.5	50.4
05:15 AM - 05:20 AM	57.2	67.7	51.9
05:20 AM - 05:25 AM	57.7	68.0	52.2
05:25 AM - 05:30 AM	57.6	71.1	50.4
05:30 AM - 05:35 AM	55.5	65.8	51.3
05:35 AM - 05:40 AM	60.6	80.5	51.9
05:40 AM - 05:45 AM	63.6	91.5	53.0
05:45 AM - 05:50 AM	58.0	68.0	51.0
05:50 AM - 05:55 AM	55.4	67.4	50.4
05:55 AM - 06:00 AM	58.4	66.3	51.0
06:00 AM - 07:00 AM	57.2	75.4	52.1
07:00 AM - 08:00 AM	55.7	76.1	50.7
08:00 AM - 09:00 AM	56.7	86.6	51.0
09:00 AM - 10:00 AM	55.9	71.4	51.2
10:00 AM - 11:00 AM	54.0	71.1	49.2

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกินจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LINE SERVICES

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872473-1

Page 1 of 3

**Sample No.** 23124327-6  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านชอบ 12 ตำบลพนาธิม (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	53.4	69.9	48.8
12:00 PM - 01:00 PM	53.3	73.3	47.2
01:00 PM - 02:00 PM	52.1	70.2	47.2
02:00 PM - 03:00 PM	52.5	67.5	48.2
03:00 PM - 04:00 PM	52.9	69.1	47.4
04:00 PM - 05:00 PM	52.0	73.2	46.3
05:00 PM - 06:00 PM	49.2	72.9	44.3
06:00 PM - 07:00 PM	46.6	70.3	43.9
07:00 PM - 08:00 PM	49.2	70.8	44.4
08:00 PM - 09:00 PM	50.1	67.7	45.8
09:00 PM - 10:00 PM	46.4	72.3	41.8
10:00 PM - 10:05 PM	46.6	59.9	42.2
10:05 PM - 10:10 PM	46.2	57.5	41.1
10:10 PM - 10:15 PM	51.8	74.0	41.8
10:15 PM - 10:20 PM	49.7	70.3	44.0
10:20 PM - 10:25 PM	45.8	51.1	41.5
10:25 PM - 10:30 PM	47.3	55.8	43.2
10:30 PM - 10:35 PM	49.3	63.3	42.9
10:35 PM - 10:40 PM	48.0	59.5	44.6
10:40 PM - 10:45 PM	49.2	55.9	45.5
10:45 PM - 10:50 PM	48.3	60.6	42.4
10:50 PM - 10:55 PM	46.3	59.4	43.1
10:55 PM - 11:00 PM	50.7	58.1	45.9
11:00 PM - 11:05 PM	52.3	62.0	45.9
11:05 PM - 11:10 PM	46.6	57.5	42.0
11:10 PM - 11:15 PM	42.1	57.0	39.4
11:15 PM - 11:20 PM	41.3	50.9	38.6
11:20 PM - 11:25 PM	42.0	50.5	39.1
11:25 PM - 11:30 PM	41.1	49.7	37.8
11:30 PM - 11:35 PM	42.3	55.1	37.5
11:35 PM - 11:40 PM	40.7	50.8	37.7
11:40 PM - 11:45 PM	40.2	54.0	36.6
11:45 PM - 11:50 PM	39.7	48.1	36.3
11:50 PM - 11:55 PM	41.9	52.2	38.5
11:55 PM - 12:00 AM	43.2	62.2	38.3
12:00 AM - 12:05 AM	43.3	53.4	39.6
12:05 AM - 12:10 AM	43.6	52.8	40.0
12:10 AM - 12:15 AM	42.4	49.8	37.4
12:15 AM - 12:20 AM	45.3	51.5	41.7
12:20 AM - 12:25 AM	47.5	57.6	43.3

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

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LINE SERVICES

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872473-1

Page 2 of 3

Sample No. 23124327-6  
Parameter Noise  
Location หมู่ที่ 1 ตำบลบางนาดี (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	46.5	52.5	43.1
12:30 AM - 12:35 AM	47.0	56.7	42.1
12:35 AM - 12:40 AM	44.7	51.8	41.1
12:40 AM - 12:45 AM	45.2	50.5	41.2
12:45 AM - 12:50 AM	42.8	49.9	39.7
12:50 AM - 12:55 AM	46.4	67.5	39.9
12:55 AM - 01:00 AM	41.3	60.6	37.7
01:00 AM - 01:05 AM	42.3	48.2	38.5
01:05 AM - 01:10 AM	42.4	49.3	37.9
01:10 AM - 01:15 AM	40.4	47.4	37.6
01:15 AM - 01:20 AM	42.9	50.1	38.6
01:20 AM - 01:25 AM	46.2	53.1	40.6
01:25 AM - 01:30 AM	45.3	54.4	39.6
01:30 AM - 01:35 AM	41.4	49.5	37.0
01:35 AM - 01:40 AM	39.6	47.7	36.1
01:40 AM - 01:45 AM	43.7	50.5	38.7
01:45 AM - 01:50 AM	45.7	51.2	40.5
01:50 AM - 01:55 AM	45.0	52.9	42.1
01:55 AM - 02:00 AM	43.3	53.0	39.5
02:00 AM - 02:05 AM	43.2	50.1	39.1
02:05 AM - 02:10 AM	45.4	59.4	39.1
02:10 AM - 02:15 AM	42.1	50.6	37.3
02:15 AM - 02:20 AM	44.1	48.9	39.4
02:20 AM - 02:25 AM	45.3	52.5	41.3
02:25 AM - 02:30 AM	46.2	54.1	41.0
02:30 AM - 02:35 AM	48.8	57.1	43.1
02:35 AM - 02:40 AM	47.4	55.6	44.2
02:40 AM - 02:45 AM	50.4	61.2	45.0
02:45 AM - 02:50 AM	50.7	71.9	44.6
02:50 AM - 02:55 AM	47.6	54.1	43.1
02:55 AM - 03:00 AM	44.9	50.8	41.9
03:00 AM - 03:05 AM	49.9	54.7	42.9
03:05 AM - 03:10 AM	46.2	55.4	41.8
03:10 AM - 03:15 AM	49.2	61.4	43.2
03:15 AM - 03:20 AM	51.1	63.1	46.2
03:20 AM - 03:25 AM	51.6	64.2	45.9
03:25 AM - 03:30 AM	49.4	60.4	45.5
03:30 AM - 03:35 AM	48.5	56.7	45.1
03:35 AM - 03:40 AM	50.2	72.5	46.0
03:40 AM - 03:45 AM	48.1	65.4	44.4

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

Approved by

*Wilaw Borik*  
Wilaw Borik  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872473-1

Page 3 of 3

Sample No. 23124327-6  
Parameter Noise  
Location หมู่ที่ 1 ตำบลบางนาดี (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	48.8	61.8	44.0
03:50 AM - 03:55 AM	49.0	63.4	44.0
03:55 AM - 04:00 AM	46.9	52.7	42.7
04:00 AM - 04:05 AM	48.9	58.5	45.8
04:05 AM - 04:10 AM	50.1	69.4	44.9
04:10 AM - 04:15 AM	49.5	56.2	44.5
04:15 AM - 04:20 AM	46.3	52.1	42.5
04:20 AM - 04:25 AM	49.1	60.4	44.5
04:25 AM - 04:30 AM	49.6	63.0	44.1
04:30 AM - 04:35 AM	48.1	55.6	42.9
04:35 AM - 04:40 AM	50.2	60.0	45.3
04:40 AM - 04:45 AM	48.1	65.2	44.5
04:45 AM - 04:50 AM	49.7	54.7	45.7
04:50 AM - 04:55 AM	49.7	60.0	44.5
04:55 AM - 05:00 AM	52.9	65.2	46.4
05:00 AM - 05:05 AM	48.7	58.2	46.0
05:05 AM - 05:10 AM	50.8	69.6	44.4
05:10 AM - 05:15 AM	54.3	72.3	47.8
05:15 AM - 05:20 AM	61.7	80.5	46.3
05:20 AM - 05:25 AM	51.5	56.8	48.4
05:25 AM - 05:30 AM	49.2	53.9	46.2
05:30 AM - 05:35 AM	54.3	74.4	46.8
05:35 AM - 05:40 AM	50.7	63.1	45.5
05:40 AM - 05:45 AM	50.9	65.0	47.0
05:45 AM - 05:50 AM	52.1	67.3	47.6
05:50 AM - 05:55 AM	52.9	66.4	48.3
05:55 AM - 06:00 AM	48.7	62.9	46.2
06:00 AM - 07:00 AM	52.3	68.5	48.3
07:00 AM - 08:00 AM	55.5	84.9	50.1
08:00 AM - 09:00 AM	55.1	77.7	50.7
09:00 AM - 10:00 AM	52.7	70.5	47.7
10:00 AM - 11:00 AM	51.3	69.6	46.8

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilaw Borik*  
Wilaw Borik  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872474-1

Page 1 of 3

**Sample No.** : 23124327-7  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** : Dec 23 - 24, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	51.9	74.4	46.7
12:00 PM - 01:00 PM	52.5	66.9	47.9
01:00 PM - 02:00 PM	50.6	70.2	46.1
02:00 PM - 03:00 PM	52.6	67.2	47.9
03:00 PM - 04:00 PM	52.9	72.7	48.6
04:00 PM - 05:00 PM	50.4	71.4	46.3
05:00 PM - 06:00 PM	48.2	66.7	45.3
06:00 PM - 07:00 PM	47.1	67.0	44.3
07:00 PM - 08:00 PM	46.2	60.3	43.9
08:00 PM - 09:00 PM	47.5	62.3	44.2
09:00 PM - 10:00 PM	47.0	68.0	43.4
10:00 PM - 10:05 PM	49.8	59.4	45.2
10:05 PM - 10:10 PM	46.5	53.8	43.3
10:10 PM - 10:15 PM	46.9	63.3	43.8
10:15 PM - 10:20 PM	46.7	55.4	44.2
10:20 PM - 10:25 PM	47.2	58.0	43.8
10:25 PM - 10:30 PM	46.4	52.4	43.5
10:30 PM - 10:35 PM	45.5	52.1	42.9
10:35 PM - 10:40 PM	49.2	56.2	45.8
10:40 PM - 10:45 PM	47.3	55.9	43.3
10:45 PM - 10:50 PM	47.9	55.3	42.4
10:50 PM - 10:55 PM	51.8	71.3	42.0
10:55 PM - 11:00 PM	47.6	60.3	42.5
11:00 PM - 11:05 PM	47.7	52.6	43.0
11:05 PM - 11:10 PM	46.7	58.6	42.9
11:10 PM - 11:15 PM	47.7	53.6	44.5
11:15 PM - 11:20 PM	49.7	57.7	44.8
11:20 PM - 11:25 PM	49.1	61.0	43.1
11:25 PM - 11:30 PM	48.6	56.4	44.9
11:30 PM - 11:35 PM	48.4	53.9	45.1
11:35 PM - 11:40 PM	47.1	52.9	42.5
11:40 PM - 11:45 PM	46.5	53.1	41.2
11:45 PM - 11:50 PM	44.5	50.5	41.0
11:50 PM - 11:55 PM	46.9	60.6	43.5
11:55 PM - 12:00 AM	46.6	58.6	42.7
12:00 AM - 12:05 AM	47.3	56.3	43.2
12:05 AM - 12:10 AM	46.8	56.6	43.0
12:10 AM - 12:15 AM	44.3	54.6	41.2
12:15 AM - 12:20 AM	46.0	54.2	42.9
12:20 AM - 12:25 AM	44.7	57.9	41.4

The above results are valid only for the analyzed/described 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), although we recommend that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 5 T. Maenam Khui A. Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872474-1

Page 2 of 3

**Sample No.** : 23124327-7  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านคลอง 12 ตำบลพนาภิรมย์ (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
**Measurement Date** : Dec 23 - 24, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:25 AM - 12:30 AM	46.6	56.5	41.7
12:30 AM - 12:35 AM	47.0	54.6	43.7
12:35 AM - 12:40 AM	42.9	54.6	40.0
12:40 AM - 12:45 AM	44.1	51.6	40.3
12:45 AM - 12:50 AM	45.1	53.7	39.2
12:50 AM - 12:55 AM	46.9	61.2	41.6
12:55 AM - 01:00 AM	45.3	56.7	41.2
01:00 AM - 01:05 AM	45.4	51.3	40.7
01:05 AM - 01:10 AM	49.6	60.5	41.9
01:10 AM - 01:15 AM	46.6	52.8	40.4
01:15 AM - 01:20 AM	45.1	54.9	40.9
01:20 AM - 01:25 AM	45.6	52.8	41.2
01:25 AM - 01:30 AM	41.8	54.0	38.5
01:30 AM - 01:35 AM	41.9	50.9	37.5
01:35 AM - 01:40 AM	38.7	47.9	37.0
01:40 AM - 01:45 AM	40.8	49.0	36.6
01:45 AM - 01:50 AM	41.5	47.6	38.7
01:50 AM - 01:55 AM	40.3	49.9	36.5
01:55 AM - 02:00 AM	41.3	52.6	38.0
02:00 AM - 02:05 AM	41.2	55.8	37.5
02:05 AM - 02:10 AM	43.1	54.5	39.1
02:10 AM - 02:15 AM	41.8	50.0	38.8
02:15 AM - 02:20 AM	43.1	50.8	38.3
02:20 AM - 02:25 AM	44.2	50.3	40.2
02:25 AM - 02:30 AM	47.1	53.2	41.4
02:30 AM - 02:35 AM	45.1	52.3	42.8
02:35 AM - 02:40 AM	47.8	61.0	41.5
02:40 AM - 02:45 AM	46.3	53.0	41.5
02:45 AM - 02:50 AM	44.8	57.6	39.8
02:50 AM - 02:55 AM	44.2	50.4	40.1
02:55 AM - 03:00 AM	45.4	53.9	41.2
03:00 AM - 03:05 AM	46.7	55.5	40.4
03:05 AM - 03:10 AM	44.1	60.9	40.7
03:10 AM - 03:15 AM	44.5	51.5	38.7
03:15 AM - 03:20 AM	48.8	57.0	43.4
03:20 AM - 03:25 AM	46.5	53.3	42.8
03:25 AM - 03:30 AM	42.5	50.2	38.5
03:30 AM - 03:35 AM	44.7	51.8	42.3
03:35 AM - 03:40 AM	47.2	57.0	42.7
03:40 AM - 03:45 AM	44.2	51.6	40.0

The above results are valid only for the analyzed/described 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), although we recommend that this report is not reproduced except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 5 T. Maenam Khui A. Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872474-1

Page 3 of 3

Sample No. 23124327-7  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนอง 12 ตำบลนาบือต (N1) (จุดอ้างอิง) (GPS 47P 0728780, 1425698) (Shut down)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296517

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:45 AM - 03:50 AM	47.2	54.7	41.3
03:50 AM - 03:55 AM	44.8	52.5	40.6
03:55 AM - 04:00 AM	46.5	51.0	41.5
04:00 AM - 04:05 AM	51.7	68.4	44.1
04:05 AM - 04:10 AM	50.2	57.9	45.2
04:10 AM - 04:15 AM	46.6	55.3	41.0
04:15 AM - 04:20 AM	46.6	54.4	42.9
04:20 AM - 04:25 AM	44.6	50.7	40.9
04:25 AM - 04:30 AM	43.1	49.8	39.9
04:30 AM - 04:35 AM	43.9	56.8	40.7
04:35 AM - 04:40 AM	46.4	53.0	42.7
04:40 AM - 04:45 AM	44.6	55.3	40.7
04:45 AM - 04:50 AM	43.7	49.2	41.5
04:50 AM - 04:55 AM	44.3	50.8	40.8
04:55 AM - 05:00 AM	43.2	48.6	39.6
05:00 AM - 05:05 AM	46.0	56.1	41.1
05:05 AM - 05:10 AM	47.7	64.4	43.2
05:10 AM - 05:15 AM	48.4	62.1	43.8
05:15 AM - 05:20 AM	53.6	68.5	42.8
05:20 AM - 05:25 AM	48.3	67.1	43.3
05:25 AM - 05:30 AM	45.8	60.2	42.7
05:30 AM - 05:35 AM	52.3	75.3	43.4
05:35 AM - 05:40 AM	46.5	56.4	43.0
05:40 AM - 05:45 AM	50.8	70.4	45.1
05:45 AM - 05:50 AM	48.4	64.3	44.4
05:50 AM - 05:55 AM	51.7	69.4	44.5
05:55 AM - 06:00 AM	47.0	64.7	42.8
06:00 AM - 07:00 AM	49.9	73.1	44.9
07:00 AM - 08:00 AM	51.1	71.6	46.2
08:00 AM - 09:00 AM	55.0	68.9	50.3
09:00 AM - 10:00 AM	52.5	70.3	47.5
10:00 AM - 11:00 AM	51.1	69.4	46.6

### Reference Method :

- ISO 1996-1
- ประกาศกระทรวงสาธารณสุข เรื่อง วิธีการตรวจวัดระดับเสียงของยานยนต์ 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analysed/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 Boririk*

Wilawan Boririk  
Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872475-1

Page 1 of 3

Sample No. 23124327-8  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลนาบือต (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.2	78.1	41.8
11:00 AM - 12:00 PM	46.6	61.4	41.9
12:00 PM - 01:00 PM	44.3	61.4	40.1
01:00 PM - 02:00 PM	44.0	64.0	39.8
02:00 PM - 03:00 PM	46.6	65.6	41.8
03:00 PM - 04:00 PM	45.6	61.9	42.0
04:00 PM - 05:00 PM	46.2	63.9	42.5
05:00 PM - 06:00 PM	48.6	64.4	45.8
06:00 PM - 07:00 PM	51.6	65.8	49.7
07:00 PM - 08:00 PM	49.5	77.0	47.2
08:00 PM - 09:00 PM	49.1	62.5	47.4
09:00 PM - 10:00 PM	49.1	71.2	46.2
10:00 PM - 10:05 PM	46.6	53.3	45.4
10:05 PM - 10:10 PM	47.2	61.4	45.3
10:10 PM - 10:15 PM	46.3	56.3	44.6
10:15 PM - 10:20 PM	46.3	51.6	45.2
10:20 PM - 10:25 PM	45.5	49.4	44.7
10:25 PM - 10:30 PM	45.5	51.9	44.6
10:30 PM - 10:35 PM	45.7	54.3	44.6
10:35 PM - 10:40 PM	46.6	61.2	44.8
10:40 PM - 10:45 PM	45.5	54.7	44.1
10:45 PM - 10:50 PM	44.8	49.0	43.3
10:50 PM - 10:55 PM	45.6	52.6	44.1
10:55 PM - 11:00 PM	45.2	52.7	43.6
11:00 PM - 11:05 PM	45.3	53.9	43.9
11:05 PM - 11:10 PM	46.5	61.0	43.9
11:10 PM - 11:15 PM	45.8	51.9	44.1
11:15 PM - 11:20 PM	46.6	61.3	44.9
11:20 PM - 11:25 PM	46.2	57.1	44.6
11:25 PM - 11:30 PM	45.1	50.6	44.1
11:30 PM - 11:35 PM	46.8	58.5	44.4
11:35 PM - 11:40 PM	46.0	51.8	44.7
11:40 PM - 11:45 PM	46.7	56.6	44.7
11:45 PM - 11:50 PM	45.5	51.9	44.1
11:50 PM - 11:55 PM	45.3	52.8	42.8
11:55 PM - 12:00 AM	44.9	51.5	43.5
12:00 AM - 12:05 AM	44.9	53.0	43.3
12:05 AM - 12:10 AM	44.8	54.4	43.5
12:10 AM - 12:15 AM	44.3	50.0	43.5
12:15 AM - 12:20 AM	45.4	55.6	44.0

The above results are valid only for the analysed/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 Boririk*

Wilawan Boririk  
Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Sample No. :** 23124327-8

**Parameter :** Noise

**Location :** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)

**Measurement Date :** Dec 17 - 18, 2023

**Measurement by :** Satcha Phetsawaeng

**Sound Level Meter :** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	45.9	56.6	44.3
12:25 AM - 12:30 AM	45.0	53.2	44.1
12:30 AM - 12:35 AM	45.2	52.3	44.2
12:35 AM - 12:40 AM	46.9	60.0	43.9
12:40 AM - 12:45 AM	43.3	49.1	42.0
12:45 AM - 12:50 AM	42.5	46.4	41.7
12:50 AM - 12:55 AM	49.1	69.8	41.9
12:55 AM - 01:00 AM	44.2	53.2	41.9
01:00 AM - 01:05 AM	44.0	49.8	42.3
01:05 AM - 01:10 AM	43.0	46.9	42.1
01:10 AM - 01:15 AM	43.0	48.4	42.1
01:15 AM - 01:20 AM	43.8	52.0	42.7
01:20 AM - 01:25 AM	44.8	60.6	42.1
01:25 AM - 01:30 AM	42.2	46.6	41.4
01:30 AM - 01:35 AM	45.3	53.8	41.7
01:35 AM - 01:40 AM	45.3	53.2	42.5
01:40 AM - 01:45 AM	44.0	49.3	42.8
01:45 AM - 01:50 AM	44.1	56.2	42.6
01:50 AM - 01:55 AM	44.3	52.0	42.3
01:55 AM - 02:00 AM	45.4	51.9	43.1
02:00 AM - 02:05 AM	44.7	51.1	42.6
02:05 AM - 02:10 AM	44.2	51.9	42.2
02:10 AM - 02:15 AM	44.9	52.3	42.6
02:15 AM - 02:20 AM	46.0	51.6	43.0
02:20 AM - 02:25 AM	45.0	51.2	42.8
02:25 AM - 02:30 AM	43.6	56.2	41.7
02:30 AM - 02:35 AM	44.8	51.6	42.0
02:35 AM - 02:40 AM	44.9	51.7	41.8
02:40 AM - 02:45 AM	46.6	59.2	42.0
02:45 AM - 02:50 AM	51.8	59.0	43.8
02:50 AM - 02:55 AM	53.6	60.4	44.2
02:55 AM - 03:00 AM	58.0	70.3	55.1
03:00 AM - 03:05 AM	57.2	60.3	54.8
03:05 AM - 03:10 AM	57.4	60.2	55.1
03:10 AM - 03:15 AM	55.4	64.7	49.4
03:15 AM - 03:20 AM	50.9	54.9	49.3
03:20 AM - 03:25 AM	51.0	55.2	49.3
03:25 AM - 03:30 AM	51.1	57.1	49.2
03:30 AM - 03:35 AM	51.7	56.8	49.3
03:35 AM - 03:40 AM	53.0	59.9	47.8

The above results are valid only for the anal (specified 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*

Wilawan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



TESTING  
No.0042

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872475-1

Page 2 of 3



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Sample No. :** 23124327-8

**Parameter :** Noise

**Location :** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขามเฒ่า (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)

**Measurement Date :** Dec 17 - 18, 2023

**Measurement by :** Satcha Phetsawaeng

**Sound Level Meter :** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	51.1	58.6	48.8
03:45 AM - 03:50 AM	49.8	57.0	42.5
03:50 AM - 03:55 AM	46.5	54.0	41.8
03:55 AM - 04:00 AM	48.2	56.2	43.3
04:00 AM - 04:05 AM	49.1	55.6	43.3
04:05 AM - 04:10 AM	49.6	55.4	42.6
04:10 AM - 04:15 AM	48.3	56.0	42.5
04:15 AM - 04:20 AM	50.2	59.7	43.3
04:20 AM - 04:25 AM	50.5	56.3	43.5
04:25 AM - 04:30 AM	51.2	55.6	45.6
04:30 AM - 04:35 AM	51.6	58.9	46.5
04:35 AM - 04:40 AM	51.6	66.0	46.4
04:40 AM - 04:45 AM	52.0	70.4	47.2
04:45 AM - 04:50 AM	51.5	62.2	47.0
04:50 AM - 04:55 AM	53.1	77.1	47.3
04:55 AM - 05:00 AM	54.2	60.4	47.3
05:00 AM - 05:05 AM	54.4	60.1	50.6
05:05 AM - 05:10 AM	51.3	56.3	47.0
05:10 AM - 05:15 AM	51.9	59.3	48.4
05:15 AM - 05:20 AM	53.8	69.7	50.6
05:20 AM - 05:25 AM	54.2	69.3	50.6
05:25 AM - 05:30 AM	52.9	62.1	50.5
05:30 AM - 05:35 AM	52.9	62.2	50.5
05:35 AM - 05:40 AM	52.1	62.3	49.9
05:40 AM - 05:45 AM	51.4	58.5	49.7
05:45 AM - 05:50 AM	52.7	63.0	49.8
05:50 AM - 05:55 AM	51.7	56.9	49.7
05:55 AM - 06:00 AM	51.4	58.5	48.3
06:00 AM - 07:00 AM	50.2	69.3	45.4
07:00 AM - 08:00 AM	51.1	70.8	44.0
08:00 AM - 09:00 AM	48.3	68.4	42.8
09:00 AM - 10:00 AM	47.6	78.6	43.3

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน กรณีเสียงต่อเนื่อง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the anal (specified 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*

Wilawan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872476-1

Page 1 of 3

Sample No. 23124327-9  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะอำ (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	51.1	77.3	44.2
11:00 AM - 12:00 PM	49.6	77.5	43.9
12:00 PM - 01:00 PM	49.5	84.1	42.5
01:00 PM - 02:00 PM	45.3	63.8	40.7
02:00 PM - 03:00 PM	49.1	66.0	43.4
03:00 PM - 04:00 PM	50.3	81.1	43.9
04:00 PM - 05:00 PM	48.5	70.5	43.2
05:00 PM - 06:00 PM	57.8	98.9	44.2
06:00 PM - 07:00 PM	49.2	72.0	47.7
07:00 PM - 08:00 PM	49.0	67.4	46.9
08:00 PM - 09:00 PM	48.7	60.2	47.1
09:00 PM - 10:00 PM	47.4	55.9	46.1
10:00 PM - 10:05 PM	47.3	53.8	46.0
10:05 PM - 10:10 PM	47.2	53.1	46.1
10:10 PM - 10:15 PM	47.8	53.6	46.7
10:15 PM - 10:20 PM	47.8	55.0	46.3
10:20 PM - 10:25 PM	47.6	53.8	46.2
10:25 PM - 10:30 PM	47.6	54.0	46.1
10:30 PM - 10:35 PM	47.1	53.2	46.2
10:35 PM - 10:40 PM	47.1	54.4	46.1
10:40 PM - 10:45 PM	47.0	54.5	46.1
10:45 PM - 10:50 PM	46.9	51.1	45.9
10:50 PM - 10:55 PM	47.2	57.9	45.6
10:55 PM - 11:00 PM	47.0	54.9	45.7
11:00 PM - 11:05 PM	48.1	64.3	45.1
11:05 PM - 11:10 PM	54.3	82.4	45.3
11:10 PM - 11:15 PM	45.7	57.3	44.3
11:15 PM - 11:20 PM	47.2	52.2	46.1
11:20 PM - 11:25 PM	47.2	51.5	46.1
11:25 PM - 11:30 PM	47.2	53.8	46.1
11:30 PM - 11:35 PM	46.2	50.7	44.8
11:35 PM - 11:40 PM	45.5	52.7	43.5
11:40 PM - 11:45 PM	45.2	58.4	43.3
11:45 PM - 11:50 PM	44.3	52.1	43.1
11:50 PM - 11:55 PM	45.1	53.3	42.8
11:55 PM - 12:00 AM	46.1	56.1	43.6
12:00 AM - 12:05 AM	44.7	53.9	43.4
12:05 AM - 12:10 AM	45.6	57.8	43.3
12:10 AM - 12:15 AM	44.5	53.0	43.1
12:15 AM - 12:20 AM	44.9	51.2	43.6

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report or data may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand), Ltd. and its subsidiaries shall not be held responsible for any misuse of the data.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872476-1

Page 2 of 3

Sample No. 23124327-9  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลชะอำ (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	45.2	54.0	43.7
12:25 AM - 12:30 AM	44.3	58.2	43.3
12:30 AM - 12:35 AM	44.8	51.2	43.2
12:35 AM - 12:40 AM	43.8	49.8	42.5
12:40 AM - 12:45 AM	44.5	53.3	42.8
12:45 AM - 12:50 AM	43.3	49.7	42.1
12:50 AM - 12:55 AM	43.3	48.9	41.5
12:55 AM - 01:00 AM	43.8	54.2	41.4
01:00 AM - 01:05 AM	45.3	61.0	42.5
01:05 AM - 01:10 AM	44.1	48.9	42.5
01:10 AM - 01:15 AM	43.0	49.2	41.9
01:15 AM - 01:20 AM	43.4	48.1	42.5
01:20 AM - 01:25 AM	43.3	47.1	42.6
01:25 AM - 01:30 AM	44.1	49.9	42.8
01:30 AM - 01:35 AM	43.6	47.1	42.9
01:35 AM - 01:40 AM	45.8	57.0	43.0
01:40 AM - 01:45 AM	44.4	57.1	42.7
01:45 AM - 01:50 AM	43.9	56.3	42.7
01:50 AM - 01:55 AM	45.5	56.6	43.4
01:55 AM - 02:00 AM	46.1	56.9	43.7
02:00 AM - 02:05 AM	45.6	56.9	43.3
02:05 AM - 02:10 AM	43.6	51.7	42.5
02:10 AM - 02:15 AM	44.2	56.2	43.0
02:15 AM - 02:20 AM	45.8	57.4	43.2
02:20 AM - 02:25 AM	45.1	57.5	42.7
02:25 AM - 02:30 AM	44.0	53.2	42.3
02:30 AM - 02:35 AM	42.8	46.2	41.8
02:35 AM - 02:40 AM	43.6	47.4	42.2
02:40 AM - 02:45 AM	43.9	46.9	42.8
02:45 AM - 02:50 AM	43.5	47.9	42.2
02:50 AM - 02:55 AM	44.1	51.6	42.8
02:55 AM - 03:00 AM	44.1	49.7	42.8
03:00 AM - 03:05 AM	43.7	48.5	42.1
03:05 AM - 03:10 AM	45.4	48.3	44.3
03:10 AM - 03:15 AM	45.9	49.2	44.9
03:15 AM - 03:20 AM	46.0	48.5	44.9
03:20 AM - 03:25 AM	45.7	48.5	44.6
03:25 AM - 03:30 AM	46.2	52.5	44.9
03:30 AM - 03:35 AM	46.2	51.9	44.9
03:35 AM - 03:40 AM	45.4	48.1	44.4

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report or data may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand), Ltd. and its subsidiaries shall not be held responsible for any misuse of the data.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872476-1

Page 3 of 3

**Sample No.** : 23124327-9  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลบึงนาราง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 18 - 19, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	46.0	52.0	44.9
03:45 AM - 03:50 AM	47.4	57.6	45.1
03:50 AM - 03:55 AM	47.0	58.0	45.4
03:55 AM - 04:00 AM	46.4	55.3	45.0
04:00 AM - 04:05 AM	46.9	56.5	45.1
04:05 AM - 04:10 AM	46.3	58.2	44.9
04:10 AM - 04:15 AM	47.0	52.4	44.8
04:15 AM - 04:20 AM	46.9	57.4	44.9
04:20 AM - 04:25 AM	49.4	57.4	46.3
04:25 AM - 04:30 AM	50.4	60.8	46.9
04:30 AM - 04:35 AM	49.5	57.5	46.7
04:35 AM - 04:40 AM	48.8	56.2	46.0
04:40 AM - 04:45 AM	48.8	56.2	46.1
04:45 AM - 04:50 AM	49.0	58.4	46.8
04:50 AM - 04:55 AM	49.8	55.4	46.9
04:55 AM - 05:00 AM	50.7	56.7	47.4
05:00 AM - 05:05 AM	50.9	57.0	47.4
05:05 AM - 05:10 AM	50.6	57.3	47.2
05:10 AM - 05:15 AM	50.9	58.2	47.6
05:15 AM - 05:20 AM	51.0	56.3	47.8
05:20 AM - 05:25 AM	50.8	56.4	47.3
05:25 AM - 05:30 AM	53.6	74.1	47.4
05:30 AM - 05:35 AM	51.6	65.3	47.2
05:35 AM - 05:40 AM	50.6	57.0	47.4
05:40 AM - 05:45 AM	56.8	79.7	47.8
05:45 AM - 05:50 AM	51.1	57.4	47.9
05:50 AM - 05:55 AM	51.0	60.8	47.5
05:55 AM - 06:00 AM	50.5	56.6	46.9
06:00 AM - 07:00 AM	51.0	73.4	46.0
07:00 AM - 08:00 AM	50.4	82.8	44.2
08:00 AM - 09:00 AM	49.3	73.1	44.6
09:00 AM - 10:00 AM	51.6	78.0	43.6

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และการประเมินผลกระทบจากโครงการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed tested sample(s) as indicated in this report. No part of this report or certificate can 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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872477-1

Page 1 of 3

**Sample No.** : 23124327-10  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลบึงนาราง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 19 - 20, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.2	73.2	42.7
11:00 AM - 12:00 PM	49.5	70.1	42.6
12:00 PM - 01:00 PM	46.2	71.6	40.5
01:00 PM - 02:00 PM	48.8	71.1	41.2
02:00 PM - 03:00 PM	48.1	72.4	42.1
03:00 PM - 04:00 PM	58.2	89.2	46.0
04:00 PM - 05:00 PM	53.7	71.0	45.7
05:00 PM - 06:00 PM	52.6	72.2	49.4
06:00 PM - 07:00 PM	54.1	64.4	52.6
07:00 PM - 08:00 PM	52.9	67.9	49.9
08:00 PM - 09:00 PM	50.5	66.0	48.5
09:00 PM - 10:00 PM	54.7	62.7	51.5
10:00 PM - 10:05 PM	53.9	60.4	51.5
10:05 PM - 10:10 PM	53.7	56.7	51.3
10:10 PM - 10:15 PM	53.4	55.8	50.9
10:15 PM - 10:20 PM	51.4	55.4	48.0
10:20 PM - 10:25 PM	51.0	53.1	49.1
10:25 PM - 10:30 PM	51.4	54.0	49.9
10:30 PM - 10:35 PM	51.6	60.5	49.2
10:35 PM - 10:40 PM	50.8	53.4	48.8
10:40 PM - 10:45 PM	49.4	58.0	47.2
10:45 PM - 10:50 PM	49.6	55.4	48.1
10:50 PM - 10:55 PM	49.2	64.1	47.2
10:55 PM - 11:00 PM	51.4	54.8	47.9
11:00 PM - 11:05 PM	52.5	55.3	50.6
11:05 PM - 11:10 PM	53.3	57.5	51.1
11:10 PM - 11:15 PM	53.4	57.6	51.8
11:15 PM - 11:20 PM	53.7	59.2	52.0
11:20 PM - 11:25 PM	54.0	57.0	52.2
11:25 PM - 11:30 PM	54.1	56.8	52.2
11:30 PM - 11:35 PM	54.0	56.9	52.3
11:35 PM - 11:40 PM	53.8	56.5	52.1
11:40 PM - 11:45 PM	53.9	59.0	52.0
11:45 PM - 11:50 PM	54.1	56.7	52.4
11:50 PM - 11:55 PM	53.9	56.7	52.2
11:55 PM - 12:00 AM	50.5	58.6	47.1
12:00 AM - 12:05 AM	49.5	54.9	45.3
12:05 AM - 12:10 AM	49.7	55.2	46.2
12:10 AM - 12:15 AM	49.7	57.1	48.2
12:15 AM - 12:20 AM	54.6	58.8	51.9

The above results are valid only for the analyzed tested sample(s) as indicated in this report. No part of this report or certificate can 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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872477-1

Page 3 of 3

**Sample No.** : 23124327-10  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลหนองหว้า (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 19 - 20, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	52.1	57.6	48.6
12:25 AM - 12:30 AM	53.2	62.7	48.5
12:30 AM - 12:35 AM	55.2	62.1	53.1
12:35 AM - 12:40 AM	54.7	58.0	52.9
12:40 AM - 12:45 AM	55.4	58.7	53.6
12:45 AM - 12:50 AM	54.3	58.4	48.6
12:50 AM - 12:55 AM	49.0	57.6	47.1
12:55 AM - 01:00 AM	49.1	55.4	47.9
01:00 AM - 01:05 AM	48.8	55.7	47.9
01:05 AM - 01:10 AM	48.4	53.4	47.6
01:10 AM - 01:15 AM	48.7	55.2	47.8
01:15 AM - 01:20 AM	48.5	54.2	47.4
01:20 AM - 01:25 AM	48.6	52.4	47.7
01:25 AM - 01:30 AM	48.6	52.9	47.5
01:30 AM - 01:35 AM	48.7	52.0	47.7
01:35 AM - 01:40 AM	50.6	58.9	48.1
01:40 AM - 01:45 AM	55.0	59.8	49.3
01:45 AM - 01:50 AM	58.2	60.6	55.7
01:50 AM - 01:55 AM	57.2	64.6	54.5
01:55 AM - 02:00 AM	58.2	66.0	55.8
02:00 AM - 02:05 AM	58.1	60.5	55.8
02:05 AM - 02:10 AM	57.7	61.1	55.4
02:10 AM - 02:15 AM	58.2	61.5	56.1
02:15 AM - 02:20 AM	58.3	61.5	56.1
02:20 AM - 02:25 AM	58.4	61.4	56.7
02:25 AM - 02:30 AM	58.3	61.0	56.3
02:30 AM - 02:35 AM	58.1	64.3	55.8
02:35 AM - 02:40 AM	58.4	63.8	56.3
02:40 AM - 02:45 AM	57.0	60.7	50.9
02:45 AM - 02:50 AM	56.4	62.2	51.2
02:50 AM - 02:55 AM	57.4	59.8	55.0
02:55 AM - 03:00 AM	56.6	59.9	54.2
03:00 AM - 03:05 AM	57.1	60.5	55.0
03:05 AM - 03:10 AM	56.4	59.5	54.0
03:10 AM - 03:15 AM	55.9	59.8	53.5
03:15 AM - 03:20 AM	56.1	59.4	54.0
03:20 AM - 03:25 AM	57.1	59.7	55.2
03:25 AM - 03:30 AM	56.2	59.8	53.5
03:30 AM - 03:35 AM	54.3	58.3	43.7
03:35 AM - 03:40 AM	54.1	58.0	43.8

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

Approved by

*Wilwan Borirak*

Wilwan Borirak  
Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phraklaeng Rayong 21340 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872477-1

Page 3 of 3

**Sample No.** : 23124327-10  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลหนองหว้า (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 19 - 20, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	55.6	58.3	53.2
03:45 AM - 03:50 AM	55.7	60.4	53.4
03:50 AM - 03:55 AM	55.7	64.1	53.0
03:55 AM - 04:00 AM	54.0	58.2	51.4
04:00 AM - 04:05 AM	53.2	59.0	46.1
04:05 AM - 04:10 AM	53.1	58.8	50.5
04:10 AM - 04:15 AM	53.4	56.5	51.3
04:15 AM - 04:20 AM	53.6	56.6	51.5
04:20 AM - 04:25 AM	54.4	58.6	52.1
04:25 AM - 04:30 AM	54.6	57.6	52.4
04:30 AM - 04:35 AM	54.9	57.9	52.8
04:35 AM - 04:40 AM	55.2	58.1	53.5
04:40 AM - 04:45 AM	55.4	57.8	53.8
04:45 AM - 04:50 AM	55.6	58.1	53.9
04:50 AM - 04:55 AM	55.4	58.8	53.7
04:55 AM - 05:00 AM	55.5	58.1	54.0
05:00 AM - 05:05 AM	56.4	59.9	54.3
05:05 AM - 05:10 AM	56.5	59.0	54.8
05:10 AM - 05:15 AM	56.2	58.8	54.4
05:15 AM - 05:20 AM	55.7	61.2	53.4
05:20 AM - 05:25 AM	55.6	60.7	53.9
05:25 AM - 05:30 AM	55.5	63.4	53.3
05:30 AM - 05:35 AM	53.9	61.6	50.2
05:35 AM - 05:40 AM	51.1	55.2	49.6
05:40 AM - 05:45 AM	51.1	57.3	49.4
05:45 AM - 05:50 AM	50.7	59.5	48.7
05:50 AM - 05:55 AM	50.7	61.3	47.4
05:55 AM - 06:00 AM	50.1	58.5	46.3
06:00 AM - 07:00 AM	50.4	79.0	45.9
07:00 AM - 08:00 AM	48.1	64.2	44.5
08:00 AM - 09:00 AM	48.6	73.0	43.8
09:00 AM - 10:00 AM	48.8	73.0	44.5

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilwan Borirak*

Wilwan Borirak  
Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phraklaeng Rayong 21340 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872478-1

**Sample No.** 23124327-11

**Parameter** Noise

**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)

**Measurement Date** Dec 20 - 21, 2023

**Measurement by** Satcha Phetsawaeng

**Sound Level Meter** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.2	78.1	44.1
11:00 AM - 12:00 PM	48.0	73.6	42.7
12:00 PM - 01:00 PM	48.0	71.3	43.5
01:00 PM - 02:00 PM	46.7	64.8	42.4
02:00 PM - 03:00 PM	47.5	67.1	43.1
03:00 PM - 04:00 PM	48.5	68.1	44.1
04:00 PM - 05:00 PM	48.7	72.3	45.5
05:00 PM - 06:00 PM	51.0	69.7	47.3
06:00 PM - 07:00 PM	56.6	70.7	54.8
07:00 PM - 08:00 PM	55.3	67.5	52.0
08:00 PM - 09:00 PM	53.7	70.2	51.8
09:00 PM - 10:00 PM	56.2	64.7	53.9
10:00 PM - 10:05 PM	51.8	56.3	50.0
10:05 PM - 10:10 PM	57.4	60.6	52.8
10:10 PM - 10:15 PM	57.8	60.3	56.1
10:15 PM - 10:20 PM	57.5	60.5	55.3
10:20 PM - 10:25 PM	57.1	60.6	54.8
10:25 PM - 10:30 PM	55.3	58.4	53.3
10:30 PM - 10:35 PM	54.8	57.8	53.0
10:35 PM - 10:40 PM	54.6	57.9	53.0
10:40 PM - 10:45 PM	54.6	57.9	53.0
10:45 PM - 10:50 PM	55.2	59.3	53.4
10:50 PM - 10:55 PM	55.5	58.6	53.9
10:55 PM - 11:00 PM	55.7	62.8	53.1
11:00 PM - 11:05 PM	54.2	59.2	49.1
11:05 PM - 11:10 PM	50.8	55.3	48.4
11:10 PM - 11:15 PM	50.5	57.6	48.8
11:15 PM - 11:20 PM	50.8	59.3	48.7
11:20 PM - 11:25 PM	52.8	70.0	49.6
11:25 PM - 11:30 PM	51.6	55.2	50.0
11:30 PM - 11:35 PM	52.1	55.2	50.7
11:35 PM - 11:40 PM	52.4	66.6	45.7
11:40 PM - 11:45 PM	49.5	54.4	48.1
11:45 PM - 11:50 PM	50.2	60.4	47.1
11:50 PM - 11:55 PM	51.7	64.8	45.9
11:55 PM - 12:00 AM	51.7	59.2	49.8
12:00 AM - 12:05 AM	51.7	59.4	49.6
12:05 AM - 12:10 AM	52.0	56.7	50.3
12:10 AM - 12:15 AM	52.3	57.2	50.6
12:15 AM - 12:20 AM	53.0	56.3	51.2

The above results are valid only for the analyzed/sampled 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*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872478-1

**Sample No.** 23124327-11

**Parameter** Noise

**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลชะเมา (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)

**Measurement Date** Dec 20 - 21, 2023

**Measurement by** Satcha Phetsawaeng

**Sound Level Meter** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	53.2	56.2	50.9
12:25 AM - 12:30 AM	53.5	60.9	50.6
12:30 AM - 12:35 AM	53.1	64.1	50.3
12:35 AM - 12:40 AM	52.7	56.5	50.2
12:40 AM - 12:45 AM	51.9	55.7	49.6
12:45 AM - 12:50 AM	52.2	56.0	50.0
12:50 AM - 12:55 AM	51.7	56.1	49.3
12:55 AM - 01:00 AM	51.7	57.1	49.5
01:00 AM - 01:05 AM	51.0	60.3	49.3
01:05 AM - 01:10 AM	50.7	54.6	49.3
01:10 AM - 01:15 AM	51.2	63.8	49.5
01:15 AM - 01:20 AM	51.0	54.8	49.7
01:20 AM - 01:25 AM	50.9	55.5	49.3
01:25 AM - 01:30 AM	54.7	67.6	49.3
01:30 AM - 01:35 AM	61.4	80.0	47.9
01:35 AM - 01:40 AM	51.7	55.9	50.3
01:40 AM - 01:45 AM	51.3	55.0	49.9
01:45 AM - 01:50 AM	51.6	62.6	49.5
01:50 AM - 01:55 AM	50.3	59.0	48.0
01:55 AM - 02:00 AM	50.3	55.0	48.5
02:00 AM - 02:05 AM	50.6	56.3	48.9
02:05 AM - 02:10 AM	50.3	54.6	48.8
02:10 AM - 02:15 AM	49.1	55.3	46.4
02:15 AM - 02:20 AM	48.6	54.5	46.4
02:20 AM - 02:25 AM	48.2	51.9	46.4
02:25 AM - 02:30 AM	47.9	53.0	46.2
02:30 AM - 02:35 AM	47.5	51.6	45.6
02:35 AM - 02:40 AM	47.9	50.6	46.2
02:40 AM - 02:45 AM	48.1	56.9	46.2
02:45 AM - 02:50 AM	47.8	53.1	46.1
02:50 AM - 02:55 AM	47.8	52.3	46.1
02:55 AM - 03:00 AM	47.9	54.6	46.1
03:00 AM - 03:05 AM	47.7	53.7	45.8
03:05 AM - 03:10 AM	49.2	54.8	47.0
03:10 AM - 03:15 AM	49.4	53.1	47.7
03:15 AM - 03:20 AM	47.9	56.6	45.8
03:20 AM - 03:25 AM	47.3	51.0	45.9
03:25 AM - 03:30 AM	46.8	54.0	45.3
03:30 AM - 03:35 AM	47.2	56.8	45.2
03:35 AM - 03:40 AM	45.6	51.1	43.3

The above results are valid only for the analyzed/sampled 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*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report No. : 2872478-1

Page 1 of 3

**Sample No.** : 23124327-11  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหัว คำนวนตามทาง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 20 - 21, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	43.0	49.9	41.8
03:45 AM - 03:50 AM	42.6	45.4	41.6
03:50 AM - 03:55 AM	43.9	55.0	41.8
03:55 AM - 04:00 AM	51.0	58.9	41.9
04:00 AM - 04:05 AM	55.4	60.9	48.5
04:05 AM - 04:10 AM	56.2	60.3	52.1
04:10 AM - 04:15 AM	53.5	57.3	50.2
04:15 AM - 04:20 AM	53.6	57.4	50.8
04:20 AM - 04:25 AM	54.4	62.8	49.7
04:25 AM - 04:30 AM	55.7	61.7	51.9
04:30 AM - 04:35 AM	54.6	60.2	50.6
04:35 AM - 04:40 AM	55.7	62.4	53.0
04:40 AM - 04:45 AM	55.5	59.4	52.8
04:45 AM - 04:50 AM	49.7	58.5	45.3
04:50 AM - 04:55 AM	52.0	56.2	49.4
04:55 AM - 05:00 AM	53.8	58.7	50.1
05:00 AM - 05:05 AM	53.6	58.9	49.7
05:05 AM - 05:10 AM	56.5	63.7	52.4
05:10 AM - 05:15 AM	57.2	64.2	52.2
05:15 AM - 05:20 AM	60.0	66.5	52.5
05:20 AM - 05:25 AM	62.4	67.0	59.2
05:25 AM - 05:30 AM	61.5	66.9	53.2
05:30 AM - 05:35 AM	55.7	63.0	51.9
05:35 AM - 05:40 AM	57.3	64.7	53.7
05:40 AM - 05:45 AM	55.6	62.2	51.8
05:45 AM - 05:50 AM	54.8	59.1	52.1
05:50 AM - 05:55 AM	53.9	58.0	51.5
05:55 AM - 06:00 AM	51.2	63.5	46.5
06:00 AM - 07:00 AM	50.4	74.3	47.5
07:00 AM - 08:00 AM	55.0	73.5	48.7
08:00 AM - 09:00 AM	52.8	67.7	47.8
09:00 AM - 10:00 AM	52.8	68.6	46.8

**Reference Method :**

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received :Dec 25, 2023  
Date Reported :Dec 26, 2023  
Report No. : 2872479-1

Page 1 of 3

**Sample No.** : 23124327-12  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหัว คำนวนตามทาง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 21 - 22, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	52.2	78.7	45.0
11:00 AM - 12:00 PM	50.6	68.6	46.6
12:00 PM - 01:00 PM	55.5	69.7	49.7
01:00 PM - 02:00 PM	61.8	76.3	53.8
02:00 PM - 03:00 PM	52.2	74.1	48.9
03:00 PM - 04:00 PM	53.1	81.2	46.6
04:00 PM - 05:00 PM	54.7	74.7	49.7
05:00 PM - 06:00 PM	51.8	75.9	48.5
06:00 PM - 07:00 PM	55.6	71.4	51.2
07:00 PM - 08:00 PM	56.9	75.5	50.4
08:00 PM - 09:00 PM	55.0	67.7	50.3
09:00 PM - 10:00 PM	58.7	67.3	56.0
10:00 PM - 10:05 PM	60.0	65.8	57.1
10:05 PM - 10:10 PM	60.9	67.6	58.1
10:10 PM - 10:15 PM	61.5	65.5	58.9
10:15 PM - 10:20 PM	62.0	71.7	58.9
10:20 PM - 10:25 PM	60.1	65.6	57.6
10:25 PM - 10:30 PM	60.3	66.0	57.7
10:30 PM - 10:35 PM	60.1	65.7	56.7
10:35 PM - 10:40 PM	59.8	66.2	57.2
10:40 PM - 10:45 PM	59.6	70.3	56.8
10:45 PM - 10:50 PM	58.3	64.5	56.4
10:50 PM - 10:55 PM	58.4	62.2	56.6
10:55 PM - 11:00 PM	57.6	61.5	54.9
11:00 PM - 11:05 PM	56.9	64.9	54.5
11:05 PM - 11:10 PM	57.4	62.2	55.3
11:10 PM - 11:15 PM	57.5	63.3	55.3
11:15 PM - 11:20 PM	57.4	65.5	55.0
11:20 PM - 11:25 PM	56.9	60.1	54.9
11:25 PM - 11:30 PM	57.1	60.7	55.2
11:30 PM - 11:35 PM	56.7	62.4	54.6
11:35 PM - 11:40 PM	56.7	63.4	54.6
11:40 PM - 11:45 PM	57.3	63.8	55.2
11:45 PM - 11:50 PM	56.8	66.8	54.1
11:50 PM - 11:55 PM	56.4	64.1	54.1
11:55 PM - 12:00 AM	56.2	63.6	53.3
12:00 AM - 12:05 AM	52.4	59.0	48.1
12:05 AM - 12:10 AM	53.8	70.5	49.5
12:10 AM - 12:15 AM	52.1	64.4	48.0
12:15 AM - 12:20 AM	53.0	57.6	48.3

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**Lot ID:** 23124327  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report No. :** 2872479-1

**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

Page 2 of 3

**Sample No.** 23124327-12  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขาม (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	52.8	61.3	47.8
12:25 AM - 12:30 AM	53.2	62.6	49.5
12:30 AM - 12:35 AM	51.9	64.0	47.5
12:35 AM - 12:40 AM	52.6	63.9	48.9
12:40 AM - 12:45 AM	52.7	64.1	48.2
12:45 AM - 12:50 AM	52.5	59.2	47.0
12:50 AM - 12:55 AM	51.9	57.9	45.7
12:55 AM - 01:00 AM	51.7	63.9	47.1
01:00 AM - 01:05 AM	51.6	58.2	46.2
01:05 AM - 01:10 AM	51.7	61.0	46.7
01:10 AM - 01:15 AM	52.3	65.3	46.6
01:15 AM - 01:20 AM	50.9	63.0	45.7
01:20 AM - 01:25 AM	51.7	66.0	47.3
01:25 AM - 01:30 AM	51.8	56.6	47.1
01:30 AM - 01:35 AM	52.3	61.7	47.6
01:35 AM - 01:40 AM	51.8	60.3	46.8
01:40 AM - 01:45 AM	53.0	60.4	48.1
01:45 AM - 01:50 AM	52.4	61.8	46.9
01:50 AM - 01:55 AM	50.9	78.5	43.7
01:55 AM - 02:00 AM	46.2	58.8	41.6
02:00 AM - 02:05 AM	51.3	68.4	43.2
02:05 AM - 02:10 AM	44.4	53.6	41.7
02:10 AM - 02:15 AM	48.7	62.8	43.6
02:15 AM - 02:20 AM	50.2	56.3	46.6
02:20 AM - 02:25 AM	50.0	60.8	45.3
02:25 AM - 02:30 AM	48.8	62.0	44.7
02:30 AM - 02:35 AM	54.1	61.9	50.6
02:35 AM - 02:40 AM	51.2	62.5	48.3
02:40 AM - 02:45 AM	51.6	59.9	47.6
02:45 AM - 02:50 AM	50.4	65.7	46.1
02:50 AM - 02:55 AM	51.0	61.3	48.1
02:55 AM - 03:00 AM	50.7	64.5	45.2
03:00 AM - 03:05 AM	49.4	64.2	45.8
03:05 AM - 03:10 AM	50.3	60.4	46.4
03:10 AM - 03:15 AM	49.1	57.5	44.9
03:15 AM - 03:20 AM	48.6	56.3	45.1
03:20 AM - 03:25 AM	49.5	59.8	45.5
03:25 AM - 03:30 AM	49.8	65.2	46.6
03:30 AM - 03:35 AM	47.2	58.8	43.5
03:35 AM - 03:40 AM	50.9	67.1	44.2

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS FROM PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**Lot ID:** 23124327  
**Date Received :** Dec 25, 2023  
**Date Reported :** Dec 26, 2023  
**Report No. :** 2872479-1

**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

Page 3 of 3

**Sample No.** 23124327-12  
**Parameter** Noise  
**Location** หมู่ที่ 1 บ้านหนองหว้า ตำบลมะขาม (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	61.6	68.8	57.1
03:45 AM - 03:50 AM	58.1	69.5	45.1
03:50 AM - 03:55 AM	60.5	68.2	53.4
03:55 AM - 04:00 AM	58.8	68.6	45.5
04:00 AM - 04:05 AM	55.2	69.8	47.1
04:05 AM - 04:10 AM	60.9	72.2	51.0
04:10 AM - 04:15 AM	66.9	76.1	57.8
04:15 AM - 04:20 AM	65.8	75.4	59.3
04:20 AM - 04:25 AM	66.4	76.1	58.1
04:25 AM - 04:30 AM	60.6	74.5	43.9
04:30 AM - 04:35 AM	47.6	59.4	42.1
04:35 AM - 04:40 AM	50.3	69.0	44.8
04:40 AM - 04:45 AM	49.5	64.7	46.4
04:45 AM - 04:50 AM	53.0	56.9	49.7
04:50 AM - 04:55 AM	53.0	56.8	49.5
04:55 AM - 05:00 AM	52.5	56.8	49.0
05:00 AM - 05:05 AM	51.2	56.7	47.8
05:05 AM - 05:10 AM	49.1	53.8	47.4
05:10 AM - 05:15 AM	49.8	56.3	47.6
05:15 AM - 05:20 AM	49.9	55.7	47.6
05:20 AM - 05:25 AM	50.4	57.5	47.6
05:25 AM - 05:30 AM	49.8	54.6	47.1
05:30 AM - 05:35 AM	49.9	54.9	47.1
05:35 AM - 05:40 AM	50.2	54.9	47.3
05:40 AM - 05:45 AM	50.1	54.1	47.2
05:45 AM - 05:50 AM	50.3	54.5	47.1
05:50 AM - 05:55 AM	51.0	54.9	47.5
05:55 AM - 06:00 AM	51.3	58.6	47.4
06:00 AM - 07:00 AM	53.1	74.5	50.0
07:00 AM - 08:00 AM	54.3	69.5	49.4
08:00 AM - 09:00 AM	51.8	75.7	48.6
09:00 AM - 10:00 AM	55.8	71.2	51.0

Reference Method :

- ISO 1996-1
- ประกาศกรมอุตุนิยมวิทยา เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS FROM PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872480-1

Page 1 of 3

Sample No. 23124327-13  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลระขนิง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.6	75.3	50.1
11:00 AM - 12:00 PM	54.8	66.2	50.7
12:00 PM - 01:00 PM	58.7	67.1	56.0
01:00 PM - 02:00 PM	59.7	71.5	57.0
02:00 PM - 03:00 PM	56.5	66.6	54.2
03:00 PM - 04:00 PM	52.3	70.3	47.8
04:00 PM - 05:00 PM	51.8	78.0	46.1
05:00 PM - 06:00 PM	45.7	59.8	41.2
06:00 PM - 07:00 PM	46.2	61.3	41.5
07:00 PM - 08:00 PM	44.1	63.9	40.0
08:00 PM - 09:00 PM	44.1	61.2	40.2
09:00 PM - 10:00 PM	47.0	65.5	42.1
10:00 PM - 10:05 PM	46.7	61.6	42.2
10:05 PM - 10:10 PM	45.6	55.8	41.3
10:10 PM - 10:15 PM	42.2	52.9	39.8
10:15 PM - 10:20 PM	43.8	54.1	40.7
10:20 PM - 10:25 PM	44.8	52.1	42.1
10:25 PM - 10:30 PM	43.9	51.5	41.4
10:30 PM - 10:35 PM	45.7	53.8	41.6
10:35 PM - 10:40 PM	45.9	58.3	42.4
10:40 PM - 10:45 PM	45.6	59.9	42.6
10:45 PM - 10:50 PM	46.6	58.3	42.2
10:50 PM - 10:55 PM	46.0	57.6	41.6
10:55 PM - 11:00 PM	45.1	59.7	42.1
11:00 PM - 11:05 PM	46.7	63.8	42.3
11:05 PM - 11:10 PM	45.1	57.3	42.1
11:10 PM - 11:15 PM	47.0	63.5	42.2
11:15 PM - 11:20 PM	46.5	61.4	42.8
11:20 PM - 11:25 PM	44.8	55.4	42.5
11:25 PM - 11:30 PM	45.8	58.5	42.5
11:30 PM - 11:35 PM	45.0	52.2	42.8
11:35 PM - 11:40 PM	44.7	51.3	42.9
11:40 PM - 11:45 PM	48.0	62.4	42.4
11:45 PM - 11:50 PM	44.5	57.4	42.7
11:50 PM - 11:55 PM	45.6	58.0	43.3
11:55 PM - 12:00 AM	46.2	55.9	43.4
12:00 AM - 12:05 AM	48.3	64.3	44.2
12:05 AM - 12:10 AM	47.3	60.5	43.3
12:10 AM - 12:15 AM	47.3	59.4	44.3
12:15 AM - 12:20 AM	46.5	55.9	44.2

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

Approved by

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

LIFE SCIENCES

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872480-1

Page 2 of 3

Sample No. 23124327-13  
Parameter Noise  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลระขนิง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
Measurement Date Dec 22 - 23, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	46.3	56.2	43.5
12:25 AM - 12:30 AM	47.3	55.4	42.9
12:30 AM - 12:35 AM	50.3	57.2	44.2
12:35 AM - 12:40 AM	51.6	54.3	49.6
12:40 AM - 12:45 AM	52.2	57.2	50.9
12:45 AM - 12:50 AM	52.4	55.5	51.2
12:50 AM - 12:55 AM	52.4	63.8	51.1
12:55 AM - 01:00 AM	52.3	56.1	51.1
01:00 AM - 01:05 AM	52.0	65.7	50.3
01:05 AM - 01:10 AM	52.0	54.6	50.8
01:10 AM - 01:15 AM	52.0	60.3	50.5
01:15 AM - 01:20 AM	51.1	58.5	49.2
01:20 AM - 01:25 AM	51.4	56.3	49.2
01:25 AM - 01:30 AM	50.4	60.0	47.1
01:30 AM - 01:35 AM	49.6	58.1	45.8
01:35 AM - 01:40 AM	50.8	57.7	48.7
01:40 AM - 01:45 AM	49.8	55.5	46.3
01:45 AM - 01:50 AM	49.7	76.9	47.0
01:50 AM - 01:55 AM	49.9	61.0	46.7
01:55 AM - 02:00 AM	47.8	65.1	46.2
02:00 AM - 02:05 AM	50.1	59.0	47.8
02:05 AM - 02:10 AM	49.9	56.6	47.6
02:10 AM - 02:15 AM	49.9	58.7	46.8
02:15 AM - 02:20 AM	48.7	56.0	46.5
02:20 AM - 02:25 AM	49.3	63.0	46.2
02:25 AM - 02:30 AM	49.2	57.7	46.8
02:30 AM - 02:35 AM	49.2	55.7	47.6
02:35 AM - 02:40 AM	49.3	58.2	47.8
02:40 AM - 02:45 AM	49.1	59.3	47.8
02:45 AM - 02:50 AM	49.1	56.0	47.8
02:50 AM - 02:55 AM	48.8	55.7	47.1
02:55 AM - 03:00 AM	48.7	54.9	47.3
03:00 AM - 03:05 AM	48.5	52.0	47.2
03:05 AM - 03:10 AM	49.3	54.1	47.6
03:10 AM - 03:15 AM	48.9	59.1	47.4
03:15 AM - 03:20 AM	49.0	55.3	47.4
03:20 AM - 03:25 AM	49.3	55.9	47.4
03:25 AM - 03:30 AM	49.0	59.5	47.0
03:30 AM - 03:35 AM	49.0	57.0	47.0
03:35 AM - 03:40 AM	50.0	62.4	47.5

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

Approved by

*Wilwan Borirak*  
Wilwan Borirak  
Manager

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

LIFE SCIENCES

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872480-1

Page 3 of 3

**Sample No.** : 23124327-13  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหัว ตำบลมะขามสูง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 22 - 23, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	48.4	55.5	47.1
03:45 AM - 03:50 AM	47.5	56.3	46.7
03:50 AM - 03:55 AM	47.7	56.2	46.5
03:55 AM - 04:00 AM	47.4	55.6	46.0
04:00 AM - 04:05 AM	46.8	50.8	45.9
04:05 AM - 04:10 AM	54.9	70.8	46.1
04:10 AM - 04:15 AM	51.4	71.1	46.3
04:15 AM - 04:20 AM	46.9	50.6	46.2
04:20 AM - 04:25 AM	47.2	53.3	46.4
04:25 AM - 04:30 AM	47.4	56.4	46.5
04:30 AM - 04:35 AM	47.6	53.6	46.2
04:35 AM - 04:40 AM	45.7	55.0	44.7
04:40 AM - 04:45 AM	46.7	60.2	44.6
04:45 AM - 04:50 AM	46.5	53.2	45.3
04:50 AM - 04:55 AM	47.1	61.3	45.2
04:55 AM - 05:00 AM	46.2	56.2	44.5
05:00 AM - 05:05 AM	46.2	51.5	45.1
05:05 AM - 05:10 AM	45.4	49.3	44.6
05:10 AM - 05:15 AM	45.4	51.8	44.5
05:15 AM - 05:20 AM	45.6	54.2	44.5
05:20 AM - 05:25 AM	46.5	61.1	44.7
05:25 AM - 05:30 AM	45.4	54.6	44.0
05:30 AM - 05:35 AM	44.7	48.9	43.2
05:35 AM - 05:40 AM	45.5	52.5	44.0
05:40 AM - 05:45 AM	45.1	52.6	43.5
05:45 AM - 05:50 AM	45.2	53.8	43.8
05:50 AM - 05:55 AM	46.4	60.9	43.8
05:55 AM - 06:00 AM	45.7	51.8	44.0
06:00 AM - 07:00 AM	45.6	61.2	44.0
07:00 AM - 08:00 AM	45.1	69.7	42.9
08:00 AM - 09:00 AM	44.4	60.5	42.3
09:00 AM - 10:00 AM	53.3	70.2	49.9

### Reference Method :

1. ISO 1996-1
2. ประกาศกระทรวงมหาดไทย เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

Approved by

*Wilwan Borik*

Wilwan Borik  
Manager

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

ADDRESS: 616/19 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3304 8555 | FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited company

LINE: @alslabthai

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872481-1

Page 1 of 3

**Sample No.** : 23124327-14  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหัว ตำบลมะขามสูง (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 23 - 24, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	50.2	59.8	46.8
11:00 AM - 12:00 PM	52.1	77.0	47.0
12:00 PM - 01:00 PM	52.3	69.6	49.1
01:00 PM - 02:00 PM	49.4	69.9	45.2
02:00 PM - 03:00 PM	51.3	70.7	43.2
03:00 PM - 04:00 PM	47.0	78.5	43.4
04:00 PM - 05:00 PM	47.2	63.8	44.1
05:00 PM - 06:00 PM	48.4	68.8	43.5
06:00 PM - 07:00 PM	49.2	73.3	42.2
07:00 PM - 08:00 PM	48.1	77.1	41.1
08:00 PM - 09:00 PM	46.5	69.3	44.6
09:00 PM - 10:00 PM	49.1	74.5	45.7
10:00 PM - 10:05 PM	50.3	63.0	44.1
10:05 PM - 10:10 PM	47.3	63.9	42.7
10:10 PM - 10:15 PM	45.3	56.1	44.6
10:15 PM - 10:20 PM	48.5	61.5	44.2
10:20 PM - 10:25 PM	50.5	65.6	43.4
10:25 PM - 10:30 PM	46.1	56.9	43.0
10:30 PM - 10:35 PM	46.2	58.1	42.6
10:35 PM - 10:40 PM	45.2	54.9	42.8
10:40 PM - 10:45 PM	45.4	53.8	44.1
10:45 PM - 10:50 PM	58.3	81.3	42.9
10:50 PM - 10:55 PM	48.4	61.6	44.8
10:55 PM - 11:00 PM	48.5	65.2	46.3
11:00 PM - 11:05 PM	52.5	68.8	43.3
11:05 PM - 11:10 PM	51.5	71.8	44.6
11:10 PM - 11:15 PM	48.3	58.7	43.2
11:15 PM - 11:20 PM	47.7	62.2	43.4
11:20 PM - 11:25 PM	46.0	59.0	43.2
11:25 PM - 11:30 PM	45.3	58.4	44.7
11:30 PM - 11:35 PM	47.4	59.2	44.4
11:35 PM - 11:40 PM	48.0	64.6	44.7
11:40 PM - 11:45 PM	47.7	60.5	44.4
11:45 PM - 11:50 PM	47.2	58.8	44.5
11:50 PM - 11:55 PM	46.7	62.2	45.1
11:55 PM - 12:00 AM	48.3	60.4	45.0
12:00 AM - 12:05 AM	47.5	60.9	44.5
12:05 AM - 12:10 AM	47.8	62.6	45.2
12:10 AM - 12:15 AM	48.9	64.2	45.2
12:15 AM - 12:20 AM	47.5	59.1	45.2

The above results are valid only for the analyzed 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

*Wilwan Borik*

Wilwan Borik  
Manager

ADDRESS: 616/19 Moo 5, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand | PHONE: +66 0 3304 8555 | FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited company

LINE: @alslabthai

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872481-1

Page 2 of 3

**Sample No.** : 23124327-14  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะอำ (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 23 - 24, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	46.9	57.0	45.1
12:25 AM - 12:30 AM	53.6	72.4	44.6
12:30 AM - 12:35 AM	47.1	63.1	44.5
12:35 AM - 12:40 AM	47.2	56.0	44.6
12:40 AM - 12:45 AM	50.9	68.0	46.1
12:45 AM - 12:50 AM	49.3	54.0	47.7
12:50 AM - 12:55 AM	49.9	64.1	47.8
12:55 AM - 01:00 AM	49.0	57.3	47.6
01:00 AM - 01:05 AM	48.4	52.9	47.5
01:05 AM - 01:10 AM	48.3	53.5	47.3
01:10 AM - 01:15 AM	48.2	55.5	47.3
01:15 AM - 01:20 AM	47.9	52.9	47.0
01:20 AM - 01:25 AM	48.3	58.4	47.2
01:25 AM - 01:30 AM	48.0	52.6	47.1
01:30 AM - 01:35 AM	48.3	56.1	47.0
01:35 AM - 01:40 AM	48.5	55.1	47.4
01:40 AM - 01:45 AM	48.7	59.4	47.7
01:45 AM - 01:50 AM	48.2	55.8	46.8
01:50 AM - 01:55 AM	49.0	55.2	47.0
01:55 AM - 02:00 AM	49.2	54.2	46.7
02:00 AM - 02:05 AM	49.7	59.4	46.4
02:05 AM - 02:10 AM	49.7	56.8	46.9
02:10 AM - 02:15 AM	53.1	55.9	48.2
02:15 AM - 02:20 AM	53.6	59.1	49.8
02:20 AM - 02:25 AM	54.0	57.4	51.1
02:25 AM - 02:30 AM	53.6	55.6	49.9
02:30 AM - 02:35 AM	53.2	57.7	48.7
02:35 AM - 02:40 AM	53.8	59.6	51.4
02:40 AM - 02:45 AM	52.8	60.3	48.8
02:45 AM - 02:50 AM	52.5	56.2	49.6
02:50 AM - 02:55 AM	52.9	60.1	49.9
02:55 AM - 03:00 AM	52.9	56.5	49.5
03:00 AM - 03:05 AM	52.8	55.6	49.7
03:05 AM - 03:10 AM	51.6	55.2	45.3
03:10 AM - 03:15 AM	46.4	54.3	45.0
03:15 AM - 03:20 AM	46.5	54.9	44.7
03:20 AM - 03:25 AM	47.0	53.8	45.4
03:25 AM - 03:30 AM	48.1	60.7	46.2
03:30 AM - 03:35 AM	49.0	61.5	46.3
03:35 AM - 03:40 AM	50.4	60.0	46.2

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

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872481-1

Page 3 of 3

**Sample No.** : 23124327-14  
**Parameter** : Noise  
**Location** : หมู่ที่ 1 บ้านหนองหว้า ตำบลชะอำ (N2) (จุดอ้างอิง) (GPS 47P 0731899, 1423148) (Shut down)  
**Measurement Date** : Dec 23 - 24, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00296518

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	49.6	61.9	46.2
03:45 AM - 03:50 AM	49.3	59.1	45.6
03:50 AM - 03:55 AM	48.0	52.7	44.3
03:55 AM - 04:00 AM	46.5	54.7	44.1
04:00 AM - 04:05 AM	46.8	54.8	44.3
04:05 AM - 04:10 AM	55.4	57.6	47.6
04:10 AM - 04:15 AM	56.1	60.1	51.6
04:15 AM - 04:20 AM	57.3	62.9	55.1
04:20 AM - 04:25 AM	58.6	61.6	56.9
04:25 AM - 04:30 AM	58.3	61.3	56.6
04:30 AM - 04:35 AM	58.9	61.7	57.2
04:35 AM - 04:40 AM	59.1	62.2	57.4
04:40 AM - 04:45 AM	58.7	61.6	54.2
04:45 AM - 04:50 AM	59.1	61.9	57.0
04:50 AM - 04:55 AM	59.2	62.1	57.4
04:55 AM - 05:00 AM	59.1	61.7	57.1
05:00 AM - 05:05 AM	59.5	61.9	57.9
05:05 AM - 05:10 AM	59.1	61.8	56.9
05:10 AM - 05:15 AM	59.1	61.8	57.3
05:15 AM - 05:20 AM	58.8	61.6	56.7
05:20 AM - 05:25 AM	58.1	61.5	55.6
05:25 AM - 05:30 AM	58.5	61.3	56.4
05:30 AM - 05:35 AM	58.7	61.4	56.8
05:35 AM - 05:40 AM	58.0	61.0	55.7
05:40 AM - 05:45 AM	58.4	62.2	56.4
05:45 AM - 05:50 AM	58.5	70.7	55.9
05:50 AM - 05:55 AM	58.7	61.8	56.6
05:55 AM - 06:00 AM	58.7	66.4	56.3
06:00 AM - 07:00 AM	56.0	61.7	50.8
07:00 AM - 08:00 AM	55.0	60.2	51.2
08:00 AM - 09:00 AM	51.9	59.1	47.8
09:00 AM - 10:00 AM	52.3	59.8	49.3

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่สังเกตจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872482-1

Page 1 of 3

**Sample No.** 23124327-15  
**Parameter** Noise  
**Location** หมู่ที่ 2 บ้านบ่อ 8 ตำบลนาบอน (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** Dec 17 - 18, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	47.9	70.2	39.8
03:00 PM - 04:00 PM	49.0	70.2	39.3
04:00 PM - 05:00 PM	51.3	78.4	40.4
05:00 PM - 06:00 PM	48.9	69.8	42.0
06:00 PM - 07:00 PM	50.9	66.5	46.4
07:00 PM - 08:00 PM	50.4	72.0	46.5
08:00 PM - 09:00 PM	50.7	76.1	44.6
09:00 PM - 10:00 PM	49.1	73.8	43.9
10:00 PM - 10:05 PM	48.2	64.3	44.3
10:05 PM - 10:10 PM	46.7	58.7	44.0
10:10 PM - 10:15 PM	46.4	52.8	44.3
10:15 PM - 10:20 PM	49.8	66.1	43.5
10:20 PM - 10:25 PM	45.3	50.3	44.2
10:25 PM - 10:30 PM	45.4	52.3	43.9
10:30 PM - 10:35 PM	46.4	56.7	43.8
10:35 PM - 10:40 PM	45.8	53.3	43.8
10:40 PM - 10:45 PM	46.3	56.7	44.0
10:45 PM - 10:50 PM	44.1	51.3	42.8
10:50 PM - 10:55 PM	44.5	56.0	42.6
10:55 PM - 11:00 PM	46.4	56.0	43.0
11:00 PM - 11:05 PM	48.3	60.4	47.2
11:05 PM - 11:10 PM	47.0	61.8	42.2
11:10 PM - 11:15 PM	45.8	59.5	42.4
11:15 PM - 11:20 PM	46.2	55.7	42.9
11:20 PM - 11:25 PM	44.1	50.8	42.3
11:25 PM - 11:30 PM	44.6	54.2	42.9
11:30 PM - 11:35 PM	44.1	51.4	43.0
11:35 PM - 11:40 PM	45.7	54.8	44.2
11:40 PM - 11:45 PM	45.5	61.4	43.7
11:45 PM - 11:50 PM	44.7	48.0	44.0
11:50 PM - 11:55 PM	44.5	50.2	43.5
11:55 PM - 12:00 AM	52.9	69.7	43.7
12:00 AM - 12:05 AM	43.9	49.3	43.1
12:05 AM - 12:10 AM	43.4	48.7	42.7
12:10 AM - 12:15 AM	43.7	49.9	42.6
12:15 AM - 12:20 AM	43.9	57.0	42.4
12:20 AM - 12:25 AM	45.6	59.9	43.1
12:25 AM - 12:30 AM	43.4	49.8	42.3
12:30 AM - 12:35 AM	49.9	69.4	42.5
12:35 AM - 12:40 AM	43.7	55.2	42.6

The above results are valid only for the analyzed/sampled 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

*Wilawon Borik*

Wilawon Borik  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872482-1

Page 2 of 3

**Sample No.** 23124327-15  
**Parameter** Noise  
**Location** หมู่ที่ 2 บ้านบ่อ 8 ตำบลนาบอน (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** Dec 17 - 18, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	44.4	60.1	41.6
12:45 AM - 12:50 AM	43.1	53.4	41.7
12:50 AM - 12:55 AM	43.4	54.6	41.0
12:55 AM - 01:00 AM	43.0	50.8	41.5
01:00 AM - 01:05 AM	45.3	59.8	42.6
01:05 AM - 01:10 AM	46.5	63.2	42.5
01:10 AM - 01:15 AM	46.0	58.4	43.0
01:15 AM - 01:20 AM	44.0	48.3	42.9
01:20 AM - 01:25 AM	44.0	53.8	42.6
01:25 AM - 01:30 AM	43.7	49.6	42.4
01:30 AM - 01:35 AM	44.7	54.4	43.1
01:35 AM - 01:40 AM	44.6	52.0	43.1
01:40 AM - 01:45 AM	44.6	50.8	43.1
01:45 AM - 01:50 AM	43.8	47.2	42.8
01:50 AM - 01:55 AM	44.3	47.0	43.2
01:55 AM - 02:00 AM	45.3	56.2	42.7
02:00 AM - 02:05 AM	44.4	49.5	43.3
02:05 AM - 02:10 AM	45.0	59.4	43.3
02:10 AM - 02:15 AM	44.3	48.2	43.4
02:15 AM - 02:20 AM	44.2	48.8	43.1
02:20 AM - 02:25 AM	44.1	48.6	42.9
02:25 AM - 02:30 AM	45.4	59.7	43.6
02:30 AM - 02:35 AM	45.6	59.3	43.4
02:35 AM - 02:40 AM	44.0	51.6	42.6
02:40 AM - 02:45 AM	48.9	63.6	42.5
02:45 AM - 02:50 AM	46.7	59.5	42.9
02:50 AM - 02:55 AM	47.4	61.7	42.9
02:55 AM - 03:00 AM	43.9	58.4	42.2
03:00 AM - 03:05 AM	45.0	57.0	41.9
03:05 AM - 03:10 AM	44.1	52.0	42.9
03:10 AM - 03:15 AM	44.7	55.5	42.7
03:15 AM - 03:20 AM	43.7	54.0	42.0
03:20 AM - 03:25 AM	43.1	50.6	41.6
03:25 AM - 03:30 AM	43.0	47.2	41.9
03:30 AM - 03:35 AM	44.4	56.5	42.0
03:35 AM - 03:40 AM	43.6	53.0	41.9
03:40 AM - 03:45 AM	43.3	49.1	41.8
03:45 AM - 03:50 AM	43.8	53.8	41.8
03:50 AM - 03:55 AM	43.6	56.3	41.5
03:55 AM - 04:00 AM	45.6	60.3	41.9

The above results are valid only for the analyzed/sampled 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

*Wilawon Borik*

Wilawon Borik  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872482-1

Sample No. 23124327-15

Parameter Noise

Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)

Measurement Date Dec 17 - 18, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 00900073

Page 3 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	42.6	47.2	41.2
04:05 AM - 04:10 AM	43.0	48.6	41.0
04:10 AM - 04:15 AM	42.2	49.5	40.3
04:15 AM - 04:20 AM	46.2	62.1	39.2
04:20 AM - 04:25 AM	49.0	70.9	40.3
04:25 AM - 04:30 AM	42.9	50.3	40.9
04:30 AM - 04:35 AM	44.9	59.7	41.7
04:35 AM - 04:40 AM	42.7	58.2	39.1
04:40 AM - 04:45 AM	42.4	52.5	40.5
04:45 AM - 04:50 AM	46.1	63.3	40.6
04:50 AM - 04:55 AM	42.5	54.4	40.4
04:55 AM - 05:00 AM	43.7	59.0	40.2
05:00 AM - 05:05 AM	44.3	55.7	40.7
05:05 AM - 05:10 AM	44.6	56.9	40.6
05:10 AM - 05:15 AM	43.9	56.8	40.1
05:15 AM - 05:20 AM	45.5	57.9	40.4
05:20 AM - 05:25 AM	44.2	53.9	40.7
05:25 AM - 05:30 AM	46.0	64.5	41.7
05:30 AM - 05:35 AM	52.4	64.2	43.5
05:35 AM - 05:40 AM	45.2	55.6	43.0
05:40 AM - 05:45 AM	45.6	56.3	42.9
05:45 AM - 05:50 AM	45.9	53.9	43.1
05:50 AM - 05:55 AM	45.9	54.9	42.1
05:55 AM - 06:00 AM	45.1	53.0	42.2
06:00 AM - 07:00 AM	49.1	70.1	43.2
07:00 AM - 08:00 AM	52.7	73.3	44.4
08:00 AM - 09:00 AM	50.9	71.4	41.6
09:00 AM - 10:00 AM	48.7	69.9	40.5
10:00 AM - 11:00 AM	47.2	69.2	40.9
11:00 AM - 12:00 PM	49.8	73.3	42.3
12:00 PM - 01:00 PM	50.1	77.7	42.0
01:00 PM - 02:00 PM	49.0	77.0	40.4

Reference Method :

1. ISO 1996-1

2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกินจากค่ามาตรฐาน/ประกาศกระทรวงมหาดไทย พ.ศ. 2553

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phukdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872483-1

Sample No. 23124327-16

Parameter Noise

Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)

Measurement Date Dec 18 - 19, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 00900073

Page 1 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.5	73.9	39.3
03:00 PM - 04:00 PM	49.4	71.8	41.4
04:00 PM - 05:00 PM	51.5	70.5	42.2
05:00 PM - 06:00 PM	58.0	93.8	44.0
06:00 PM - 07:00 PM	50.4	70.8	45.9
07:00 PM - 08:00 PM	49.0	69.0	44.9
08:00 PM - 09:00 PM	50.1	73.2	43.7
09:00 PM - 10:00 PM	47.5	68.3	43.2
10:00 PM - 10:05 PM	45.1	56.8	43.4
10:05 PM - 10:10 PM	45.0	52.8	43.4
10:10 PM - 10:15 PM	45.0	50.0	43.7
10:15 PM - 10:20 PM	45.4	56.6	43.5
10:20 PM - 10:25 PM	49.2	65.1	44.2
10:25 PM - 10:30 PM	45.9	60.7	43.9
10:30 PM - 10:35 PM	47.5	63.6	44.4
10:35 PM - 10:40 PM	47.5	61.5	44.2
10:40 PM - 10:45 PM	47.2	61.6	44.0
10:45 PM - 10:50 PM	46.8	59.1	44.1
10:50 PM - 10:55 PM	45.6	57.7	43.9
10:55 PM - 11:00 PM	46.7	59.2	44.2
11:00 PM - 11:05 PM	45.4	54.6	44.0
11:05 PM - 11:10 PM	45.5	58.8	43.4
11:10 PM - 11:15 PM	44.7	52.1	42.9
11:15 PM - 11:20 PM	44.4	50.5	42.7
11:20 PM - 11:25 PM	44.7	56.8	42.6
11:25 PM - 11:30 PM	44.2	52.2	42.7
11:30 PM - 11:35 PM	45.4	55.4	43.4
11:35 PM - 11:40 PM	45.3	59.3	43.2
11:40 PM - 11:45 PM	46.4	59.8	43.0
11:45 PM - 11:50 PM	45.6	60.0	43.2
11:50 PM - 11:55 PM	44.8	56.0	43.2
11:55 PM - 12:00 AM	44.6	52.1	43.3
12:00 AM - 12:05 AM	44.3	47.7	43.3
12:05 AM - 12:10 AM	45.4	58.3	43.3
12:10 AM - 12:15 AM	44.2	49.0	43.1
12:15 AM - 12:20 AM	45.1	58.3	43.2
12:20 AM - 12:25 AM	43.7	47.7	42.2
12:25 AM - 12:30 AM	47.2	63.7	43.0
12:30 AM - 12:35 AM	44.0	51.7	42.8
12:35 AM - 12:40 AM	44.4	54.9	43.1

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phukdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8556

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872483-1

Page 2 of 3

**Sample No.** : 23124327-16  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรมย์ (N3) (จุดล่างฝั่ง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 18 - 19, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	44.1	52.2	42.9
12:45 AM - 12:50 AM	44.2	49.4	43.2
12:50 AM - 12:55 AM	44.6	52.3	43.4
12:55 AM - 01:00 AM	44.2	46.8	43.2
01:00 AM - 01:05 AM	44.4	51.5	43.3
01:05 AM - 01:10 AM	44.8	54.8	43.5
01:10 AM - 01:15 AM	46.1	61.5	43.4
01:15 AM - 01:20 AM	44.1	51.6	43.0
01:20 AM - 01:25 AM	43.8	49.7	42.5
01:25 AM - 01:30 AM	43.3	45.9	42.3
01:30 AM - 01:35 AM	46.8	66.1	42.1
01:35 AM - 01:40 AM	43.4	55.9	41.3
01:40 AM - 01:45 AM	43.2	50.6	41.9
01:45 AM - 01:50 AM	43.1	47.7	41.9
01:50 AM - 01:55 AM	44.3	54.0	42.0
01:55 AM - 02:00 AM	42.7	54.2	40.8
02:00 AM - 02:05 AM	42.7	48.7	41.1
02:05 AM - 02:10 AM	43.4	48.7	41.5
02:10 AM - 02:15 AM	43.2	49.2	41.8
02:15 AM - 02:20 AM	42.9	52.5	40.9
02:20 AM - 02:25 AM	42.8	49.6	41.3
02:25 AM - 02:30 AM	42.5	50.4	40.9
02:30 AM - 02:35 AM	42.9	48.7	41.7
02:35 AM - 02:40 AM	42.9	50.6	41.5
02:40 AM - 02:45 AM	42.9	46.2	41.7
02:45 AM - 02:50 AM	43.4	54.6	41.6
02:50 AM - 02:55 AM	42.6	51.6	40.2
02:55 AM - 03:00 AM	43.1	55.5	40.8
03:00 AM - 03:05 AM	43.3	52.3	41.3
03:05 AM - 03:10 AM	43.3	48.5	42.1
03:10 AM - 03:15 AM	43.2	50.6	41.7
03:15 AM - 03:20 AM	43.2	49.4	41.8
03:20 AM - 03:25 AM	43.4	47.2	42.1
03:25 AM - 03:30 AM	44.5	56.8	42.5
03:30 AM - 03:35 AM	44.1	59.1	42.0
03:35 AM - 03:40 AM	44.0	54.5	42.2
03:40 AM - 03:45 AM	44.1	52.3	42.4
03:45 AM - 03:50 AM	47.1	66.6	42.5
03:50 AM - 03:55 AM	43.2	51.7	41.9
03:55 AM - 04:00 AM	43.2	50.1	42.0

Approved by

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS PROTECT YOUR FUTURE



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872483-1

Page 3 of 3

**Sample No.** : 23124327-16  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรมย์ (N3) (จุดล่างฝั่ง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 18 - 19, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	43.7	49.3	42.4
04:05 AM - 04:10 AM	44.8	55.1	42.7
04:10 AM - 04:15 AM	44.5	51.1	42.8
04:15 AM - 04:20 AM	45.1	57.2	43.3
04:20 AM - 04:25 AM	44.7	53.5	42.9
04:25 AM - 04:30 AM	43.8	50.6	42.2
04:30 AM - 04:35 AM	44.2	52.0	42.5
04:35 AM - 04:40 AM	43.5	50.0	42.0
04:40 AM - 04:45 AM	44.0	52.8	41.8
04:45 AM - 04:50 AM	44.5	52.0	42.2
04:50 AM - 04:55 AM	44.7	52.9	42.5
04:55 AM - 05:00 AM	43.9	55.6	41.9
05:00 AM - 05:05 AM	44.6	56.2	40.4
05:05 AM - 05:10 AM	43.7	54.3	41.0
05:10 AM - 05:15 AM	44.2	52.7	41.4
05:15 AM - 05:20 AM	43.6	50.0	41.9
05:20 AM - 05:25 AM	43.9	54.6	42.2
05:25 AM - 05:30 AM	52.7	65.6	43.1
05:30 AM - 05:35 AM	44.6	51.8	42.7
05:35 AM - 05:40 AM	45.2	57.8	42.8
05:40 AM - 05:45 AM	45.5	60.1	42.4
05:45 AM - 05:50 AM	45.9	56.3	42.5
05:50 AM - 05:55 AM	47.2	59.2	42.1
05:55 AM - 06:00 AM	45.8	57.6	42.3
06:00 AM - 07:00 AM	49.5	72.8	42.0
07:00 AM - 08:00 AM	52.4	73.4	44.0
08:00 AM - 09:00 AM	48.7	66.4	41.1
09:00 AM - 10:00 AM	47.7	67.1	41.4
10:00 AM - 11:00 AM	47.2	66.8	40.9
11:00 AM - 12:00 PM	46.8	63.7	40.6
12:00 PM - 01:00 PM	46.9	68.1	37.7
01:00 PM - 02:00 PM	48.2	74.5	40.8

Reference Method :

1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการทำงานของเครื่องจักรโรงงาน พ.ศ. 2553

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

Approved by

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS PROTECT YOUR FUTURE



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872484-1

Page 1 of 3

Sample No. 23124327-17  
Parameter Noise  
Location หมู่ที่ 2 บ้านหนอง 8 ตำบลพนาภิรมย์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	48.4	66.6	41.3
03:00 PM - 04:00 PM	47.9	64.4	42.7
04:00 PM - 05:00 PM	49.9	65.2	43.3
05:00 PM - 06:00 PM	50.0	66.2	45.5
06:00 PM - 07:00 PM	50.0	71.0	45.0
07:00 PM - 08:00 PM	51.5	81.7	45.0
08:00 PM - 09:00 PM	51.1	80.3	45.1
09:00 PM - 10:00 PM	48.8	68.7	44.2
10:00 PM - 10:05 PM	46.1	65.7	42.2
10:05 PM - 10:10 PM	44.6	58.3	42.7
10:10 PM - 10:15 PM	45.5	53.6	43.6
10:15 PM - 10:20 PM	44.7	52.9	43.4
10:20 PM - 10:25 PM	45.9	59.8	43.5
10:25 PM - 10:30 PM	50.6	69.1	43.9
10:30 PM - 10:35 PM	47.3	61.3	43.5
10:35 PM - 10:40 PM	47.3	57.3	44.2
10:40 PM - 10:45 PM	51.0	61.7	43.8
10:45 PM - 10:50 PM	45.3	57.3	43.3
10:50 PM - 10:55 PM	44.2	48.2	43.2
10:55 PM - 11:00 PM	45.5	57.8	43.6
11:00 PM - 11:05 PM	45.6	52.8	43.7
11:05 PM - 11:10 PM	46.1	59.5	44.0
11:10 PM - 11:15 PM	52.0	68.1	43.7
11:15 PM - 11:20 PM	47.3	63.1	43.5
11:20 PM - 11:25 PM	45.1	53.7	43.3
11:25 PM - 11:30 PM	44.0	48.4	43.2
11:30 PM - 11:35 PM	44.7	49.0	43.6
11:35 PM - 11:40 PM	44.9	53.9	43.8
11:40 PM - 11:45 PM	43.7	53.1	42.7
11:45 PM - 11:50 PM	47.9	67.2	43.4
11:50 PM - 11:55 PM	44.4	54.6	42.8
11:55 PM - 12:00 AM	44.1	50.7	43.0
12:00 AM - 12:05 AM	43.6	49.9	42.4
12:05 AM - 12:10 AM	44.6	52.1	43.6
12:10 AM - 12:15 AM	44.5	48.6	43.7
12:15 AM - 12:20 AM	45.2	56.1	43.6
12:20 AM - 12:25 AM	44.9	49.7	43.9
12:25 AM - 12:30 AM	45.8	53.5	44.1
12:30 AM - 12:35 AM	47.5	66.6	43.4
12:35 AM - 12:40 AM	43.7	48.4	42.9

The above results are valid only for the analytical method described 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*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872484-1

Page 2 of 3

Sample No. 23124327-17  
Parameter Noise  
Location หมู่ที่ 2 บ้านหนอง 8 ตำบลพนาภิรมย์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	45.1	58.1	43.0
12:45 AM - 12:50 AM	43.9	49.6	42.9
12:50 AM - 12:55 AM	44.7	55.8	43.0
12:55 AM - 01:00 AM	43.4	48.8	42.5
01:00 AM - 01:05 AM	43.6	51.6	42.8
01:05 AM - 01:10 AM	44.6	57.2	42.8
01:10 AM - 01:15 AM	43.4	53.4	42.3
01:15 AM - 01:20 AM	43.1	46.4	42.2
01:20 AM - 01:25 AM	42.8	49.0	41.6
01:25 AM - 01:30 AM	43.4	51.7	41.3
01:30 AM - 01:35 AM	43.5	54.4	41.5
01:35 AM - 01:40 AM	43.2	52.6	41.8
01:40 AM - 01:45 AM	42.5	45.0	41.6
01:45 AM - 01:50 AM	41.6	49.5	40.6
01:50 AM - 01:55 AM	42.0	52.4	40.5
01:55 AM - 02:00 AM	43.2	51.4	41.8
02:00 AM - 02:05 AM	44.0	52.7	42.6
02:05 AM - 02:10 AM	42.9	49.5	41.8
02:10 AM - 02:15 AM	43.5	52.1	41.7
02:15 AM - 02:20 AM	43.1	45.6	42.2
02:20 AM - 02:25 AM	43.6	52.2	42.5
02:25 AM - 02:30 AM	45.0	59.9	42.4
02:30 AM - 02:35 AM	41.3	46.5	40.2
02:35 AM - 02:40 AM	42.1	50.0	40.7
02:40 AM - 02:45 AM	42.0	50.7	40.8
02:45 AM - 02:50 AM	41.6	45.8	40.7
02:50 AM - 02:55 AM	42.8	56.9	39.8
02:55 AM - 03:00 AM	41.3	50.2	40.0
03:00 AM - 03:05 AM	41.4	49.2	39.8
03:05 AM - 03:10 AM	40.9	44.0	39.9
03:10 AM - 03:15 AM	41.9	51.5	40.2
03:15 AM - 03:20 AM	43.1	51.2	40.4
03:20 AM - 03:25 AM	42.6	56.1	39.7
03:25 AM - 03:30 AM	43.5	58.6	39.6
03:30 AM - 03:35 AM	41.7	53.4	39.5
03:35 AM - 03:40 AM	41.7	54.2	39.4
03:40 AM - 03:45 AM	41.2	54.1	39.0
03:45 AM - 03:50 AM	41.9	53.5	39.8
03:50 AM - 03:55 AM	41.0	47.0	39.7
03:55 AM - 04:00 AM	42.1	49.6	40.4

The above results are valid only for the analytical method described 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*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phrakdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872484-1

Page 3 of 3

Sample No. 23124327-17  
Parameter Noise  
Location หมู่ที่ 2 บ้านซอย 8 ตำบลพนาภิรมย์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	42.1	52.4	40.6
04:05 AM - 04:10 AM	41.7	50.1	40.3
04:10 AM - 04:15 AM	42.4	50.8	40.5
04:15 AM - 04:20 AM	42.4	54.7	40.8
04:20 AM - 04:25 AM	42.6	53.9	41.2
04:25 AM - 04:30 AM	44.6	54.9	41.3
04:30 AM - 04:35 AM	42.5	54.6	40.3
04:35 AM - 04:40 AM	41.5	49.1	40.0
04:40 AM - 04:45 AM	41.8	46.4	40.6
04:45 AM - 04:50 AM	44.9	59.6	41.0
04:50 AM - 04:55 AM	42.0	51.2	40.6
04:55 AM - 05:00 AM	43.5	51.8	41.0
05:00 AM - 05:05 AM	44.4	56.4	41.0
05:05 AM - 05:10 AM	44.1	56.9	41.4
05:10 AM - 05:15 AM	44.9	57.1	41.9
05:15 AM - 05:20 AM	45.5	57.7	42.3
05:20 AM - 05:25 AM	44.2	52.5	41.4
05:25 AM - 05:30 AM	53.6	66.3	41.8
05:30 AM - 05:35 AM	46.2	56.6	43.3
05:35 AM - 05:40 AM	44.5	54.7	42.0
05:40 AM - 05:45 AM	46.0	57.1	42.7
05:45 AM - 05:50 AM	48.3	65.1	44.1
05:50 AM - 05:55 AM	45.0	52.0	43.5
05:55 AM - 06:00 AM	45.9	56.6	43.6
06:00 AM - 07:00 AM	48.3	67.2	43.4
07:00 AM - 08:00 AM	54.0	74.5	44.8
08:00 AM - 09:00 AM	49.3	66.7	42.4
09:00 AM - 10:00 AM	48.3	66.7	42.0
10:00 AM - 11:00 AM	51.7	78.8	43.8
11:00 AM - 12:00 PM	49.5	65.8	42.8
12:00 PM - 01:00 PM	50.1	74.5	38.8
01:00 PM - 02:00 PM	50.2	66.8	42.9

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed/tested item(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 reprinted except in full.

Approved by

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872485-1

Page 1 of 3

Sample No. 23124327-18  
Parameter Noise  
Location หมู่ที่ 2 บ้านซอย 8 ตำบลพนาภิรมย์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 20 - 21, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	51.3	73.1	44.4
03:00 PM - 04:00 PM	52.0	72.4	45.2
04:00 PM - 05:00 PM	53.6	75.0	48.3
05:00 PM - 06:00 PM	56.6	93.8	46.5
06:00 PM - 07:00 PM	51.4	73.1	45.1
07:00 PM - 08:00 PM	50.7	69.9	45.0
08:00 PM - 09:00 PM	49.1	68.6	44.5
09:00 PM - 10:00 PM	48.8	69.4	44.9
10:00 PM - 10:05 PM	48.8	62.3	45.0
10:05 PM - 10:10 PM	47.7	57.3	45.1
10:10 PM - 10:15 PM	45.4	50.7	44.6
10:15 PM - 10:20 PM	45.6	53.9	43.4
10:20 PM - 10:25 PM	46.7	57.4	45.0
10:25 PM - 10:30 PM	46.5	60.6	44.7
10:30 PM - 10:35 PM	46.2	54.6	45.2
10:35 PM - 10:40 PM	46.9	56.5	45.5
10:40 PM - 10:45 PM	45.7	50.9	44.6
10:45 PM - 10:50 PM	45.4	57.0	43.5
10:50 PM - 10:55 PM	44.2	51.2	42.7
10:55 PM - 11:00 PM	45.8	59.1	42.8
11:00 PM - 11:05 PM	44.2	50.9	42.6
11:05 PM - 11:10 PM	44.2	52.1	42.5
11:10 PM - 11:15 PM	53.9	70.2	44.0
11:15 PM - 11:20 PM	48.0	54.6	43.8
11:20 PM - 11:25 PM	46.2	57.7	44.6
11:25 PM - 11:30 PM	50.7	68.2	43.6
11:30 PM - 11:35 PM	45.7	55.0	43.3
11:35 PM - 11:40 PM	45.8	56.4	43.9
11:40 PM - 11:45 PM	48.7	66.8	44.7
11:45 PM - 11:50 PM	46.3	52.4	45.0
11:50 PM - 11:55 PM	46.0	52.5	44.2
11:55 PM - 12:00 AM	45.4	56.6	43.6
12:00 AM - 12:05 AM	46.7	57.3	44.4
12:05 AM - 12:10 AM	45.4	53.9	43.2
12:10 AM - 12:15 AM	44.0	48.7	43.1
12:15 AM - 12:20 AM	44.9	54.7	43.5
12:20 AM - 12:25 AM	45.7	58.0	43.7
12:25 AM - 12:30 AM	44.8	54.7	43.2
12:30 AM - 12:35 AM	44.2	52.6	42.4
12:35 AM - 12:40 AM	43.6	54.4	42.1

The above results are valid only for the analyzed/tested item(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 reprinted except in full.

Approved by

Wilawan Borirak  
Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872485-1

Page 2 of 3

**Sample No.** : 23124327-18  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านคลอง 8 ตำบลเทพาภิรมย์ (N3) (จุดล่างฝั่ง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 20 - 21, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	43.4	52.5	42.2
12:45 AM - 12:50 AM	43.6	50.7	42.2
12:50 AM - 12:55 AM	43.7	52.5	42.5
12:55 AM - 01:00 AM	42.8	50.2	41.6
01:00 AM - 01:05 AM	42.3	51.8	41.1
01:05 AM - 01:10 AM	42.0	49.1	40.8
01:10 AM - 01:15 AM	42.4	47.5	41.3
01:15 AM - 01:20 AM	49.8	67.4	42.8
01:20 AM - 01:25 AM	43.9	49.9	42.7
01:25 AM - 01:30 AM	44.2	52.9	42.2
01:30 AM - 01:35 AM	44.0	50.5	42.4
01:35 AM - 01:40 AM	42.9	47.6	42.1
01:40 AM - 01:45 AM	43.5	50.0	42.5
01:45 AM - 01:50 AM	47.2	63.2	42.7
01:50 AM - 01:55 AM	48.0	61.0	43.6
01:55 AM - 02:00 AM	44.4	52.2	42.4
02:00 AM - 02:05 AM	47.2	63.4	43.6
02:05 AM - 02:10 AM	43.6	47.4	41.9
02:10 AM - 02:15 AM	44.2	49.8	43.1
02:15 AM - 02:20 AM	46.6	63.8	43.0
02:20 AM - 02:25 AM	44.3	51.1	43.0
02:25 AM - 02:30 AM	44.4	52.1	43.1
02:30 AM - 02:35 AM	45.5	58.8	42.9
02:35 AM - 02:40 AM	44.2	48.8	43.0
02:40 AM - 02:45 AM	44.5	53.0	43.1
02:45 AM - 02:50 AM	45.6	58.5	42.8
02:50 AM - 02:55 AM	44.1	51.8	42.5
02:55 AM - 03:00 AM	43.7	48.5	42.5
03:00 AM - 03:05 AM	44.7	53.6	42.7
03:05 AM - 03:10 AM	44.4	52.6	42.8
03:10 AM - 03:15 AM	44.8	58.1	42.7
03:15 AM - 03:20 AM	44.1	53.0	42.6
03:20 AM - 03:25 AM	43.8	49.3	42.3
03:25 AM - 03:30 AM	43.7	49.7	42.2
03:30 AM - 03:35 AM	43.7	48.5	42.3
03:35 AM - 03:40 AM	44.5	56.9	42.5
03:40 AM - 03:45 AM	44.6	55.3	42.6
03:45 AM - 03:50 AM	43.8	55.3	41.6
03:50 AM - 03:55 AM	44.7	53.4	42.6
03:55 AM - 04:00 AM	50.3	68.1	42.9

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

Approved by

*Wilwan Borik*

Wilwan Borik  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872485-1

Page 3 of 3

**Sample No.** : 23124327-18  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านคลอง 8 ตำบลเทพาภิรมย์ (N3) (จุดล่างฝั่ง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 20 - 21, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	45.1	56.6	42.7
04:05 AM - 04:10 AM	44.9	56.3	42.9
04:10 AM - 04:15 AM	44.6	56.0	42.5
04:15 AM - 04:20 AM	44.2	53.6	42.7
04:20 AM - 04:25 AM	46.1	57.0	43.2
04:25 AM - 04:30 AM	44.8	54.7	43.0
04:30 AM - 04:35 AM	45.0	53.1	43.1
04:35 AM - 04:40 AM	45.5	59.4	42.6
04:40 AM - 04:45 AM	43.4	49.7	41.5
04:45 AM - 04:50 AM	44.7	55.0	42.0
04:50 AM - 04:55 AM	44.0	53.9	41.8
04:55 AM - 05:00 AM	44.4	54.8	42.4
05:00 AM - 05:05 AM	44.9	55.9	42.1
05:05 AM - 05:10 AM	44.1	53.8	41.9
05:10 AM - 05:15 AM	44.3	52.6	42.1
05:15 AM - 05:20 AM	45.0	57.4	42.6
05:20 AM - 05:25 AM	45.4	55.7	42.8
05:25 AM - 05:30 AM	53.5	65.7	43.9
05:30 AM - 05:35 AM	44.5	57.8	42.3
05:35 AM - 05:40 AM	46.0	58.1	41.8
05:40 AM - 05:45 AM	44.4	53.4	41.8
05:45 AM - 05:50 AM	43.8	52.7	42.0
05:50 AM - 05:55 AM	44.8	55.1	41.8
05:55 AM - 06:00 AM	45.9	58.9	42.0
06:00 AM - 07:00 AM	48.0	67.9	42.1
07:00 AM - 08:00 AM	53.1	72.9	45.2
08:00 AM - 09:00 AM	50.6	70.3	43.8
09:00 AM - 10:00 AM	50.5	70.0	43.3
10:00 AM - 11:00 AM	48.8	69.2	42.5
11:00 AM - 12:00 PM	49.6	70.0	42.6
12:00 PM - 01:00 PM	50.8	77.5	40.9
01:00 PM - 02:00 PM	51.6	75.2	43.4

### Reference Method :

1. ISO 1996-1
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการทำงานของเครื่องจักรโรงงาน พ.ศ. 2553

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

Approved by

*Wilwan Borik*

Wilwan Borik  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872486-1

Page 1 of 3

Sample No. : 23124327-19  
Parameter : Noise  
Location : หมู่ที่ 2 บ้านเลข 8 ตำบลพนาภิรม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date : Dec 21 - 22, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	50.6	69.3	43.8
03:00 PM - 04:00 PM	49.9	71.5	44.0
04:00 PM - 05:00 PM	50.7	70.6	42.6
05:00 PM - 06:00 PM	49.4	67.1	43.8
06:00 PM - 07:00 PM	50.2	69.4	43.6
07:00 PM - 08:00 PM	50.4	68.8	46.5
08:00 PM - 09:00 PM	48.7	69.6	44.0
09:00 PM - 10:00 PM	47.9	69.7	43.6
10:00 PM - 10:05 PM	49.8	63.5	43.0
10:05 PM - 10:10 PM	46.2	61.4	42.8
10:10 PM - 10:15 PM	44.9	54.4	42.7
10:15 PM - 10:20 PM	45.5	59.0	42.8
10:20 PM - 10:25 PM	46.8	60.9	42.4
10:25 PM - 10:30 PM	46.0	63.2	42.3
10:30 PM - 10:35 PM	45.0	60.7	42.3
10:35 PM - 10:40 PM	44.2	53.9	41.9
10:40 PM - 10:45 PM	43.6	57.1	41.9
10:45 PM - 10:50 PM	43.4	53.0	41.7
10:50 PM - 10:55 PM	42.7	49.9	40.3
10:55 PM - 11:00 PM	43.3	52.8	41.2
11:00 PM - 11:05 PM	43.4	55.2	40.7
11:05 PM - 11:10 PM	43.1	53.6	41.1
11:10 PM - 11:15 PM	43.2	51.8	41.6
11:15 PM - 11:20 PM	51.9	73.0	41.8
11:20 PM - 11:25 PM	43.7	57.5	41.3
11:25 PM - 11:30 PM	54.8	72.0	41.9
11:30 PM - 11:35 PM	45.9	65.3	41.7
11:35 PM - 11:40 PM	43.4	54.9	41.6
11:40 PM - 11:45 PM	43.4	51.7	41.0
11:45 PM - 11:50 PM	42.9	51.4	41.2
11:50 PM - 11:55 PM	42.5	50.0	40.7
11:55 PM - 12:00 AM	43.1	51.6	40.9
12:00 AM - 12:05 AM	42.3	48.6	40.6
12:05 AM - 12:10 AM	42.3	49.3	40.7
12:10 AM - 12:15 AM	44.9	58.8	41.1
12:15 AM - 12:20 AM	44.1	54.1	41.3
12:20 AM - 12:25 AM	53.8	72.8	41.4
12:25 AM - 12:30 AM	44.1	54.9	42.0
12:30 AM - 12:35 AM	45.1	54.9	41.8
12:35 AM - 12:40 AM	44.2	57.2	41.6

The above results are valid only for the analyzed/checked 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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTS RIGHT PEOPLE



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872486-1

Page 2 of 3

Sample No. : 23124327-19  
Parameter : Noise  
Location : หมู่ที่ 2 บ้านเลข 8 ตำบลพนาภิรม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date : Dec 21 - 22, 2023  
Measurement by : Satcha Phetsawaeng  
Sound Level Meter : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	44.1	56.5	41.0
12:45 AM - 12:50 AM	42.7	52.5	40.2
12:50 AM - 12:55 AM	43.6	53.8	40.9
12:55 AM - 01:00 AM	43.3	56.3	40.9
01:00 AM - 01:05 AM	43.0	58.1	41.2
01:05 AM - 01:10 AM	42.2	50.1	40.6
01:10 AM - 01:15 AM	42.4	52.4	40.4
01:15 AM - 01:20 AM	43.6	55.7	40.4
01:20 AM - 01:25 AM	42.9	57.8	40.4
01:25 AM - 01:30 AM	41.4	57.0	40.3
01:30 AM - 01:35 AM	41.4	49.4	40.3
01:35 AM - 01:40 AM	42.1	51.0	40.8
01:40 AM - 01:45 AM	42.6	48.2	41.6
01:45 AM - 01:50 AM	42.7	50.1	41.3
01:50 AM - 01:55 AM	43.7	58.0	41.8
01:55 AM - 02:00 AM	42.8	51.7	40.9
02:00 AM - 02:05 AM	42.9	57.2	40.7
02:05 AM - 02:10 AM	43.0	57.3	40.9
02:10 AM - 02:15 AM	41.9	47.6	40.7
02:15 AM - 02:20 AM	42.4	55.2	40.6
02:20 AM - 02:25 AM	40.1	45.0	38.7
02:25 AM - 02:30 AM	41.9	54.8	39.0
02:30 AM - 02:35 AM	41.1	50.7	39.3
02:35 AM - 02:40 AM	41.1	53.1	39.4
02:40 AM - 02:45 AM	41.7	54.1	39.8
02:45 AM - 02:50 AM	43.4	57.1	40.6
02:50 AM - 02:55 AM	42.2	49.0	40.8
02:55 AM - 03:00 AM	42.0	51.9	40.2
03:00 AM - 03:05 AM	40.1	49.6	38.4
03:05 AM - 03:10 AM	42.1	55.4	37.6
03:10 AM - 03:15 AM	39.7	50.2	37.2
03:15 AM - 03:20 AM	38.7	46.7	36.5
03:20 AM - 03:25 AM	40.1	46.2	38.5
03:25 AM - 03:30 AM	39.7	47.5	37.8
03:30 AM - 03:35 AM	41.4	51.8	38.6
03:35 AM - 03:40 AM	41.2	46.6	40.1
03:40 AM - 03:45 AM	41.9	49.3	40.4
03:45 AM - 03:50 AM	41.8	53.5	39.9
03:50 AM - 03:55 AM	40.2	44.1	38.8
03:55 AM - 04:00 AM	39.4	51.6	38.7

The above results are valid only for the analyzed/checked 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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTS RIGHT PEOPLE



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872486-1

Page 3 of 3

**Sample No.** : 23124327-19  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านตาด 8 ตำบลเทพารักษ์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 21 - 22, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	44.7	63.7	38.9
04:05 AM - 04:10 AM	39.8	48.6	38.3
04:10 AM - 04:15 AM	40.4	47.5	38.6
04:15 AM - 04:20 AM	42.6	57.8	38.5
04:20 AM - 04:25 AM	43.1	58.2	39.2
04:25 AM - 04:30 AM	41.0	51.6	39.3
04:30 AM - 04:35 AM	41.7	51.0	39.7
04:35 AM - 04:40 AM	41.3	47.3	39.9
04:40 AM - 04:45 AM	43.1	50.7	41.0
04:45 AM - 04:50 AM	43.0	52.7	40.8
04:50 AM - 04:55 AM	42.5	50.3	40.3
04:55 AM - 05:00 AM	43.9	55.3	41.4
05:00 AM - 05:05 AM	43.4	51.8	41.7
05:05 AM - 05:10 AM	45.5	55.9	41.8
05:10 AM - 05:15 AM	44.9	55.2	42.2
05:15 AM - 05:20 AM	45.6	65.6	42.0
05:20 AM - 05:25 AM	44.5	53.1	42.5
05:25 AM - 05:30 AM	44.3	51.1	42.5
05:30 AM - 05:35 AM	52.9	66.2	43.6
05:35 AM - 05:40 AM	44.4	51.9	42.7
05:40 AM - 05:45 AM	44.8	55.4	42.1
05:45 AM - 05:50 AM	44.4	58.6	41.6
05:50 AM - 05:55 AM	45.0	57.6	41.3
05:55 AM - 06:00 AM	45.3	57.0	42.2
06:00 AM - 07:00 AM	49.3	70.4	43.8
07:00 AM - 08:00 AM	53.9	74.3	46.9
08:00 AM - 09:00 AM	50.6	67.3	45.0
09:00 AM - 10:00 AM	51.1	68.8	44.8
10:00 AM - 11:00 AM	50.6	70.0	44.6
11:00 AM - 12:00 PM	47.3	67.0	41.1
12:00 PM - 01:00 PM	47.0	68.5	40.8
01:00 PM - 02:00 PM	46.6	65.7	40.0

**Reference Method :**

- ISO 1996-1
- ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate is to 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

*Wilaw Boriak*

Wilawan Boriak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872487-1

Page 1 of 3

**Sample No.** : 23124327-20  
**Parameter** : Noise  
**Location** : หมู่ที่ 2 บ้านตาด 8 ตำบลเทพารักษ์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
**Measurement Date** : Dec 22 - 23, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	46.8	65.9	41.4
03:00 PM - 04:00 PM	52.3	77.9	42.7
04:00 PM - 05:00 PM	49.1	67.7	42.3
05:00 PM - 06:00 PM	50.4	78.8	43.9
06:00 PM - 07:00 PM	51.8	73.4	44.2
07:00 PM - 08:00 PM	49.3	74.2	43.0
08:00 PM - 09:00 PM	49.3	74.2	42.7
09:00 PM - 10:00 PM	47.6	65.9	41.4
10:00 PM - 10:05 PM	44.5	58.1	41.1
10:05 PM - 10:10 PM	43.2	51.9	40.8
10:10 PM - 10:15 PM	44.7	56.5	41.1
10:15 PM - 10:20 PM	43.2	57.1	40.9
10:20 PM - 10:25 PM	43.7	54.6	40.7
10:25 PM - 10:30 PM	43.5	57.2	40.6
10:30 PM - 10:35 PM	43.1	54.9	40.5
10:35 PM - 10:40 PM	44.7	61.6	40.7
10:40 PM - 10:45 PM	53.3	71.0	41.0
10:45 PM - 10:50 PM	43.2	52.0	40.7
10:50 PM - 10:55 PM	42.0	51.5	39.8
10:55 PM - 11:00 PM	41.4	54.2	39.5
11:00 PM - 11:05 PM	41.5	50.8	39.6
11:05 PM - 11:10 PM	41.6	52.6	39.5
11:10 PM - 11:15 PM	43.0	53.4	39.4
11:15 PM - 11:20 PM	53.7	68.1	39.5
11:20 PM - 11:25 PM	43.5	54.6	39.5
11:25 PM - 11:30 PM	41.7	51.2	39.1
11:30 PM - 11:35 PM	39.9	49.9	37.9
11:35 PM - 11:40 PM	39.9	49.2	38.0
11:40 PM - 11:45 PM	39.8	46.9	38.0
11:45 PM - 11:50 PM	41.9	62.9	38.1
11:50 PM - 11:55 PM	39.0	44.8	37.9
11:55 PM - 12:00 AM	41.0	53.8	37.9
12:00 AM - 12:05 AM	40.4	50.2	37.9
12:05 AM - 12:10 AM	41.2	53.3	38.0
12:10 AM - 12:15 AM	43.0	58.9	38.3
12:15 AM - 12:20 AM	41.5	54.7	38.1
12:20 AM - 12:25 AM	45.8	63.8	37.8
12:25 AM - 12:30 AM	41.9	53.0	38.6
12:30 AM - 12:35 AM	41.3	52.8	38.7
12:35 AM - 12:40 AM	40.6	55.4	37.3

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate is to 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

*Wilaw Boriak*

Wilawan Boriak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872487-1

Sample No.	23124327-20
Parameter	Noise
Location	หมู่ที่ 2 ตำบลขอม 8 ตำบลสหภาพนิคม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)
Measurement Date	Dec 22 - 23, 2023
Measurement by	Satcha Phetsawaeng
Sound Level Meter	00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	40.8	57.5	37.4
12:45 AM - 12:50 AM	41.2	55.1	37.5
12:50 AM - 12:55 AM	39.1	47.8	37.1
12:55 AM - 01:00 AM	40.1	48.0	37.5
01:00 AM - 01:05 AM	40.6	56.5	36.7
01:05 AM - 01:10 AM	40.8	48.8	38.2
01:10 AM - 01:15 AM	40.4	51.1	37.9
01:15 AM - 01:20 AM	40.1	48.1	38.5
01:20 AM - 01:25 AM	39.8	50.4	38.3
01:25 AM - 01:30 AM	39.4	48.4	38.2
01:30 AM - 01:35 AM	40.2	49.9	38.1
01:35 AM - 01:40 AM	40.4	51.9	38.1
01:40 AM - 01:45 AM	40.5	50.0	38.3
01:45 AM - 01:50 AM	39.3	49.6	36.4
01:50 AM - 01:55 AM	37.7	48.9	36.0
01:55 AM - 02:00 AM	41.9	59.4	36.7
02:00 AM - 02:05 AM	39.3	50.6	36.8
02:05 AM - 02:10 AM	38.9	48.4	36.7
02:10 AM - 02:15 AM	38.7	50.4	37.0
02:15 AM - 02:20 AM	38.9	49.9	36.9
02:20 AM - 02:25 AM	39.8	54.8	37.0
02:25 AM - 02:30 AM	38.2	49.1	36.7
02:30 AM - 02:35 AM	39.1	50.4	36.5
02:35 AM - 02:40 AM	38.7	48.9	36.8
02:40 AM - 02:45 AM	39.0	49.0	37.1
02:45 AM - 02:50 AM	39.0	49.8	37.0
02:50 AM - 02:55 AM	38.1	50.9	36.1
02:55 AM - 03:00 AM	37.9	44.5	35.9
03:00 AM - 03:05 AM	38.2	46.7	36.5
03:05 AM - 03:10 AM	47.4	63.7	37.8
03:10 AM - 03:15 AM	39.5	48.8	36.9
03:15 AM - 03:20 AM	38.1	51.1	36.5
03:20 AM - 03:25 AM	40.4	49.3	37.5
03:25 AM - 03:30 AM	51.0	67.4	38.2
03:30 AM - 03:35 AM	40.1	48.0	38.1
03:35 AM - 03:40 AM	49.5	65.3	39.3
03:40 AM - 03:45 AM	41.4	58.3	37.8
03:45 AM - 03:50 AM	40.6	52.2	38.4
03:50 AM - 03:55 AM	39.9	49.5	37.5
03:55 AM - 04:00 AM	43.2	63.5	38.1

Approved by \_\_\_\_\_

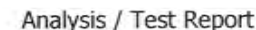
Wilawan Borirak  
Manager

ADDRESS: 616/10 Moo 5, T. Maenam Eho A. Phakdaeng Rayong 21140 Thailand | PHONE: +66 0 3304 8555 | FAX: +66 0 3304 8556  
 AJS LABORATORY GROUP (THAILAND) CO., LTD. AN AJS Limited Company

Life Sciences

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTITION



P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872487-I

Sample No.	23124327-20
Parameter	Noise
Location	บพข 2 บ้านขอ 8 ตำบลนาหินตม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)
Measurement Date	Dec 22 - 23, 2023
Measurement by	Satcha Phetsawaeng
Sound Level Meter	00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	40.5	55.8	38.2
04:05 AM - 04:10 AM	42.9	57.0	38.5
04:10 AM - 04:15 AM	41.6	55.1	38.5
04:15 AM - 04:20 AM	40.9	50.2	38.5
04:20 AM - 04:25 AM	43.6	58.3	39.2
04:25 AM - 04:30 AM	40.7	52.9	38.6
04:30 AM - 04:35 AM	42.1	50.5	39.6
04:35 AM - 04:40 AM	41.7	49.7	39.7
04:40 AM - 04:45 AM	41.8	49.0	39.7
04:45 AM - 04:50 AM	42.6	53.4	40.1
04:50 AM - 04:55 AM	42.0	56.0	39.6
04:55 AM - 05:00 AM	44.6	66.8	38.0
05:00 AM - 05:05 AM	44.2	55.0	37.7
05:05 AM - 05:10 AM	41.9	56.0	38.2
05:10 AM - 05:15 AM	44.8	55.4	39.6
05:15 AM - 05:20 AM	41.0	49.9	39.0
05:20 AM - 05:25 AM	43.8	61.4	39.2
05:25 AM - 05:30 AM	42.3	57.0	38.9
05:30 AM - 05:35 AM	53.0	68.3	40.5
05:35 AM - 05:40 AM	43.4	56.4	39.6
05:40 AM - 05:45 AM	44.8	57.3	39.7
05:45 AM - 05:50 AM	45.5	58.9	40.6
05:50 AM - 05:55 AM	43.8	54.0	39.4
05:55 AM - 06:00 AM	47.1	57.3	41.2
06:00 AM - 07:00 AM	46.3	68.3	41.8
07:00 AM - 08:00 AM	52.4	77.3	45.2
08:00 AM - 09:00 AM	49.8	68.9	45.1
09:00 AM - 10:00 AM	49.0	69.4	44.4
10:00 AM - 11:00 AM	49.3	68.8	42.8
11:00 AM - 12:00 PM	49.0	69.8	41.7
12:00 PM - 01:00 PM	46.9	66.4	40.1
01:00 PM - 02:00 PM	50.1	75.7	40.8

**Reference Method :**

1. ISO 1996-1
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

Approved by \_\_\_\_\_

Wilawan Borirak  
Manager

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

LIFE: SCIENCE

[www.alsglobal.com](http://www.alsglobal.com)

**RIGHT SOLUTIONS RIGHT PARTNER**



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872488-1

Page 1 of 3

Sample No. 23124327-21  
Parameter Noise  
Location หมู่ที่ 2 บ้านตาด 8 ตำบลพนาธิคม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
02:00 PM - 03:00 PM	49.4	70.1	42.5
03:00 PM - 04:00 PM	50.2	77.2	44.3
04:00 PM - 05:00 PM	52.2	77.9	44.2
05:00 PM - 06:00 PM	51.3	70.7	45.0
06:00 PM - 07:00 PM	52.5	69.9	45.6
07:00 PM - 08:00 PM	50.8	68.1	46.4
08:00 PM - 09:00 PM	51.2	70.2	45.7
09:00 PM - 10:00 PM	48.0	65.4	44.0
10:00 PM - 10:05 PM	45.5	64.2	42.3
10:05 PM - 10:10 PM	46.1	58.4	42.8
10:10 PM - 10:15 PM	48.1	59.9	42.4
10:15 PM - 10:20 PM	47.6	59.4	43.2
10:20 PM - 10:25 PM	47.4	58.6	44.0
10:25 PM - 10:30 PM	46.6	56.8	42.7
10:30 PM - 10:35 PM	45.6	55.2	41.8
10:35 PM - 10:40 PM	47.1	58.7	42.2
10:40 PM - 10:45 PM	45.6	60.8	42.1
10:45 PM - 10:50 PM	46.4	55.9	43.3
10:50 PM - 10:55 PM	46.0	58.4	41.8
10:55 PM - 11:00 PM	49.6	64.9	44.3
11:00 PM - 11:05 PM	46.8	59.9	42.8
11:05 PM - 11:10 PM	46.9	58.7	43.3
11:10 PM - 11:15 PM	48.3	62.2	43.0
11:15 PM - 11:20 PM	44.6	57.9	40.7
11:20 PM - 11:25 PM	44.4	52.1	42.3
11:25 PM - 11:30 PM	45.8	66.7	42.6
11:30 PM - 11:35 PM	46.9	59.8	42.5
11:35 PM - 11:40 PM	46.4	63.4	43.1
11:40 PM - 11:45 PM	43.4	48.4	42.1
11:45 PM - 11:50 PM	44.2	54.0	42.0
11:50 PM - 11:55 PM	42.9	48.7	41.1
11:55 PM - 12:00 AM	42.5	48.6	40.4
12:00 AM - 12:05 AM	44.1	54.8	41.9
12:05 AM - 12:10 AM	44.8	54.3	42.1
12:10 AM - 12:15 AM	46.5	59.6	42.1
12:15 AM - 12:20 AM	44.6	59.0	41.8
12:20 AM - 12:25 AM	43.4	51.8	41.6
12:25 AM - 12:30 AM	43.5	51.6	41.4
12:30 AM - 12:35 AM	44.7	57.7	41.6
12:35 AM - 12:40 AM	43.2	52.1	40.9

The above results are valid only for the analyzed 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

*Wibab*

Wiwann Borrak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872488-1

Page 2 of 3

Sample No. 23124327-21  
Parameter Noise  
Location หมู่ที่ 2 บ้านตาด 8 ตำบลพนาธิคม (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:40 AM - 12:45 AM	45.0	62.9	41.5
12:45 AM - 12:50 AM	44.7	55.1	41.6
12:50 AM - 12:55 AM	45.2	58.1	40.8
12:55 AM - 01:00 AM	49.6	68.5	40.9
01:00 AM - 01:05 AM	45.8	63.8	40.4
01:05 AM - 01:10 AM	50.8	69.5	40.4
01:10 AM - 01:15 AM	49.3	66.6	41.5
01:15 AM - 01:20 AM	43.6	61.3	40.6
01:20 AM - 01:25 AM	45.2	60.8	39.6
01:25 AM - 01:30 AM	43.4	58.9	40.0
01:30 AM - 01:35 AM	41.6	48.9	40.0
01:35 AM - 01:40 AM	41.9	52.7	40.0
01:40 AM - 01:45 AM	43.0	55.0	40.6
01:45 AM - 01:50 AM	44.9	59.4	40.3
01:50 AM - 01:55 AM	44.3	61.4	39.8
01:55 AM - 02:00 AM	50.1	70.5	39.0
02:00 AM - 02:05 AM	40.8	54.5	38.5
02:05 AM - 02:10 AM	44.0	59.3	38.2
02:10 AM - 02:15 AM	41.7	56.2	38.2
02:15 AM - 02:20 AM	40.9	54.5	38.6
02:20 AM - 02:25 AM	41.5	52.0	39.5
02:25 AM - 02:30 AM	42.8	56.2	39.3
02:30 AM - 02:35 AM	40.6	55.1	38.2
02:35 AM - 02:40 AM	41.0	51.7	39.1
02:40 AM - 02:45 AM	42.1	57.8	39.6
02:45 AM - 02:50 AM	41.6	49.7	40.1
02:50 AM - 02:55 AM	42.9	64.1	38.4
02:55 AM - 03:00 AM	40.8	49.6	38.9
03:00 AM - 03:05 AM	41.5	52.6	39.2
03:05 AM - 03:10 AM	40.1	50.0	38.8
03:10 AM - 03:15 AM	40.5	50.1	38.8
03:15 AM - 03:20 AM	40.2	48.1	38.2
03:20 AM - 03:25 AM	39.9	50.3	37.3
03:25 AM - 03:30 AM	41.9	58.8	37.7
03:30 AM - 03:35 AM	39.3	43.9	37.8
03:35 AM - 03:40 AM	39.3	52.0	37.2
03:40 AM - 03:45 AM	38.3	43.3	37.0
03:45 AM - 03:50 AM	39.7	49.7	38.0
03:50 AM - 03:55 AM	40.1	53.8	37.4
03:55 AM - 04:00 AM	41.5	56.9	37.8

The above results are valid only for the analyzed 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

*Wibab*

Wiwann Borrak  
Manager

ADDRESS 616/10 Moo 3, T. Maenam Khu A, Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872488-1

Page 3 of 3

Sample No. 23124327-21  
Parameter Noise  
Location หมู่ที่ 2 บ้านรอบ 8 ตำบลพนาภิรมย์ (N3) (จุดอ้างอิง) (GPS 47P 0731765, 1424738) (Shut down)  
Measurement Date Dec 23 - 24, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 00900073

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
04:00 AM - 04:05 AM	45.1	65.0	37.4
04:05 AM - 04:10 AM	37.8	50.7	36.0
04:10 AM - 04:15 AM	38.5	49.2	36.6
04:15 AM - 04:20 AM	40.3	54.2	38.2
04:20 AM - 04:25 AM	41.6	51.7	39.5
04:25 AM - 04:30 AM	40.2	48.4	39.0
04:30 AM - 04:35 AM	40.6	48.9	38.5
04:35 AM - 04:40 AM	41.2	55.7	37.7
04:40 AM - 04:45 AM	38.6	43.4	37.2
04:45 AM - 04:50 AM	41.8	50.1	39.4
04:50 AM - 04:55 AM	42.2	55.3	38.9
04:55 AM - 05:00 AM	40.8	54.8	38.6
05:00 AM - 05:05 AM	40.3	49.8	37.8
05:05 AM - 05:10 AM	43.1	54.6	38.5
05:10 AM - 05:15 AM	39.8	50.9	37.9
05:15 AM - 05:20 AM	41.2	53.1	38.0
05:20 AM - 05:25 AM	40.4	50.1	38.6
05:25 AM - 05:30 AM	40.7	51.8	38.6
05:30 AM - 05:35 AM	41.4	50.7	39.3
05:35 AM - 05:40 AM	42.8	53.2	39.6
05:40 AM - 05:45 AM	43.5	54.0	40.7
05:45 AM - 05:50 AM	43.0	56.0	40.7
05:50 AM - 05:55 AM	41.7	49.6	40.0
05:55 AM - 06:00 AM	42.7	52.3	40.4
06:00 AM - 07:00 AM	47.4	71.2	39.7
07:00 AM - 08:00 AM	48.6	69.4	41.7
08:00 AM - 09:00 AM	49.9	75.0	42.0
09:00 AM - 10:00 AM	48.4	70.1	41.4
10:00 AM - 11:00 AM	47.4	69.4	41.1
11:00 AM - 12:00 PM	50.0	73.5	42.5
12:00 PM - 01:00 PM	50.3	77.9	42.2
01:00 PM - 02:00 PM	49.2	77.2	40.6

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน รอบเมืองเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

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) Limited recommends that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872489-1

Page 3 of 3

Sample No. 23124327-22  
Parameter Noise  
Location ชั้นวีไอโครงการห้องโถงศูนย์รวมทางเทคโนโลยี (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
Measurement Date Dec 17 - 18, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	52.2	70.7	43.5
02:00 PM - 03:00 PM	51.9	70.7	43.6
03:00 PM - 04:00 PM	53.5	70.6	45.6
04:00 PM - 05:00 PM	55.5	74.9	48.5
05:00 PM - 06:00 PM	56.1	71.0	51.8
06:00 PM - 07:00 PM	56.6	77.9	50.4
07:00 PM - 08:00 PM	54.8	76.4	47.3
08:00 PM - 09:00 PM	52.0	73.9	45.3
09:00 PM - 10:00 PM	50.9	70.3	44.4
10:00 PM - 10:05 PM	51.9	69.1	43.1
10:05 PM - 10:10 PM	56.6	74.0	43.9
10:10 PM - 10:15 PM	50.5	61.0	44.0
10:15 PM - 10:20 PM	49.5	58.4	44.3
10:20 PM - 10:25 PM	48.5	56.1	43.3
10:25 PM - 10:30 PM	51.6	65.9	43.6
10:30 PM - 10:35 PM	48.0	54.8	43.3
10:35 PM - 10:40 PM	50.6	68.4	43.5
10:40 PM - 10:45 PM	53.4	70.6	42.1
10:45 PM - 10:50 PM	49.2	65.0	42.1
10:50 PM - 10:55 PM	50.7	64.9	43.2
10:55 PM - 11:00 PM	47.6	63.3	41.1
11:00 PM - 11:05 PM	46.8	58.6	39.9
11:05 PM - 11:10 PM	54.9	71.9	43.6
11:10 PM - 11:15 PM	49.7	64.2	42.3
11:15 PM - 11:20 PM	49.6	62.3	41.4
11:20 PM - 11:25 PM	49.0	60.2	39.8
11:25 PM - 11:30 PM	49.3	62.3	41.0
11:30 PM - 11:35 PM	48.5	62.9	40.5
11:35 PM - 11:40 PM	49.6	63.7	41.8
11:40 PM - 11:45 PM	47.1	58.2	40.1
11:45 PM - 11:50 PM	47.3	59.3	39.9
11:50 PM - 11:55 PM	47.1	57.7	39.0
11:55 PM - 12:00 AM	51.4	65.1	39.0
12:00 AM - 12:05 AM	45.0	56.7	37.8
12:05 AM - 12:10 AM	50.4	70.9	41.2
12:10 AM - 12:15 AM	47.9	60.7	39.7
12:15 AM - 12:20 AM	44.4	58.9	36.6
12:20 AM - 12:25 AM	43.7	58.0	36.7
12:25 AM - 12:30 AM	44.0	59.4	37.4
12:30 AM - 12:35 AM	51.4	64.5	38.3

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) Limited recommends that this report is not reproduced except in full.

Approved by

Wilawan Borirak  
Manager

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Sample No. 23124327-22

Parameter Noise

Location บริเวณโครงการที่สถานีวิทยุคมนาคม (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 17 - 18, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724



TESTING  
No.0042

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872489-1

Page 2 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	45.4	57.4	37.6
12:40 AM - 12:45 AM	42.5	55.6	36.1
12:45 AM - 12:50 AM	43.2	57.0	36.1
12:50 AM - 12:55 AM	52.7	72.6	37.2
12:55 AM - 01:00 AM	44.1	59.2	37.7
01:00 AM - 01:05 AM	45.6	61.8	36.7
01:05 AM - 01:10 AM	45.2	61.9	36.5
01:10 AM - 01:15 AM	45.8	62.0	37.2
01:15 AM - 01:20 AM	44.4	60.8	37.4
01:20 AM - 01:25 AM	42.8	59.9	36.3
01:25 AM - 01:30 AM	46.1	65.8	35.9
01:30 AM - 01:35 AM	47.3	59.2	36.6
01:35 AM - 01:40 AM	42.4	57.4	36.1
01:40 AM - 01:45 AM	49.8	64.7	37.2
01:45 AM - 01:50 AM	41.7	55.0	36.9
01:50 AM - 01:55 AM	45.0	57.8	36.6
01:55 AM - 02:00 AM	47.7	61.2	37.5
02:00 AM - 02:05 AM	45.6	58.9	37.8
02:05 AM - 02:10 AM	43.5	61.4	37.1
02:10 AM - 02:15 AM	41.5	54.9	37.1
02:15 AM - 02:20 AM	37.9	48.2	35.8
02:20 AM - 02:25 AM	48.5	68.0	36.6
02:25 AM - 02:30 AM	45.5	59.8	37.2
02:30 AM - 02:35 AM	45.8	60.6	37.5
02:35 AM - 02:40 AM	47.5	64.5	36.7
02:40 AM - 02:45 AM	46.8	65.5	36.4
02:45 AM - 02:50 AM	44.8	62.2	36.7
02:50 AM - 02:55 AM	42.9	60.6	36.1
02:55 AM - 03:00 AM	45.7	60.4	36.6
03:00 AM - 03:05 AM	44.9	61.6	37.1
03:05 AM - 03:10 AM	40.9	54.5	36.7
03:10 AM - 03:15 AM	43.2	55.0	37.8
03:15 AM - 03:20 AM	45.0	58.3	37.4
03:20 AM - 03:25 AM	42.6	54.9	37.4
03:25 AM - 03:30 AM	48.1	63.6	38.4
03:30 AM - 03:35 AM	44.2	57.1	39.3
03:35 AM - 03:40 AM	45.0	59.1	39.7
03:40 AM - 03:45 AM	47.1	58.2	40.9
03:45 AM - 03:50 AM	48.5	61.0	41.3
03:50 AM - 03:55 AM	46.7	55.9	41.9

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

Approved by

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Sample No. 23124327-22

Parameter Noise

Location บริเวณโครงการที่สถานีวิทยุคมนาคม (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 17 - 18, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724



TESTING  
No.0042

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872489-1

Page 3 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	47.4	59.4	42.2
04:00 AM - 04:05 AM	47.6	59.8	42.8
04:05 AM - 04:10 AM	54.3	70.4	43.2
04:10 AM - 04:15 AM	51.4	63.9	42.9
04:15 AM - 04:20 AM	49.8	61.4	44.4
04:20 AM - 04:25 AM	51.7	61.1	45.0
04:25 AM - 04:30 AM	50.9	66.1	46.1
04:30 AM - 04:35 AM	51.3	61.4	46.6
04:35 AM - 04:40 AM	51.9	64.6	47.2
04:40 AM - 04:45 AM	51.0	60.3	47.2
04:45 AM - 04:50 AM	54.6	72.8	47.7
04:50 AM - 04:55 AM	55.7	73.1	48.2
04:55 AM - 05:00 AM	50.2	58.7	47.6
05:00 AM - 05:05 AM	53.7	69.0	47.8
05:05 AM - 05:10 AM	54.0	67.4	48.9
05:10 AM - 05:15 AM	50.8	57.5	48.8
05:15 AM - 05:20 AM	53.0	65.6	48.8
05:20 AM - 05:25 AM	51.7	63.9	49.1
05:25 AM - 05:30 AM	52.8	62.9	49.5
05:30 AM - 05:35 AM	54.3	64.2	49.8
05:35 AM - 05:40 AM	53.3	67.0	50.1
05:40 AM - 05:45 AM	54.2	66.2	49.3
05:45 AM - 05:50 AM	52.7	64.2	49.0
05:50 AM - 05:55 AM	53.3	65.2	49.1
05:55 AM - 06:00 AM	51.9	58.9	49.7
06:00 AM - 07:00 AM	52.3	76.0	49.1
07:00 AM - 08:00 AM	51.9	70.2	47.6
08:00 AM - 09:00 AM	51.4	75.1	45.0
09:00 AM - 10:00 AM	50.1	74.7	44.3
10:00 AM - 11:00 AM	50.0	71.8	44.2
11:00 AM - 12:00 PM	49.8	76.2	42.3
12:00 PM - 01:00 PM	51.9	78.5	44.0

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และการประเมินเสียงสูงส่งที่เกิดจากการทำงานของเครื่องจักรกล พ.ศ. 2553

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

Approved by

*Wilwan Borirak*

Wilwan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872490-1

**Sample No.** : 23124327-23

**Parameter** : Noise

**Location** : บริเวณโครงการปลูกไม้ประดับทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

**Measurement Date** : Dec 18 - 19, 2023

**Measurement by** : Satcha Phetsawaeng

**Sound Level Meter** : 01222724

Page 1 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	48.9	75.9	42.7
02:00 PM - 03:00 PM	48.5	63.0	43.6
03:00 PM - 04:00 PM	53.1	80.0	44.6
04:00 PM - 05:00 PM	54.0	79.4	48.3
05:00 PM - 06:00 PM	56.1	80.2	50.9
06:00 PM - 07:00 PM	55.8	73.8	51.4
07:00 PM - 08:00 PM	57.0	76.8	52.1
08:00 PM - 09:00 PM	52.0	68.3	46.7
09:00 PM - 10:00 PM	54.6	78.2	46.8
10:00 PM - 10:05 PM	54.4	62.0	48.7
10:05 PM - 10:10 PM	54.2	62.9	46.4
10:10 PM - 10:15 PM	55.6	60.0	50.6
10:15 PM - 10:20 PM	55.2	63.2	47.2
10:20 PM - 10:25 PM	53.2	60.4	44.6
10:25 PM - 10:30 PM	50.2	60.4	41.5
10:30 PM - 10:35 PM	56.3	74.8	42.3
10:35 PM - 10:40 PM	49.8	59.3	42.7
10:40 PM - 10:45 PM	50.3	63.0	41.0
10:45 PM - 10:50 PM	49.9	68.6	43.6
10:50 PM - 10:55 PM	56.8	74.7	44.1
10:55 PM - 11:00 PM	50.7	63.0	44.2
11:00 PM - 11:05 PM	50.2	63.1	43.8
11:05 PM - 11:10 PM	55.2	71.3	41.3
11:10 PM - 11:15 PM	49.7	61.9	44.3
11:15 PM - 11:20 PM	50.3	64.5	45.0
11:20 PM - 11:25 PM	49.4	67.1	45.1
11:25 PM - 11:30 PM	48.8	60.1	45.1
11:30 PM - 11:35 PM	52.4	66.3	45.1
11:35 PM - 11:40 PM	52.0	64.1	45.0
11:40 PM - 11:45 PM	60.0	78.7	45.5
11:45 PM - 11:50 PM	53.3	72.3	44.7
11:50 PM - 11:55 PM	50.0	64.4	44.6
11:55 PM - 12:00 AM	52.2	67.5	44.4
12:00 AM - 12:05 AM	46.9	59.3	43.9
12:05 AM - 12:10 AM	46.7	59.4	32.8
12:10 AM - 12:15 AM	48.7	63.4	39.3
12:15 AM - 12:20 AM	42.5	56.5	37.8
12:20 AM - 12:25 AM	47.8	65.0	37.6
12:25 AM - 12:30 AM	52.0	68.0	39.3
12:30 AM - 12:35 AM	46.8	61.5	38.6

The above results are valid only for the analyzed/checked 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*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTS FROM



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872490-1

**Sample No.** : 23124327-23

**Parameter** : Noise

**Location** : บริเวณโครงการปลูกไม้ประดับทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

**Measurement Date** : Dec 18 - 19, 2023

**Measurement by** : Satcha Phetsawaeng

**Sound Level Meter** : 01222724

Page 2 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	47.5	58.2	39.0
12:40 AM - 12:45 AM	49.9	63.4	40.0
12:45 AM - 12:50 AM	44.6	58.0	37.9
12:50 AM - 12:55 AM	47.9	60.3	37.9
12:55 AM - 01:00 AM	47.2	58.8	38.1
01:00 AM - 01:05 AM	55.0	72.3	37.8
01:05 AM - 01:10 AM	47.4	59.5	38.5
01:10 AM - 01:15 AM	47.0	59.1	38.1
01:15 AM - 01:20 AM	47.5	60.5	38.1
01:20 AM - 01:25 AM	48.3	65.0	37.8
01:25 AM - 01:30 AM	47.3	58.8	38.0
01:30 AM - 01:35 AM	48.5	63.9	37.6
01:35 AM - 01:40 AM	47.8	60.8	39.0
01:40 AM - 01:45 AM	42.3	51.8	38.4
01:45 AM - 01:50 AM	42.1	52.7	37.4
01:50 AM - 01:55 AM	45.0	58.3	38.6
01:55 AM - 02:00 AM	42.2	54.1	37.7
02:00 AM - 02:05 AM	45.9	58.2	39.8
02:05 AM - 02:10 AM	46.9	59.1	41.4
02:10 AM - 02:15 AM	44.2	53.3	41.5
02:15 AM - 02:20 AM	45.9	57.1	41.6
02:20 AM - 02:25 AM	44.2	52.4	41.8
02:25 AM - 02:30 AM	47.5	60.8	42.5
02:30 AM - 02:35 AM	44.9	52.4	42.2
02:35 AM - 02:40 AM	47.1	58.3	43.0
02:40 AM - 02:45 AM	44.9	56.7	42.2
02:45 AM - 02:50 AM	45.1	52.5	42.6
02:50 AM - 02:55 AM	47.3	57.4	43.0
02:55 AM - 03:00 AM	44.9	53.5	42.2
03:00 AM - 03:05 AM	44.2	51.9	41.9
03:05 AM - 03:10 AM	43.7	51.7	39.8
03:10 AM - 03:15 AM	45.2	60.3	38.6
03:15 AM - 03:20 AM	47.8	63.9	38.1
03:20 AM - 03:25 AM	48.3	64.6	38.3
03:25 AM - 03:30 AM	44.1	57.4	39.0
03:30 AM - 03:35 AM	44.5	58.1	39.1
03:35 AM - 03:40 AM	46.9	59.4	39.7
03:40 AM - 03:45 AM	46.3	54.1	40.6
03:45 AM - 03:50 AM	44.7	53.1	41.3
03:50 AM - 03:55 AM	45.1	58.3	42.2

The above results are valid only for the analyzed/checked 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*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTS FROM



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872490-1

Page 3 of 3

Sample No. 23124327-23  
Parameter Noise  
Location บริเวณโครงการฟาร์มไก่ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
Measurement Date Dec 18 - 19, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	48.7	60.4	42.9
04:00 AM - 04:05 AM	48.2	60.6	42.9
04:05 AM - 04:10 AM	49.7	63.1	43.5
04:10 AM - 04:15 AM	51.4	61.0	44.9
04:15 AM - 04:20 AM	50.7	62.4	45.2
04:20 AM - 04:25 AM	51.2	59.4	44.4
04:25 AM - 04:30 AM	51.4	63.4	45.8
04:30 AM - 04:35 AM	51.0	61.4	46.4
04:35 AM - 04:40 AM	52.6	60.9	48.1
04:40 AM - 04:45 AM	52.5	60.9	47.7
04:45 AM - 04:50 AM	52.8	61.2	47.9
04:50 AM - 04:55 AM	56.5	71.1	48.9
04:55 AM - 05:00 AM	52.3	60.5	48.8
05:00 AM - 05:05 AM	52.6	60.2	49.4
05:05 AM - 05:10 AM	52.7	60.0	49.8
05:10 AM - 05:15 AM	54.0	61.9	50.7
05:15 AM - 05:20 AM	54.2	64.5	50.5
05:20 AM - 05:25 AM	58.4	75.1	50.9
05:25 AM - 05:30 AM	56.6	68.2	50.6
05:30 AM - 05:35 AM	55.0	67.2	51.2
05:35 AM - 05:40 AM	54.3	64.9	49.9
05:40 AM - 05:45 AM	56.5	68.4	50.9
05:45 AM - 05:50 AM	54.4	61.5	49.9
05:50 AM - 05:55 AM	56.3	66.6	50.9
05:55 AM - 06:00 AM	57.3	72.0	49.5
06:00 AM - 07:00 AM	54.9	70.7	49.4
07:00 AM - 08:00 AM	52.5	77.1	46.2
08:00 AM - 09:00 AM	54.4	78.3	46.3
09:00 AM - 10:00 AM	51.0	71.5	44.9
10:00 AM - 11:00 AM	50.5	75.6	42.9
11:00 AM - 12:00 PM	54.8	80.1	41.8
12:00 PM - 01:00 PM	50.1	73.1	43.2

### Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่วัดจากการประกอบกิจการโรงงาน พ.ศ. 2553

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

The above results are valid only for the analyzed 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 reprinted except in full.

ADDRESS 618/10 Moo 5 - T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand / PHONE +66 0 3304 8555 / FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124327  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872491-1

Page 1 of 3

Sample No. 23124327-24  
Parameter Noise  
Location บริเวณโครงการฟาร์มไก่ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
Measurement Date Dec 19 - 20, 2023  
Measurement by Satcha Phetsawaeng  
Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	48.7	67.9	43.0
02:00 PM - 03:00 PM	49.7	71.3	42.9
03:00 PM - 04:00 PM	50.5	69.1	44.0
04:00 PM - 05:00 PM	56.5	80.5	49.5
05:00 PM - 06:00 PM	55.4	72.4	50.3
06:00 PM - 07:00 PM	58.9	86.4	51.2
07:00 PM - 08:00 PM	54.2	73.7	47.4
08:00 PM - 09:00 PM	52.9	67.8	46.2
09:00 PM - 10:00 PM	51.4	68.3	45.6
10:00 PM - 10:05 PM	52.5	70.3	43.4
10:05 PM - 10:10 PM	47.6	58.9	42.7
10:10 PM - 10:15 PM	48.6	64.5	42.2
10:15 PM - 10:20 PM	48.8	61.3	41.4
10:20 PM - 10:25 PM	50.3	63.3	41.9
10:25 PM - 10:30 PM	48.0	62.6	41.6
10:30 PM - 10:35 PM	50.8	68.2	43.0
10:35 PM - 10:40 PM	49.0	57.1	44.2
10:40 PM - 10:45 PM	48.7	59.3	43.8
10:45 PM - 10:50 PM	49.9	62.4	44.3
10:50 PM - 10:55 PM	54.2	71.4	41.9
10:55 PM - 11:00 PM	47.9	65.9	41.9
11:00 PM - 11:05 PM	48.5	61.4	41.8
11:05 PM - 11:10 PM	48.5	59.6	42.7
11:10 PM - 11:15 PM	48.1	60.9	40.8
11:15 PM - 11:20 PM	49.5	63.6	41.1
11:20 PM - 11:25 PM	54.5	72.9	41.7
11:25 PM - 11:30 PM	48.4	60.5	42.3
11:30 PM - 11:35 PM	49.8	63.6	42.7
11:35 PM - 11:40 PM	50.1	65.3	42.3
11:40 PM - 11:45 PM	50.3	59.7	46.1
11:45 PM - 11:50 PM	53.7	69.8	46.1
11:50 PM - 11:55 PM	49.3	58.6	45.4
11:55 PM - 12:00 AM	55.3	75.3	45.9
12:00 AM - 12:05 AM	53.1	71.6	45.9
12:05 AM - 12:10 AM	47.8	56.9	45.1
12:10 AM - 12:15 AM	47.1	55.7	45.1
12:15 AM - 12:20 AM	47.4	59.4	41.3
12:20 AM - 12:25 AM	48.8	61.0	44.1
12:25 AM - 12:30 AM	48.4	57.9	44.3
12:30 AM - 12:35 AM	49.2	57.5	44.7

The above results are valid only for the analyzed 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 reprinted except in full.

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

ADDRESS 618/10 Moo 5 - T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand / PHONE +66 0 3304 8555 / FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872491-1

Page 2 of 3

**Sample No.** 23124327-24  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 19 - 20, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	48.8	60.0	44.6
12:40 AM - 12:45 AM	47.9	56.9	44.0
12:45 AM - 12:50 AM	48.5	58.4	44.6
12:50 AM - 12:55 AM	47.4	55.6	42.7
12:55 AM - 01:00 AM	48.8	58.0	42.4
01:00 AM - 01:05 AM	49.7	57.7	45.7
01:05 AM - 01:10 AM	48.9	56.5	44.9
01:10 AM - 01:15 AM	61.0	81.6	45.1
01:15 AM - 01:20 AM	48.5	57.9	45.3
01:20 AM - 01:25 AM	47.0	53.7	44.3
01:25 AM - 01:30 AM	59.6	78.9	44.6
01:30 AM - 01:35 AM	50.8	63.7	45.2
01:35 AM - 01:40 AM	48.3	57.9	44.9
01:40 AM - 01:45 AM	50.3	62.7	45.3
01:45 AM - 01:50 AM	47.8	59.2	44.2
01:50 AM - 01:55 AM	50.9	63.6	45.0
01:55 AM - 02:00 AM	47.1	53.9	44.1
02:00 AM - 02:05 AM	54.6	75.8	44.5
02:05 AM - 02:10 AM	57.2	75.5	43.5
02:10 AM - 02:15 AM	50.5	60.6	44.6
02:15 AM - 02:20 AM	49.4	60.6	44.8
02:20 AM - 02:25 AM	51.6	63.5	46.6
02:25 AM - 02:30 AM	49.5	60.4	45.6
02:30 AM - 02:35 AM	50.0	59.4	45.8
02:35 AM - 02:40 AM	50.9	66.1	45.3
02:40 AM - 02:45 AM	47.5	55.7	44.5
02:45 AM - 02:50 AM	49.6	59.8	44.9
02:50 AM - 02:55 AM	51.2	57.9	48.6
02:55 AM - 03:00 AM	51.4	56.0	48.8
03:00 AM - 03:05 AM	50.8	54.8	48.2
03:05 AM - 03:10 AM	51.3	59.1	48.4
03:10 AM - 03:15 AM	52.0	61.6	49.2
03:15 AM - 03:20 AM	53.5	65.4	49.3
03:20 AM - 03:25 AM	52.4	60.1	49.6
03:25 AM - 03:30 AM	51.0	56.2	47.9
03:30 AM - 03:35 AM	51.9	58.2	49.0
03:35 AM - 03:40 AM	51.5	59.1	48.8
03:40 AM - 03:45 AM	51.8	59.5	49.3
03:45 AM - 03:50 AM	52.3	60.4	49.8
03:50 AM - 03:55 AM	52.5	59.5	49.9

Approved by

*Wilawan*

Wilawan Bonrak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID:** 23124327

**Date Received :** Dec 25, 2023

**Date Reported :** Dec 26, 2023

**Report No. :** 2872491-1

Page 3 of 3

**Sample No.** 23124327-24  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 19 - 20, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	52.3	57.4	50.0
04:00 AM - 04:05 AM	52.3	56.4	50.2
04:05 AM - 04:10 AM	52.1	56.5	50.2
04:10 AM - 04:15 AM	52.4	58.5	50.3
04:15 AM - 04:20 AM	49.6	59.1	45.1
04:20 AM - 04:25 AM	52.5	68.0	46.0
04:25 AM - 04:30 AM	50.5	59.8	46.9
04:30 AM - 04:35 AM	51.7	59.0	47.1
04:35 AM - 04:40 AM	51.1	59.2	47.9
04:40 AM - 04:45 AM	54.7	63.8	48.7
04:45 AM - 04:50 AM	55.7	60.5	53.4
04:50 AM - 04:55 AM	60.4	78.7	54.0
04:55 AM - 05:00 AM	55.6	60.0	53.0
05:00 AM - 05:05 AM	54.7	62.1	50.5
05:05 AM - 05:10 AM	53.5	61.5	49.9
05:10 AM - 05:15 AM	56.2	74.3	49.7
05:15 AM - 05:20 AM	53.9	63.4	50.2
05:20 AM - 05:25 AM	54.3	62.5	50.9
05:25 AM - 05:30 AM	54.4	63.1	50.2
05:30 AM - 05:35 AM	55.1	68.5	50.2
05:35 AM - 05:40 AM	56.8	70.2	50.5
05:40 AM - 05:45 AM	56.8	70.9	50.5
05:45 AM - 05:50 AM	54.7	64.4	49.0
05:50 AM - 05:55 AM	55.8	67.8	49.1
05:55 AM - 06:00 AM	55.3	62.7	49.5
06:00 AM - 07:00 AM	54.2	72.8	49.1
07:00 AM - 08:00 AM	51.5	69.9	46.6
08:00 AM - 09:00 AM	51.9	72.6	45.2
09:00 AM - 10:00 AM	51.1	72.2	44.2
10:00 AM - 11:00 AM	51.1	72.1	44.4
11:00 AM - 12:00 PM	52.4	78.6	43.3
12:00 PM - 01:00 PM	52.3	72.4	44.6

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงจากโรงงานระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

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

Approved by

*Wilawan*

Wilawan Bonrak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872492-1

Page 1 of 3

Sample No. 23124327-25

Parameter Noise

Location ในบริเวณการปล่อย/ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 20 - 21, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	53.8	73.6	45.5
02:00 PM - 03:00 PM	53.5	70.3	44.9
03:00 PM - 04:00 PM	55.4	74.1	47.4
04:00 PM - 05:00 PM	56.3	72.6	50.1
05:00 PM - 06:00 PM	55.9	73.1	49.5
06:00 PM - 07:00 PM	55.3	75.8	46.6
07:00 PM - 08:00 PM	55.7	75.8	47.4
08:00 PM - 09:00 PM	55.5	80.1	45.6
09:00 PM - 10:00 PM	53.6	75.0	42.1
10:00 PM - 10:05 PM	48.8	60.9	39.8
10:05 PM - 10:10 PM	48.8	60.4	41.2
10:10 PM - 10:15 PM	51.2	67.2	39.5
10:15 PM - 10:20 PM	48.8	66.3	38.9
10:20 PM - 10:25 PM	46.4	59.4	39.1
10:25 PM - 10:30 PM	48.1	61.5	39.6
10:30 PM - 10:35 PM	42.5	53.2	39.0
10:35 PM - 10:40 PM	46.0	59.6	39.8
10:40 PM - 10:45 PM	45.0	58.0	39.3
10:45 PM - 10:50 PM	56.5	75.0	40.6
10:50 PM - 10:55 PM	49.4	68.8	39.6
10:55 PM - 11:00 PM	49.9	68.0	39.7
11:00 PM - 11:05 PM	48.0	65.4	39.6
11:05 PM - 11:10 PM	47.3	64.0	40.3
11:10 PM - 11:15 PM	52.4	73.2	38.5
11:15 PM - 11:20 PM	44.6	59.9	38.5
11:20 PM - 11:25 PM	47.6	58.4	39.3
11:25 PM - 11:30 PM	53.4	69.8	39.3
11:30 PM - 11:35 PM	45.7	57.9	39.1
11:35 PM - 11:40 PM	47.6	65.5	39.0
11:40 PM - 11:45 PM	51.6	68.3	39.3
11:45 PM - 11:50 PM	44.8	56.0	39.2
11:50 PM - 11:55 PM	45.3	60.1	39.0
11:55 PM - 12:00 AM	43.7	58.7	39.1
12:00 AM - 12:05 AM	47.1	66.7	39.1
12:05 AM - 12:10 AM	42.8	56.6	39.0
12:10 AM - 12:15 AM	45.0	57.0	39.3
12:15 AM - 12:20 AM	45.7	62.3	38.6
12:20 AM - 12:25 AM	41.9	55.7	38.5
12:25 AM - 12:30 AM	44.3	58.5	38.4
12:30 AM - 12:35 AM	45.1	58.2	38.1

The above results are valid only for the analyzed 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 or ALS Laboratory Group (Thailand).  
ตัวอย่างผลการวัดที่ได้ในรายงานนี้ใช้ได้เฉพาะตัวอย่างที่วิเคราะห์เท่านั้น  
การนำข้อมูลไปใช้โดยไม่ได้รับอนุญาตจากห้องปฏิบัติการ หรือ กลุ่มห้องปฏิบัติการ ALS (ประเทศไทย) ถือเป็นความผิด

Approved by

*Wilaw*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872492-1

Page 2 of 3

Sample No. 23124327-25

Parameter Noise

Location ในบริเวณการปล่อย/ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 20 - 21, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	48.7	66.1	39.1
12:40 AM - 12:45 AM	43.9	57.4	38.4
12:45 AM - 12:50 AM	42.3	54.1	37.7
12:50 AM - 12:55 AM	42.5	58.1	37.5
12:55 AM - 01:00 AM	51.7	67.4	37.6
01:00 AM - 01:05 AM	45.5	59.3	38.1
01:05 AM - 01:10 AM	43.7	58.6	38.1
01:10 AM - 01:15 AM	45.5	57.8	37.7
01:15 AM - 01:20 AM	49.4	62.3	39.3
01:20 AM - 01:25 AM	45.6	57.4	38.6
01:25 AM - 01:30 AM	45.2	57.6	37.6
01:30 AM - 01:35 AM	47.8	63.4	37.7
01:35 AM - 01:40 AM	44.9	57.2	37.0
01:40 AM - 01:45 AM	43.4	56.0	37.5
01:45 AM - 01:50 AM	42.0	57.2	36.8
01:50 AM - 01:55 AM	48.3	68.3	36.9
01:55 AM - 02:00 AM	44.8	60.9	36.9
02:00 AM - 02:05 AM	53.8	72.5	37.7
02:05 AM - 02:10 AM	50.3	65.4	38.1
02:10 AM - 02:15 AM	39.0	47.0	37.6
02:15 AM - 02:20 AM	43.9	56.1	38.3
02:20 AM - 02:25 AM	42.4	55.9	37.5
02:25 AM - 02:30 AM	44.8	56.7	38.0
02:30 AM - 02:35 AM	46.2	62.7	37.3
02:35 AM - 02:40 AM	45.7	58.2	37.5
02:40 AM - 02:45 AM	39.5	52.0	37.1
02:45 AM - 02:50 AM	41.0	53.2	37.4
02:50 AM - 02:55 AM	41.6	53.4	38.2
02:55 AM - 03:00 AM	39.9	50.3	37.4
03:00 AM - 03:05 AM	39.4	48.9	37.3
03:05 AM - 03:10 AM	40.4	52.9	36.9
03:10 AM - 03:15 AM	45.9	61.1	37.7
03:15 AM - 03:20 AM	47.2	65.7	37.9
03:20 AM - 03:25 AM	44.5	56.2	38.8
03:25 AM - 03:30 AM	44.1	57.0	37.7
03:30 AM - 03:35 AM	44.1	54.8	37.8
03:35 AM - 03:40 AM	44.4	54.9	38.2
03:40 AM - 03:45 AM	45.5	56.6	37.8
03:45 AM - 03:50 AM	42.2	52.6	37.9
03:50 AM - 03:55 AM	48.2	61.6	38.9

The above results are valid only for the analyzed 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 or ALS Laboratory Group (Thailand).  
ตัวอย่างผลการวัดที่ได้ในรายงานนี้ใช้ได้เฉพาะตัวอย่างที่วิเคราะห์เท่านั้น  
การนำข้อมูลไปใช้โดยไม่ได้รับอนุญาตจากห้องปฏิบัติการ หรือ กลุ่มห้องปฏิบัติการ ALS (ประเทศไทย) ถือเป็นความผิด

Approved by

*Wilaw*

Wilawan Borirak  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received :Dec 25, 2023

Date Reported :Dec 26, 2023

Report No. : 2872492-1

Page 3 of 3

**Sample No.** 23124327-25  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 20 - 21, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	45.8	61.9	38.8
04:00 AM - 04:05 AM	43.4	56.9	37.9
04:05 AM - 04:10 AM	45.2	56.5	38.1
04:10 AM - 04:15 AM	43.6	55.6	38.2
04:15 AM - 04:20 AM	41.0	51.4	37.8
04:20 AM - 04:25 AM	44.0	57.1	37.9
04:25 AM - 04:30 AM	47.3	57.3	40.2
04:30 AM - 04:35 AM	46.5	56.3	40.0
04:35 AM - 04:40 AM	45.5	55.5	40.8
04:40 AM - 04:45 AM	47.1	54.9	41.1
04:45 AM - 04:50 AM	47.0	57.6	40.3
04:50 AM - 04:55 AM	48.4	63.4	39.5
04:55 AM - 05:00 AM	47.7	59.4	41.1
05:00 AM - 05:05 AM	48.5	55.8	41.8
05:05 AM - 05:10 AM	53.2	68.4	42.2
05:10 AM - 05:15 AM	49.2	62.4	42.6
05:15 AM - 05:20 AM	49.1	61.9	44.0
05:20 AM - 05:25 AM	49.4	62.0	43.8
05:25 AM - 05:30 AM	49.4	59.4	43.0
05:30 AM - 05:35 AM	49.8	61.7	44.2
05:35 AM - 05:40 AM	50.4	64.3	44.3
05:40 AM - 05:45 AM	51.0	61.7	45.3
05:45 AM - 05:50 AM	52.0	62.6	46.4
05:50 AM - 05:55 AM	53.2	65.9	46.3
05:55 AM - 06:00 AM	54.0	66.7	47.8
06:00 AM - 07:00 AM	53.3	71.4	47.9
07:00 AM - 08:00 AM	54.5	73.5	48.4
08:00 AM - 09:00 AM	53.2	70.2	47.2
09:00 AM - 10:00 AM	53.3	72.2	46.5
10:00 AM - 11:00 AM	55.4	88.7	47.4
11:00 AM - 12:00 PM	52.1	70.4	45.3
12:00 PM - 01:00 PM	53.3	78.5	45.5

### Reference Method :

- ISO 1996-1
- ประกาศกระทรวงมหาดไทย เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analysed/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*

Wilawan Borirak  
Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O** : 54230025

**Project Name** : Monitoring

**Project Location** : WHA Rayong 36

**Lot ID: 23124327**

Date Received :Dec 25, 2023

Date Reported :Dec 26, 2023

Report No. : 2872493-1

Page 1 of 3

**Sample No.** 23124327-26  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 21 - 22, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	51.1	69.2	44.7
02:00 PM - 03:00 PM	51.2	70.7	45.1
03:00 PM - 04:00 PM	52.9	78.0	46.3
04:00 PM - 05:00 PM	52.0	72.0	47.8
05:00 PM - 06:00 PM	51.4	63.1	48.4
06:00 PM - 07:00 PM	50.7	67.7	46.4
07:00 PM - 08:00 PM	50.1	69.0	45.5
08:00 PM - 09:00 PM	52.4	74.1	47.1
09:00 PM - 10:00 PM	52.9	63.0	48.9
10:00 PM - 10:05 PM	49.1	56.7	45.1
10:05 PM - 10:10 PM	49.0	55.2	44.0
10:10 PM - 10:15 PM	48.7	63.9	41.6
10:15 PM - 10:20 PM	49.9	63.8	43.5
10:20 PM - 10:25 PM	48.7	54.0	43.7
10:25 PM - 10:30 PM	47.9	55.8	42.4
10:30 PM - 10:35 PM	47.9	53.6	43.8
10:35 PM - 10:40 PM	49.1	54.2	46.0
10:40 PM - 10:45 PM	48.7	54.4	45.5
10:45 PM - 10:50 PM	50.5	56.3	47.3
10:50 PM - 10:55 PM	49.1	56.0	45.8
10:55 PM - 11:00 PM	48.3	52.9	45.3
11:00 PM - 11:05 PM	49.5	54.8	46.0
11:05 PM - 11:10 PM	48.2	53.7	44.1
11:10 PM - 11:15 PM	49.7	62.3	44.0
11:15 PM - 11:20 PM	48.7	61.1	43.7
11:20 PM - 11:25 PM	50.0	62.8	45.8
11:25 PM - 11:30 PM	46.5	53.0	42.2
11:30 PM - 11:35 PM	48.9	59.9	43.4
11:35 PM - 11:40 PM	48.0	55.6	43.4
11:40 PM - 11:45 PM	49.3	58.5	45.2
11:45 PM - 11:50 PM	48.4	57.7	43.1
11:50 PM - 11:55 PM	46.7	53.3	42.4
11:55 PM - 12:00 AM	48.0	56.6	43.5
12:00 AM - 12:05 AM	48.1	56.6	43.2
12:05 AM - 12:10 AM	48.5	57.2	43.1
12:10 AM - 12:15 AM	46.6	53.8	42.1
12:15 AM - 12:20 AM	45.0	53.5	40.3
12:20 AM - 12:25 AM	44.2	51.9	40.5
12:25 AM - 12:30 AM	46.1	56.9	41.0
12:30 AM - 12:35 AM	44.0	58.0	40.7

The above results are valid only for the analysed/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*

Wilawan Borirak  
Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872493-1

Page 2 of 3

**Sample No.** : 23124327-26  
**Parameter** : Noise  
**Location** : บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** : Dec 21 - 22, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	43.6	49.5	40.8
12:40 AM - 12:45 AM	44.7	52.7	41.2
12:45 AM - 12:50 AM	44.8	53.2	41.2
12:50 AM - 12:55 AM	43.5	50.6	39.1
12:55 AM - 01:00 AM	43.9	52.1	39.3
01:00 AM - 01:05 AM	44.5	54.4	40.1
01:05 AM - 01:10 AM	45.4	57.1	40.1
01:10 AM - 01:15 AM	43.3	52.5	38.7
01:15 AM - 01:20 AM	43.1	54.9	38.0
01:20 AM - 01:25 AM	41.0	51.9	37.6
01:25 AM - 01:30 AM	39.6	46.6	37.5
01:30 AM - 01:35 AM	40.4	47.8	37.5
01:35 AM - 01:40 AM	43.2	57.8	37.4
01:40 AM - 01:45 AM	39.6	54.7	37.2
01:45 AM - 01:50 AM	39.8	48.4	37.4
01:50 AM - 01:55 AM	45.2	56.4	38.8
01:55 AM - 02:00 AM	40.9	54.1	37.6
02:00 AM - 02:05 AM	41.3	49.3	38.2
02:05 AM - 02:10 AM	41.6	51.2	38.2
02:10 AM - 02:15 AM	41.6	54.3	37.2
02:15 AM - 02:20 AM	39.6	48.1	37.3
02:20 AM - 02:25 AM	40.5	51.2	37.2
02:25 AM - 02:30 AM	44.0	59.8	38.0
02:30 AM - 02:35 AM	42.7	54.6	38.5
02:35 AM - 02:40 AM	41.3	52.7	37.9
02:40 AM - 02:45 AM	43.7	55.4	38.0
02:45 AM - 02:50 AM	40.2	45.8	37.5
02:50 AM - 02:55 AM	44.5	57.1	38.7
02:55 AM - 03:00 AM	55.1	62.6	51.5
03:00 AM - 03:05 AM	55.0	61.8	51.5
03:05 AM - 03:10 AM	54.8	60.1	51.1
03:10 AM - 03:15 AM	55.4	61.4	51.9
03:15 AM - 03:20 AM	55.3	62.3	51.6
03:20 AM - 03:25 AM	55.2	60.5	51.7
03:25 AM - 03:30 AM	54.9	60.0	51.5
03:30 AM - 03:35 AM	55.3	60.8	51.9
03:35 AM - 03:40 AM	55.4	60.4	51.8
03:40 AM - 03:45 AM	55.8	62.2	52.2
03:45 AM - 03:50 AM	55.5	68.1	51.7
03:50 AM - 03:55 AM	55.3	60.9	51.7

The above results are valid only for the analyzed 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 reissued except in full.

Approved by

*Wilaw Borikak*

Wilaw Borikak  
Manager

ADDRESS: 919/10 Moo 5, T. Maenam Khu A, Huakdaeng Rayong 21140 Thailand / PHONE: +66 0 3304 8555 / FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client** : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O** : 54230025  
**Project Name** : Monitoring  
**Project Location** : WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872493-1

Page 3 of 3

**Sample No.** : 23124327-26  
**Parameter** : Noise  
**Location** : บริเวณโครงการที่อยู่ใกล้ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** : Dec 21 - 22, 2023  
**Measurement by** : Satcha Phetsawaeng  
**Sound Level Meter** : 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	56.7	62.4	52.6
04:00 AM - 04:05 AM	58.1	64.9	54.0
04:05 AM - 04:10 AM	57.8	64.5	53.6
04:10 AM - 04:15 AM	56.1	64.6	45.8
04:15 AM - 04:20 AM	48.1	55.3	45.4
04:20 AM - 04:25 AM	47.5	54.1	43.8
04:25 AM - 04:30 AM	52.1	60.0	46.1
04:30 AM - 04:35 AM	53.1	60.7	47.5
04:35 AM - 04:40 AM	50.9	60.4	45.2
04:40 AM - 04:45 AM	53.8	61.1	49.6
04:45 AM - 04:50 AM	54.2	63.5	49.0
04:50 AM - 04:55 AM	53.9	60.4	50.0
04:55 AM - 05:00 AM	55.1	75.3	48.7
05:00 AM - 05:05 AM	53.2	63.5	47.2
05:05 AM - 05:10 AM	50.1	58.5	46.8
05:10 AM - 05:15 AM	47.9	54.8	45.3
05:15 AM - 05:20 AM	48.2	58.4	45.7
05:20 AM - 05:25 AM	51.4	63.3	46.5
05:25 AM - 05:30 AM	50.0	62.6	46.0
05:30 AM - 05:35 AM	50.0	62.1	45.3
05:35 AM - 05:40 AM	50.5	62.2	46.2
05:40 AM - 05:45 AM	49.3	60.4	45.3
05:45 AM - 05:50 AM	50.0	61.7	46.2
05:50 AM - 05:55 AM	50.7	58.1	47.9
05:55 AM - 06:00 AM	49.5	55.1	46.9
06:00 AM - 07:00 AM	51.5	68.5	47.6
07:00 AM - 08:00 AM	53.6	74.5	48.9
08:00 AM - 09:00 AM	53.3	74.7	48.8
09:00 AM - 10:00 AM	53.1	69.2	48.3
10:00 AM - 11:00 AM	52.3	67.3	48.0
11:00 AM - 12:00 PM	51.1	77.4	44.9
12:00 PM - 01:00 PM	54.3	79.3	48.1

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the analyzed 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 reissued except in full.

Approved by

*Wilaw Borikak*

Wilaw Borikak  
Manager

ADDRESS: 919/10 Moo 5, T. Maenam Khu A, Huakdaeng Rayong 21140 Thailand / PHONE: +66 0 3304 8555 / FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872494-1

Page 1 of 3

**Sample No.** 23124327-27  
**Parameter** Noise  
**Location** บริเวณโครงการฟาร์มไก่ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	52.6	68.3	47.9
02:00 PM - 03:00 PM	52.2	67.0	47.7
03:00 PM - 04:00 PM	52.2	69.6	47.5
04:00 PM - 05:00 PM	51.5	69.2	48.2
05:00 PM - 06:00 PM	50.9	66.3	47.5
06:00 PM - 07:00 PM	51.3	66.8	47.1
07:00 PM - 08:00 PM	50.3	68.0	46.5
08:00 PM - 09:00 PM	49.4	69.1	44.5
09:00 PM - 10:00 PM	48.5	66.1	43.5
10:00 PM - 10:05 PM	45.3	54.3	41.7
10:05 PM - 10:10 PM	46.1	58.7	41.9
10:10 PM - 10:15 PM	47.5	61.1	41.5
10:15 PM - 10:20 PM	46.1	52.8	42.1
10:20 PM - 10:25 PM	45.6	54.2	41.2
10:25 PM - 10:30 PM	45.7	57.4	41.8
10:30 PM - 10:35 PM	45.3	53.5	41.1
10:35 PM - 10:40 PM	44.4	55.0	41.0
10:40 PM - 10:45 PM	45.0	55.5	41.1
10:45 PM - 10:50 PM	46.2	55.6	41.6
10:50 PM - 10:55 PM	44.4	52.4	40.9
10:55 PM - 11:00 PM	49.6	63.3	42.8
11:00 PM - 11:05 PM	49.6	62.4	43.3
11:05 PM - 11:10 PM	49.6	56.0	43.7
11:10 PM - 11:15 PM	48.1	54.9	43.1
11:15 PM - 11:20 PM	49.8	61.6	43.4
11:20 PM - 11:25 PM	48.5	55.0	44.0
11:25 PM - 11:30 PM	49.3	55.4	43.0
11:30 PM - 11:35 PM	48.3	55.1	41.7
11:35 PM - 11:40 PM	48.6	56.0	41.3
11:40 PM - 11:45 PM	49.8	63.1	41.4
11:45 PM - 11:50 PM	48.1	56.9	41.1
11:50 PM - 11:55 PM	48.8	60.8	41.8
11:55 PM - 12:00 AM	49.3	56.8	42.6
12:00 AM - 12:05 AM	47.9	55.1	41.4
12:05 AM - 12:10 AM	46.3	59.3	40.1
12:10 AM - 12:15 AM	44.4	54.3	40.2
12:15 AM - 12:20 AM	41.9	51.4	39.2
12:20 AM - 12:25 AM	43.6	53.1	39.6
12:25 AM - 12:30 AM	43.8	54.9	39.7
12:30 AM - 12:35 AM	47.9	64.6	39.4

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

Approved by

*Wilawan Borikak*

Wilawan Borikak  
Manager

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

ALP SOLUTIONS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124327**  
Date Received : Dec 25, 2023  
Date Reported : Dec 26, 2023  
Report No. : 2872494-1

Page 2 of 3

**Sample No.** 23124327-27  
**Parameter** Noise  
**Location** บริเวณโครงการฟาร์มไก่ชุมชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 22 - 23, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	46.4	64.7	39.4
12:40 AM - 12:45 AM	41.5	52.8	38.6
12:45 AM - 12:50 AM	45.5	60.7	39.2
12:50 AM - 12:55 AM	43.2	52.4	40.4
12:55 AM - 01:00 AM	47.5	62.7	40.2
01:00 AM - 01:05 AM	44.7	57.3	41.0
01:05 AM - 01:10 AM	46.9	60.2	40.8
01:10 AM - 01:15 AM	47.8	65.1	39.5
01:15 AM - 01:20 AM	46.1	68.5	37.5
01:20 AM - 01:25 AM	42.4	55.2	37.9
01:25 AM - 01:30 AM	42.4	51.5	37.5
01:30 AM - 01:35 AM	43.8	54.1	38.4
01:35 AM - 01:40 AM	43.9	55.0	40.5
01:40 AM - 01:45 AM	45.5	55.9	40.2
01:45 AM - 01:50 AM	43.7	55.1	40.3
01:50 AM - 01:55 AM	44.3	52.8	39.9
01:55 AM - 02:00 AM	40.4	48.6	40.2
02:00 AM - 02:05 AM	41.1	50.5	40.3
02:05 AM - 02:10 AM	44.7	53.1	37.7
02:10 AM - 02:15 AM	43.4	54.6	37.6
02:15 AM - 02:20 AM	42.7	54.9	37.6
02:20 AM - 02:25 AM	41.7	55.4	37.0
02:25 AM - 02:30 AM	40.9	52.5	38.2
02:30 AM - 02:35 AM	43.9	54.8	37.0
02:35 AM - 02:40 AM	41.1	50.8	37.7
02:40 AM - 02:45 AM	42.1	51.0	37.1
02:45 AM - 02:50 AM	42.7	52.8	37.8
02:50 AM - 02:55 AM	42.6	54.8	38.1
02:55 AM - 03:00 AM	42.1	51.5	38.2
03:00 AM - 03:05 AM	42.6	54.1	37.8
03:05 AM - 03:10 AM	44.5	55.9	38.8
03:10 AM - 03:15 AM	41.2	50.8	37.8
03:15 AM - 03:20 AM	43.8	57.2	39.4
03:20 AM - 03:25 AM	44.5	57.1	38.6
03:25 AM - 03:30 AM	43.6	56.7	38.9
03:30 AM - 03:35 AM	43.3	53.4	47.7
03:35 AM - 03:40 AM	52.8	58.6	49.3
03:40 AM - 03:45 AM	53.7	60.5	49.9
03:45 AM - 03:50 AM	54.2	60.6	49.9
03:50 AM - 03:55 AM	55.1	71.7	48.1

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

Approved by

*Wilawan Borikak*

Wilawan Borikak  
Manager

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

ALP SOLUTIONS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872494-1

Page 3 of 3

Sample No. 23124327-27

Parameter Noise

Location บริเวณโครงการฟาร์มไก่สุ่มชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 22 - 23, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	54.4	60.0	50.5
04:00 AM - 04:05 AM	54.3	59.9	50.2
04:05 AM - 04:10 AM	55.9	62.8	51.6
04:10 AM - 04:15 AM	55.7	62.5	51.5
04:15 AM - 04:20 AM	55.1	61.0	50.6
04:20 AM - 04:25 AM	55.3	62.0	50.9
04:25 AM - 04:30 AM	55.4	61.5	51.2
04:30 AM - 04:35 AM	54.8	61.6	49.7
04:35 AM - 04:40 AM	54.1	60.2	49.4
04:40 AM - 04:45 AM	54.3	62.0	48.8
04:45 AM - 04:50 AM	54.9	62.0	50.2
04:50 AM - 04:55 AM	54.4	61.6	49.0
04:55 AM - 05:00 AM	54.7	62.5	49.7
05:00 AM - 05:05 AM	53.5	60.0	45.0
05:05 AM - 05:10 AM	47.4	55.4	42.9
05:10 AM - 05:15 AM	47.4	55.9	43.7
05:15 AM - 05:20 AM	48.5	62.3	43.6
05:20 AM - 05:25 AM	49.7	63.2	45.0
05:25 AM - 05:30 AM	49.5	61.4	43.7
05:30 AM - 05:35 AM	50.8	71.4	46.0
05:35 AM - 05:40 AM	51.3	63.6	45.9
05:40 AM - 05:45 AM	49.6	58.0	45.2
05:45 AM - 05:50 AM	48.7	55.0	45.5
05:50 AM - 05:55 AM	50.0	61.6	45.4
05:55 AM - 06:00 AM	50.0	57.6	46.7
06:00 AM - 07:00 AM	52.8	73.4	48.4
07:00 AM - 08:00 AM	52.5	70.6	48.9
08:00 AM - 09:00 AM	52.6	69.5	48.9
09:00 AM - 10:00 AM	51.7	69.6	47.8
10:00 AM - 11:00 AM	51.4	68.4	46.7
11:00 AM - 12:00 PM	52.8	81.4	46.2
12:00 PM - 01:00 PM	57.0	86.3	48.3

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

The above results are valid only for the anal. condition(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*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 5, T. Maniam Khui A. Phrakdaeng Rayong 21140 Thailand TEL: +66 0 3304 8555 FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124327

Date Received : Dec 25, 2023

Date Reported : Dec 26, 2023

Report No. : 2872495-1

Page 1 of 3

Sample No. 23124327-28

Parameter Noise

Location บริเวณโครงการฟาร์มไก่สุ่มชนทางทิศตะวันออก (N4) (จุดอ้างอิง) (GPS 47P 0731048, 1424139) (Shut down)

Measurement Date Dec 23 - 24, 2023

Measurement by Satcha Phetsawaeng

Sound Level Meter 01222724

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
01:00 PM - 02:00 PM	53.3	75.0	47.3
02:00 PM - 03:00 PM	52.1	74.2	47.4
03:00 PM - 04:00 PM	52.0	70.6	47.1
04:00 PM - 05:00 PM	52.5	71.7	48.4
05:00 PM - 06:00 PM	51.7	68.3	48.4
06:00 PM - 07:00 PM	57.1	80.9	53.4
07:00 PM - 08:00 PM	55.0	64.4	52.4
08:00 PM - 09:00 PM	54.7	66.4	51.9
09:00 PM - 10:00 PM	50.0	67.0	46.3
10:00 PM - 10:05 PM	49.3	56.3	46.5
10:05 PM - 10:10 PM	50.4	57.0	47.7
10:10 PM - 10:15 PM	51.5	66.2	48.1
10:15 PM - 10:20 PM	49.7	55.7	47.0
10:20 PM - 10:25 PM	53.6	71.9	46.8
10:25 PM - 10:30 PM	50.3	60.1	46.4
10:30 PM - 10:35 PM	48.3	53.9	45.8
10:35 PM - 10:40 PM	46.7	54.9	44.3
10:40 PM - 10:45 PM	47.1	52.6	44.6
10:45 PM - 10:50 PM	48.3	59.6	44.8
10:50 PM - 10:55 PM	46.8	53.6	44.3
10:55 PM - 11:00 PM	47.8	59.9	44.7
11:00 PM - 11:05 PM	50.9	67.3	44.3
11:05 PM - 11:10 PM	48.2	57.7	45.0
11:10 PM - 11:15 PM	49.2	59.4	45.8
11:15 PM - 11:20 PM	48.5	59.2	44.3
11:20 PM - 11:25 PM	47.8	54.5	43.8
11:25 PM - 11:30 PM	52.3	69.4	45.2
11:30 PM - 11:35 PM	48.7	58.7	43.9
11:35 PM - 11:40 PM	47.2	56.3	44.3
11:40 PM - 11:45 PM	48.2	55.1	45.0
11:45 PM - 11:50 PM	47.2	53.0	44.3
11:50 PM - 11:55 PM	44.3	52.1	40.8
11:55 PM - 12:00 AM	45.7	53.2	41.1
12:00 AM - 12:05 AM	44.9	54.0	40.3
12:05 AM - 12:10 AM	45.8	53.1	42.4
12:10 AM - 12:15 AM	47.3	54.3	42.9
12:15 AM - 12:20 AM	44.3	54.2	40.4
12:20 AM - 12:25 AM	44.5	54.4	40.7
12:25 AM - 12:30 AM	43.3	51.8	39.2
12:30 AM - 12:35 AM	44.9	55.5	40.1

The above results are valid only for the anal. condition(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*

Wilawan Borirak  
Manager

ADDRESS 616/10 Moo 5, T. Maniam Khui A. Phrakdaeng Rayong 21140 Thailand TEL: +66 0 3304 8555 FAX: +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER





## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID: 23124327**

Date Received :Dec 25, 2023

Date Reported :Dec 26, 2023

Report No. : 2872495-1

**Sample No.** 23124327-28  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (จุดข้างฝั่ง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 23 - 24, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Page 2 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:35 AM - 12:40 AM	44.9	54.9	39.7
12:40 AM - 12:45 AM	44.3	55.8	39.0
12:45 AM - 12:50 AM	43.4	50.6	39.7
12:50 AM - 12:55 AM	50.3	71.3	39.3
12:55 AM - 01:00 AM	42.6	51.2	38.6
01:00 AM - 01:05 AM	43.6	55.9	39.2
01:05 AM - 01:10 AM	44.3	54.2	39.0
01:10 AM - 01:15 AM	44.0	52.9	39.7
01:15 AM - 01:20 AM	42.6	48.4	39.0
01:20 AM - 01:25 AM	43.5	51.5	38.6
01:25 AM - 01:30 AM	48.3	62.5	39.6
01:30 AM - 01:35 AM	43.0	52.6	38.6
01:35 AM - 01:40 AM	44.1	54.8	39.1
01:40 AM - 01:45 AM	42.5	53.0	39.2
01:45 AM - 01:50 AM	43.8	49.4	40.7
01:50 AM - 01:55 AM	43.1	51.3	39.8
01:55 AM - 02:00 AM	43.9	55.8	39.2
02:00 AM - 02:05 AM	43.2	51.2	39.6
02:05 AM - 02:10 AM	44.0	52.6	39.3
02:10 AM - 02:15 AM	41.5	51.4	36.8
02:15 AM - 02:20 AM	42.1	48.4	37.9
02:20 AM - 02:25 AM	41.0	47.9	37.9
02:25 AM - 02:30 AM	44.6	54.2	40.0
02:30 AM - 02:35 AM	43.7	51.9	39.4
02:35 AM - 02:40 AM	43.4	52.7	38.6
02:40 AM - 02:45 AM	41.5	46.4	38.2
02:45 AM - 02:50 AM	46.1	61.9	39.9
02:50 AM - 02:55 AM	46.6	62.8	38.0
02:55 AM - 03:00 AM	41.5	48.2	37.8
03:00 AM - 03:05 AM	45.6	57.8	39.5
03:05 AM - 03:10 AM	42.5	51.0	38.3
03:10 AM - 03:15 AM	42.7	54.5	38.2
03:15 AM - 03:20 AM	47.3	61.2	39.7
03:20 AM - 03:25 AM	44.2	53.8	40.4
03:25 AM - 03:30 AM	42.6	51.7	38.5
03:30 AM - 03:35 AM	44.2	51.8	39.7
03:35 AM - 03:40 AM	44.5	51.9	41.2
03:40 AM - 03:45 AM	44.0	60.8	41.2
03:45 AM - 03:50 AM	46.4	58.9	43.0
03:50 AM - 03:55 AM	46.1	56.6	42.1

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

(The above results are valid only for the analyzed tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) Limited is responsible for this report as well as the test results.)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



## Analysis / Test Report



TESTING  
No.0042

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

**P/O :** 54230025

**Project Name :** Monitoring

**Project Location :** WHA Rayong 36

**Lot ID: 23124327**

Date Received :Dec 25, 2023

Date Reported :Dec 26, 2023

Report No. : 2872495-1

**Sample No.** 23124327-28  
**Parameter** Noise  
**Location** บริเวณโครงการที่อยู่ใกล้ถนนทางทิศตะวันออก (N4) (จุดข้างฝั่ง) (GPS 47P 0731048, 1424139) (Shut down)  
**Measurement Date** Dec 23 - 24, 2023  
**Measurement by** Satcha Phetsawaeng  
**Sound Level Meter** 01222724

Page 3 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:55 AM - 04:00 AM	45.2	56.7	42.5
04:00 AM - 04:05 AM	45.5	52.8	42.9
04:05 AM - 04:10 AM	50.6	59.2	41.1
04:10 AM - 04:15 AM	57.1	63.4	51.2
04:15 AM - 04:20 AM	58.4	68.6	54.2
04:20 AM - 04:25 AM	57.7	62.8	54.0
04:25 AM - 04:30 AM	56.7	65.3	48.5
04:30 AM - 04:35 AM	56.4	64.9	52.1
04:35 AM - 04:40 AM	55.6	61.1	51.8
04:40 AM - 04:45 AM	56.2	62.1	52.5
04:45 AM - 04:50 AM	55.9	61.8	52.4
04:50 AM - 04:55 AM	55.5	63.0	51.3
04:55 AM - 05:00 AM	54.8	60.5	51.3
05:00 AM - 05:05 AM	55.2	62.2	50.9
05:05 AM - 05:10 AM	50.1	57.6	46.6
05:10 AM - 05:15 AM	48.0	55.2	45.1
05:15 AM - 05:20 AM	47.6	54.0	45.5
05:20 AM - 05:25 AM	46.9	52.9	44.4
05:25 AM - 05:30 AM	47.5	60.9	45.0
05:30 AM - 05:35 AM	47.4	54.8	44.7
05:35 AM - 05:40 AM	50.5	61.7	44.8
05:40 AM - 05:45 AM	50.7	61.9	45.5
05:45 AM - 05:50 AM	52.8	69.4	46.7
05:50 AM - 05:55 AM	51.0	63.6	46.0
05:55 AM - 06:00 AM	47.7	54.4	44.0
06:00 AM - 07:00 AM	50.3	68.6	45.7
07:00 AM - 08:00 AM	52.5	75.3	46.9
08:00 AM - 09:00 AM	53.3	73.9	47.3
09:00 AM - 10:00 AM	53.3	77.6	46.4
10:00 AM - 11:00 AM	53.3	74.8	46.6
11:00 AM - 12:00 PM	54.6	79.3	45.4
12:00 PM - 01:00 PM	54.4	75.9	46.7

Reference Method :

- ISO 1996-1
- ประกาศกระทรวงมหาดไทย เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ณพื้นผิวเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553

(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) Limited is responsible for this report as well as the test results.)

Approved by

*Wilawan Borirak*

Wilawan Borirak  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

---

คุณภาพน้ำผิวดิน





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816056-1

Page 1 of 3

Sample Number : 23120574-1  
Sample Date : Oct 17, 2023 12:29 PM  
Sample Description : Surface Water  
Location : คลองระบายน้ำดิบ ก่อนไหลเข้าพื้นที่โรงการ (SW1)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(I) Arsenic	mg/L	0.0003	0.0005	0.007	≤0.01	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(K) Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(K) Copper	mg/L	0.0003	0.0005	0.002	≤0.10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(K) Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(K) Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(K) Manganese	mg/L	0.0003	0.0005	0.67	≤1	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(K) Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method: STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
(K) Nickel	mg/L	0.0003	0.0005	0.001	≤0.10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-22 (PMS)

5 (Reports)\_AL\_GL\_01 (1.4.0) (PMS)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816056-1

Page 2 of 3

Sample Number : 23120574-1  
Sample Date : Oct 17, 2023 12:20 PM  
Sample Description : Surface Water  
Location : คลองระบายน้ำดิบ ก่อนไหลเข้าพื้นที่โรงการ (SW1)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(K) Zinc	mg/L	0.003	0.005	0.009	≤1	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.25	≤0.5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	238	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	6.3	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.25	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-22 (PMS)

5 (Reports)\_AL\_GL\_01 (1.4.0) (PMS)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0042

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816056-1

Page 3 of 3

<b>Sample Number</b>	23120574-1						
<b>Sampled Date</b>	Oct 17, 2023 12:20 PM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองรางจั่นเดี่ยว คลองไหลผ่านพื้นที่โครงการ (SW1)						
<b>Date Analysis Commenced</b>	Oct 17, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C				7.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C			29.8	n <sup>1</sup>	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	182	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L		5	30	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU		0.1	20.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C.  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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.

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

Approved by

*D. Chanchong*

Dej Chanchong  
Senior Manager

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

17004-D/ENR

T:\Report\AL\_GL\ref (4-2023)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0009

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816056-2

Page 1 of 1

<b>Sample Number</b>	23120574-1						
<b>Sampled Date</b>	Oct 17, 2023 12:20 PM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองรางจั่นเดี่ยว คลองไหลผ่านพื้นที่โครงการ (SW1)						
<b>Date Analysis Commenced</b>	Oct 18, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL			79000.0	≤4000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL			240000.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C.  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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.

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

Approved by

*Sithichok T.*

Sithichok Thongnuen  
Scientist (3)

ADDRESS: T04 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand. PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

17004-D/ENR

S:\Report\AL\_GL\ref (3-2023)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816057-1

Page 1 of 3

Sample Number : 23120574-2  
Sampled Date : Oct 17, 2023 11:40 AM  
Sample Description : Surface Water  
Location : คลองชะง่อนใต้ หมู่ 10 ตำบลบ้านใหม่ อำเภอราม (SW2)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.007	≤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	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	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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.002	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.91	≤1	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	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
(A) Nickel	mg/L	0.0003	0.0005	0.001	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/2008-2/1/2022

3/2020/ALGL-01/1/4/2020



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816057-1

Page 2 of 3

Sample Number : 23120574-2  
Sampled Date : Oct 17, 2023 11:40 AM  
Sample Description : Surface Water  
Location : คลองชะง่อนใต้ หมู่ 10 ตำบลบ้านใหม่ อำเภอราม (SW2)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Zinc	mg/L	0.003	0.005	0.007	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.19	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - Q C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	202	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	6.9	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.87	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/2008-2/1/2022

3/2020/ALGL-01/1/4/2020



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0042

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816057-1

Page 3 of 3

<b>Sample Number</b>	23120574-2						
<b>Sampled Date</b>	Oct 17, 2023 11:40 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองระบองบางเตย หลังโหมโรงพื้นที่โครงการ (SW2)						
<b>Date Analysis Commenced</b>	Oct 17, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	n <sup>1</sup>	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	158	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	64	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	80.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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

*D. Chanchon*  
Dej Chanchon  
Senior Manager

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENB

3 (Report)\_AL\_GL.rpt (4.40KB)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0009

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816057-2

Page 1 of 1

<b>Sample Number</b>	23120574-2						
<b>Sampled Date</b>	Oct 17, 2023 11:40 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองระบองบางเตย หลังโหมโรงพื้นที่โครงการ (SW2)						
<b>Date Analysis Commenced</b>	Oct 18, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL	-	-	24000.0	<4000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	-	-	33000.0	<20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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

*Sithichok T.*  
Sithichok Thongnuen  
Scientist (3)

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENB

5 (Report)\_AL\_GL.rpt (5.36KB)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816058-1

Page 1 of 3

Sample Number : 23120574-3  
Sample Date : Oct 17, 2023 10:06 AM  
Sample Description : Surface Water  
Location : คลองน้ำไหลในเขตพื้นที่โรงงาน (SW3)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.003	≤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	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	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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.48	≤1	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	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
(A) Nickel	mg/L	0.0003	0.0005	0.0007	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

The above results are valid only for the analyzed/ordered 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

*D. Changchon*

Dej Changchon  
Senior Manager

ADDRESS 616/10 Moo 5, T. Maenam Khru A, Phraekdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8536  
ALS LABORATORY GROUP (THAILAND) CO. LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13094-32 (ENG)

5/06/2023, ML/SL/pt (4/6/2023)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816058-1

Page 2 of 3

Sample Number : 23120574-3  
Sample Date : Oct 17, 2023 10:06 AM  
Sample Description : Surface Water  
Location : คลองน้ำไหลในเขตพื้นที่โรงงาน (SW3)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Zinc	mg/L	0.003	0.005	0.02	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	187	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	4.5	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.44	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.2	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

The above results are valid only for the analyzed/ordered 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

*D. Changchon*

Dej Changchon  
Senior Manager

ADDRESS 616/10 Moo 5, T. Maenam Khru A, Phraekdaeng Rayong 21140 Thailand | PHONE +66 0 3304 8555 | FAX +66 0 3304 8536  
ALS LABORATORY GROUP (THAILAND) CO. LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13094-32 (ENG)

5/06/2023, ML/SL/pt (4/6/2023)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0042

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816058-1

Page 3 of 3

<b>Sample Number</b>	23120574-3						
<b>Sampled Date</b>	Oct 17, 2023 10:06 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองพหลุณยธาร (SW3)						
<b>Date Analysis Commenced</b>	Oct 17, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Temperature *	Degree C	-	-	29.4	n	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	142	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	13	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	25.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n: Change from Natural condition not more than 3 degree C  
n: Not Change from natural condition

**Sampling By :** Tanasit Wongsachai

**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

*D. Chongchon*

Dr. Chongchon  
Senior Manager

The above results are valid only for the analyzed 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) Co., Ltd. strongly recommends that this report is not reproduced except in full.

ADDRESS: 615/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE: +66 0 3304 8555 FAX: +66 0 3304 8558  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12008-21/ENGL

1/Approved, AL, GL, pt (4/2023)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0009

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816058-2

Page 1 of 1

<b>Sample Number</b>	23120574-3						
<b>Sampled Date</b>	Oct 17, 2023 10:06 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองพหลุณยธาร (SW3)						
<b>Date Analysis Commenced</b>	Oct 18, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL	-	-	79000.0	≤4000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	-	-	110000.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.69	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong

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

**Sampling By :** Tanasit Wongsachai

**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

*Sithichok T.*

Sithichok Thongnguen  
Scientist (3)

The above results are valid only for the analyzed 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) Co., Ltd. strongly recommends that this report is not reproduced except in full.

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12004-22/ENGL

1/Approved, AL, GL, pt (3/2023)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816059-1

Page 1 of 3

Sample Number : 23120574-4  
Sample Date : Oct 17, 2023 10:20 AM  
Sample Description : Surface Water  
Location : คลองวัดแก้ว ตำบลหนองจอกระยะทางน้ำถึง 500 เมตร (SW4)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Arsenic	mg/L	0.0003	0.0005	0.008	≤0.01	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	<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
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3509-Cr B	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	0.0008	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Manganese	mg/L	0.0003	0.0005	0.51	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	<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

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1704-21) ENG.

1704-21) ENG.



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816059-1

Page 2 of 3

Sample Number : 23120574-4  
Sample Date : Oct 17, 2023 10:20 AM  
Sample Description : Surface Water  
Location : คลองวัดแก้ว ตำบลหนองจอกระยะทางน้ำถึง 500 เมตร (SW4)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	0.02	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.15	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	208	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	7.0	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.78	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1704-21) ENG.

1704-21) ENG.



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location:** WHA Rayong 36



**TESTING**  
No.0042

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816059-1

Page 3 of 3

<b>Sample Number</b>	23120574-4						
<b>Sampled Date</b>	Oct 17, 2023 10:20 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองปลวกแก้ว บริเวณเหนือประตูระบายน้ำทั้ง 500 เมตร (SW4)						
<b>Date Analysis Commenced</b>	Oct 17, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
pH at 25 degree C				7.5	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C			29.4	n <sup>1</sup>	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	142	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L		5	26	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU		0.1	14.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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.

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

Approved by

*D. Changchon*  
Dej Changchon  
Senior Manager

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS PROVIDE IT. SMART TESTERS.

13/04/22/23/24

@ALS@\_AL\_Grp (4/2019)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location:** WHA Rayong 36



**TESTING**  
No.0009

**Lot ID: 23120574**  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816059-2

Page 1 of 1

<b>Sample Number</b>	23120574-4						
<b>Sampled Date</b>	Oct 17, 2023 10:20 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองปลวกแก้ว บริเวณเหนือประตูระบายน้ำทั้ง 500 เมตร (SW4)						
<b>Date Analysis Commenced</b>	Oct 18, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL			11000.0	≤4000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL			220000.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Tanasit Wongsachai

**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.

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

Approved by

*Sithichok T.*  
Sithichok Thongneng  
Scientist (3)

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS PROVIDE IT. SMART TESTERS.

13/04/22/23/24

@ALS@\_AL\_Grp (3/5/19)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816060-1

Page 1 of 3

Sample Number : 23120574-5  
Sample Date : Oct 17, 2023 10:50 AM  
Sample Description : Surface Water  
Location : คลองชลประทาน บริเวณจุดระดมน้ำวัง (SWS)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.009	≤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	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	0.0006	≤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	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.47	≤1	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	0.0003	0.0005	Not Detected	≤0.002	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
(A) Nickel	mg/L	0.0003	0.0005	0.0006	≤0.10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/004-211/ENH

1/Reports\_AL\_GL-01 (4-15/06)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 25, 2023  
Report Number : 2816060-1

Page 2 of 3

Sample Number : 23120574-5  
Sample Date : Oct 17, 2023 10:50 AM  
Sample Description : Surface Water  
Location : คลองชลประทาน บริเวณจุดระดมน้ำวัง (SWS)  
Date Analysis Commenced : Oct 17, 2023  
Condition of Sample : Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Zinc	mg/L	0.003	0.005	0.009	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.12	≤0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	200	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	7.2	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.79	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCE

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/004-211/ENH

1/Reports\_AL\_GL-01 (4-15/06)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0042

Lot ID: 23120574

Date Received : Oct 17, 2023

Date Reported : Oct 25, 2023

Report Number : 2816060-1

Page 3 of 3

Sample Number	23120574-5						
Sampled Date	Oct 17, 2023 10:50 AM						
Sample Description	Surface Water						
Location	คลองประปาภิบาล บริเวณจุดระบายน้ำทิ้ง (SWS)						
Date Analysis Commenced	Oct 17, 2023						
Condition of Sample	Contained in two glass vials, one BOD bottle, one amber glass bottle and six 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	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	n <sup>1</sup>	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	148	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	51	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	29.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

n<sup>1</sup>: Change from Natural condition not more than 3 degree C

n : Not Change from natural condition

Sampling By : Tanasit Wongsachai

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.

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

Approved by

*D. Chanchong*

Dej Chanchong  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PEOPLE RIGHT TIME

S:\reports\_AL\_GL\91 (4-1029)

17004-21/ENR3



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0009

Lot ID: 23120574

Date Received : Oct 17, 2023

Date Reported : Oct 25, 2023

Report Number : 2816060-2

Page 1 of 1

Sample Number	23120574-5						
Sampled Date	Oct 17, 2023 10:50 AM						
Sample Description	Surface Water						
Location	คลองประปาภิบาล บริเวณจุดระบายน้ำทิ้ง (SWS)						
Date Analysis Commenced	Oct 18, 2023						
Condition of Sample	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL	—	—	33000.0	≤4000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	—	—	130000.0	≤20000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

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

n<sup>1</sup>: Change from Natural condition not more than 3 degree C

n : Not Change from natural condition

Sampling By : Tanasit Wongsachai

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.

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

Approved by

*Sithichok T.*

Sithichok Thongnuean  
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 8197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PEOPLE RIGHT TIME

S:\reports\_AL\_GL\91 (3-5799)

17004-21/ENR3





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2816061-1

Page 1 of 4

Sample Number 23120574-6  
Sampled Date Oct 17, 2023 11:15 AM  
Sample Description Surface Water  
Location คลองปลวกแดง บริเวณท่าเรือระยะทางห่าง 500 เมตร (SW6)  
Date Analysis Commenced Oct 17, 2023  
Condition of Sample Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.008	≤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	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	0.0006	≤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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.002	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.40	≤1	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	In-house method: STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
(A) Nickel	mg/L	0.0003	0.0005	0.0006	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Approved by

N. Banmait

Narumon Banchongkit  
Supervisor

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 reprinted except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8553 FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/09/23/0002

S:\Report\_AL\_GL\01 7.33PM



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2816061-1

Page 2 of 4

Sample Number 23120574-6  
Sampled Date Oct 17, 2023 11:15 AM  
Sample Description Surface Water  
Location คลองปลวกแดง บริเวณท่าเรือระยะทางห่าง 500 เมตร (SW6)  
Date Analysis Commenced Oct 17, 2023  
Condition of Sample Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Zinc	mg/L	0.003	0.005	0.008	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Microbiological Testing</b>							
(A) Fecal Coliform	MPN/100mL	-	-	2400.0	≤4000	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	-	-	4900.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.18	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	199	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	6.8	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

Approved by

N. Banmait

Narumon Banchongkit  
Supervisor

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 reprinted except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8553 FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/09/23/0002

S:\Report\_AL\_GL\01 7.33PM



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574

Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2816061-1

Page 3 of 4

Sample Number	23120574-6						
Sample Date	Oct 17, 2023 11:15 AM						
Sample Description	Surface Water						
Location	คลองชลประทาน บริเวณท่าเรือประมงท่าเรือ 500 เมตร (SW6)						
Date Analysis Commenced	Oct 17, 2023						
Condition of Sample	Contained in two glass vials, one BOD bottle, one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Nitrate as N *	mg/L	0.015	0.05	0.94	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.2	n	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	136	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	62	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	31.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

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

n : Not Change from natural condition

**Sampling By :** Tanasit Wongsachai

Remark :

- LOD : Limit of Detection

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

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

Approved by

N. Banngit

Narumon Banchoangkit  
Supervisor

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13064-21/0005

S:\Report\AL\GL\pt (7-3789)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23120574

Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2816061-1

Page 4 of 4

- 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. Banngit

Narumon Banchoangkit  
Supervisor

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13064-21/0005

S:\Report\AL\GL\pt (7-3789)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867434-1

Page 1 of 3

Sample Number : 23134919-1  
Sampled Date : Dec 12, 2023 10:37 AM  
Sample Description : Surface Water  
Location : คลองรางจันทน์ฯ ตอนไหลผ่านพื้นที่โครงการ (SW1)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Copper	mg/L	0.0003	0.0005	0.0007	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(A)</sup> Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Manganese	mg/L	0.0003	0.0005	0.41	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER

17006 (J1) (004)

S:\Report\_ML\_Group (13896)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867434-1

Page 2 of 3

Sample Number : 23134919-1  
Sampled Date : Dec 12, 2023 10:37 AM  
Sample Description : Surface Water  
Location : คลองรางจันทน์ฯ ตอนไหลผ่านพื้นที่โครงการ (SW1)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(A)</sup> Nickel	mg/L	0.0003	0.0005	0.0009	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(A)</sup> Zinc	mg/L	0.003	0.005	<0.005	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.38	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	257	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	4.3	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.49	≤5	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 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

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER

17006 (J1) (004)

S:\Report\_ML\_Group (13896)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0042

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867434-1

Page 3 of 3

<b>Sample Number</b>	23134919-1						
<b>Sample Date</b>	Dec 12, 2023 10:37 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองขากเจ้าเสือ ตอนโหลกนหินที่โครงการ (SW1)						
<b>Date Analysis Commenced</b>	Dec 12, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Oil & Grease *	mg/L	—	8	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C				7.8	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C			27.5	n <sup>1</sup>	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	170	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L		5	10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU		0.1	7.7	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

n<sup>1</sup>: Change from Natural condition not more than 3 degree C

n : Not Change from natural condition

**Sampling By :** Paramet Sattayakun

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
- [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) through representatives that this report is not reproduced except in full.

Approved by

*Dej Chanchong*

Dej Chanchong  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17008-01/THAI

2 (Report)\_AL\_GL.pdf ( 3/10/2023 )



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0009

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867434-2

Page 1 of 1

<b>Sample Number</b>	23134919-1						
<b>Sample Date</b>	Dec 12, 2023 10:37 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองขากเจ้าเสือ ตอนโหลกนหินที่โครงการ (SW1)						
<b>Date Analysis Commenced</b>	Dec 13, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL	—	—	22000.0	≤4000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	—	—	79000.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

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

n<sup>1</sup>: Change from Natural condition not more than 3 degree C

n : Not Change from natural condition

**Sampling By :** Paramet Sattayakun

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.
- 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) through representatives that this report is not reproduced except in full.

Approved by

*Suwannee Chiamkew*

Suwannee Chiamkew  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17008-01/THAI

2 (Report)\_AL\_GL.pdf ( 3/10/2023 )





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



## TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867435-1

Page 1 of 4

Sample Number : 23134919-2  
Sampled Date : Dec 12, 2023 10:15 AM  
Sample Description : Surface Water  
Location : คลองบางชันใต้ หลังโรงงานซีพีอินทรา (SW2)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	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
(A) Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.0006	≤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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.0009	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.78	≤1	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	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

17096 J2/ENR

S:\Report\AR\_GL.rpt (5.10PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



## TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867435-1

Page 2 of 4

Sample Number : 23134919-2  
Sampled Date : Dec 12, 2023 10:15 AM  
Sample Description : Surface Water  
Location : คลองบางชันใต้ หลังโรงงานซีพีอินทรา (SW2)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Nickel	mg/L	0.0003	0.0005	0.0009	≤0.10	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	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Microbiological Testing</b>							
(A) Fecal Coliform	MPN/100mL	-	-	3300.0	≤4000	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	-	-	4900.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.21	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	222	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

17096 J2/ENR

S:\Report\AR\_GL.rpt (5.10PM)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0042

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867435-1

Page 3 of 4

<b>Sample Number</b>	23134919-2						
<b>Sample Date</b>	Dec 12, 2023 10:15 AM						
<b>Sample Description</b>	Surface Water						
<b>Location</b>	คลองชะลอก้างเคียว ฝั่งโน้นตามพื้นที่โครงการ (SW2)						
<b>Date Analysis Commenced</b>	Dec 12, 2023						
<b>Condition of Sample</b>	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Dissolved Oxygen *	mg/L	-	0.1	5.6	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.26	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.8	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong
Temperature *	Degree C	-	-	27.7	n	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	146	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	28	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	28.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition

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

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

T:\Reports\AL\_Glob\T (S.10PM)

1/2004-1/2/2005



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0042

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867435-1

Page 4 of 4

**Sampling By :** Paramet Sattayakun

Remark :

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/2004-1/2/2005

S:\Reports\AL\_Glob\T (S.10PM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867436-1

Page 1 of 3

Sample Number 23134919-3  
Sampled Date Dec 12, 2023 10:51 AM  
Sample Description Surface Water  
Location คลองขุด คลองไหลผ่านพื้นที่โรงงาน (SW3)  
Date Analysis Commenced Dec 12, 2023  
Condition of Sample Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.003	≤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	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	<0.0005	≤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	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.54	≤1	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	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17504-21/ENR

ALS (Secret)\_AR\_GL.pdf (3.50PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867436-1

Page 2 of 3

Sample Number 23134919-3  
Sampled Date Dec 12, 2023 10:51 AM  
Sample Description Surface Water  
Location คลองขุด คลองไหลผ่านพื้นที่โรงงาน (SW3)  
Date Analysis Commenced Dec 12, 2023  
Condition of Sample Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Nickel	mg/L	0.0003	0.0005	0.0006	≤0.10	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	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	216	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.55	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C	-	-	-	7.4	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17504-21/ENR

ALS (Secret)\_AR\_GL.pdf (3.50PM)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0042

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867436-1

Page 3 of 3

**Sample Number** 23134919-3  
**Sampled Date** Dec 12, 2023 10:51 AM  
**Sample Description** Surface Water  
**Location** คลองชลประทานพื้นที่โครงการ (SW3)  
**Date Analysis Commenced** Dec 12, 2023  
**Condition of Sample** Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Temperature *	Degree C	-	-	28.7	n	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	116	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	<5	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	4.5	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

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

n: Not Change from natural condition

**Sampling By :** Paramet Sattayakorn

**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

*D. Chanchon*

Dej Chanchon  
Senior Manager

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) Co., Ltd. strongly recommends that this report is not reproduced except in full.

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Ruakdaeng Rayong 21140 Thailand PHON: +66 0 3304 8555 FAX +66 0 3304 8356  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\report\AL\_GL\ref (1-3009)

17004-21/ENGL



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
No.0009

**Lot ID: 23134919**  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867436-2

Page 1 of 3

**Sample Number** 23134919-3  
**Sampled Date** Dec 12, 2023 10:51 AM  
**Sample Description** Surface Water  
**Location** คลองชลประทานพื้นที่โครงการ (SW3)  
**Date Analysis Commenced** Dec 13, 2023  
**Condition of Sample** Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Microbiological Testing</b>							
Fecal Coliform	MPN/100mL	-	-	33000.0	<4000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	-	-	330000.0	<20000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.98	<0.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	3.4	>4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

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

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

n: Not Change from natural condition

**Sampling By :** Paramet Sattayakorn

**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

*Suwannee Chuankiew*

Suwannee Chuankiew  
Section Head

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) Co., Ltd. strongly recommends that this report is not reproduced except in full.

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\report\AL\_GL\ref (1-3009)

17004-21/ENGL





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867437-1

Page 1 of 3

Sample Number 23134919-4  
 Sample Date Dec 12, 2023 11:10 AM  
 Sample Description Surface Water  
 Location คลองโสดวนกุ่ม บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
 Date Analysis Commenced Dec 12, 2023  
 Condition of Sample Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(1)</sup> Arsenic	mg/L	0.0003	0.0005	0.009	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(1)</sup> Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(1)</sup> Copper	mg/L	0.0003	0.0005	Not Detected	≤0.10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(1)</sup> Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
<sup>(1)</sup> Lead	mg/L	0.0003	0.0005	0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(1)</sup> Manganese	mg/L	0.0003	0.0005	0.79	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<sup>(1)</sup> Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13064-12/1948

S:\Report\AR\_GL\rc (1.3.5898)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867437-1

Page 2 of 3

Sample Number 23134919-4  
 Sample Date Dec 12, 2023 11:10 AM  
 Sample Description Surface Water  
 Location คลองโสดวนกุ่ม บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
 Date Analysis Commenced Dec 12, 2023  
 Condition of Sample Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
<sup>(1)</sup> Nickel	mg/L	0.0003	0.0005	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
<sup>(1)</sup> Zinc	mg/L	0.003	0.005	0.009	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.50	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	—	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COO *	mg/L	—	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	—	0.5	227	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	5.8	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.18	≤5	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 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

*D. Changchon*

Dej Changchon  
Senior Manager

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13064-12/1948

S:\Report\AR\_GL\rc (1.3.5898)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867437-1

Page 3 of 3

Sample Number	23134919-4						
Sampled Date	Dec 12, 2023 11:10 AM						
Sample Description	Surface Water						
Location	คลองชลประทาน บริเวณพื้นที่เกษตรกรรมน้ำทิ้ง 500 เมตร (SW4)						
Date Analysis Commenced	Dec 12, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Oil & Grease *	mg/L	—	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		—	—	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	—	—	28.2	n <sup>1</sup>	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	114	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	—	5	12	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	—	0.1	10.0	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Paramet Sattayakun

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

Approved by

*Dej Changchon*

Dej Changchon  
Senior Manager

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

ALS Laboratory Group

www.alsglobal.com

RIGHT SOLUTIONS PRECISE ANALYTICAL

5/19/2023, AL\_GL\_rpt (3.5899)

1/004-23/0042



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867437-2

Page 1 of 1

Sample Number	23134919-4						
Sampled Date	Dec 12, 2023 11:10 AM						
Sample Description	Surface Water						
Location	คลองชลประทาน บริเวณพื้นที่เกษตรกรรมน้ำทิ้ง 500 เมตร (SW4)						
Date Analysis Commenced	Dec 13, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Fecal Coliform	MPN/100mL	—	—	4900.0	≤4000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Bangkok
Total Coliform	MPN/100mL	—	—	33000.0	≤20000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok

**Guideline :** Notification of the National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n<sup>1</sup>: Change from Natural condition not more than 3 degree C  
n : Not Change from natural condition  
**Sampling By :** Paramet Sattayakun

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

Approved by

*Suwannee Chuankeaw*

Suwannee Chuankeaw  
Section Head

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

ALS Laboratory Group

www.alsglobal.com

RIGHT SOLUTIONS PRECISE ANALYTICAL

5/19/2023, AL\_GL\_rpt (3.5899)

1/004-23/0042





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867438-1

Page 1 of 4

Sample Number : 23134919-5  
Sampled Date : Dec 12, 2023 11:25 AM  
Sample Description : Surface Water  
Location : คลองสาธารณะ บริเวณจุดระบายน้ำฝั่ง (SW5)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.007	≤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	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	<0.0005	≤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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr 8	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.67	≤1	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	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*Dej Changchon*

Dej Changchon  
Senior Manager

ADDRESS 615/10 Moo 5 T. Maenam Khru A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-22/ENAE

5186991\_AL\_GL.qxd (3/17/09)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867438-1

Page 2 of 4

Sample Number : 23134919-5  
Sampled Date : Dec 12, 2023 11:25 AM  
Sample Description : Surface Water  
Location : คลองสาธารณะ บริเวณจุดระบายน้ำฝั่ง (SW5)  
Date Analysis Commenced : Dec 12, 2023  
Condition of Sample : Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Nickel	mg/L	0.0003	0.0005	0.0006	≤0.10	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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Microbiological Testing</b>							
(A) Fecal Coliform	MPN/100mL	-	-	3300.0	≤4000	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	-	-	13000.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.20	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C. *	micromhos/cm	-	0.5	207	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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

*Dej Changchon*

Dej Changchon  
Senior Manager

ADDRESS 615/10 Moo 5 T. Maenam Khru A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-22/ENAE

5186991\_AL\_GL.qxd (3/17/09)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867438-1

Page 3 of 4

Sample Number	23134919-5						
Sampled Date	Dec 12, 2023 11:25 AM						
Sample Description	Surface Water						
Location	คลองลำคอกกาว บริเวณจุดระดมรถน้ำทิ้ง (SWS)						
Date Analysis Commenced	Dec 12, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen *	mg/L	—	0.1	6.2	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.12	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	—	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		—	—	7.6	5.0-9.0	In-house method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	—	—	29.7	n <sup>a</sup>	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	82	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	—	5	12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	—	0.1	8.7	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act. B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)

n<sup>a</sup>: Change from Natural condition not more than 3 degree C

n : Not Change from natural condition

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

*Dej Changchon*

Dej Changchon  
Senior Manager

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

Life Solutions

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\_AIS\_GL.rpt ( 5.17799)

13096-22/0903



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867438-1

Page 4 of 4

Sampling By : Paramet Sattayakun

Remark :

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

*Dej Changchon*

Dej Changchon  
Senior Manager

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

Life Solutions

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\_AIS\_GL.rpt ( 5.17799)

13096-22/0903





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867439-1

Page 1 of 4

Sample Number	23134919-6
Sampled Date	Dec 12, 2023 11:40 AM
Sample Description	Surface Water
Location	คลองปลวกแดง บริเวณทางจุดตรวจน้ำท่า 500 เมตร (SW6)
Date Analysis Commenced	Dec 12, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Arsenic	mg/L	0.0003	0.0005	0.006	≤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	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	Not Detected	≤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	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3500-Cr B	Bangkok
(A) Lead	mg/L	0.0003	0.0005	0.0005	≤0.05	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
(A) Manganese	mg/L	0.0003	0.0005	0.42	≤1	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	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

0704-21/ENAE

S:\reports\AL\_GA.rpt (3.10PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0042

Lot ID: 23134919

Date Received : Dec 12, 2023

Date Reported : Dec 19, 2023

Report Number : 2867439-1

Page 2 of 4

Sample Number	23134919-6
Sampled Date	Dec 12, 2023 11:40 AM
Sample Description	Surface Water
Location	คลองปลวกแดง บริเวณทางจุดตรวจน้ำท่า 500 เมตร (SW6)
Date Analysis Commenced	Dec 12, 2023
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
(A) Nickel	mg/L	0.0003	0.0005	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
(A) Zinc	mg/L	0.003	0.005	0.008	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Microbiological Testing</b>							
(A) Fecal Coliform	MPN/100mL	-	-	1300.0	≤4000	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	-	-	4900.0	≤20000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
<b>Water Testing</b>							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.15	≤0.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH3 (D)	Rayong
BOD *	mg/L	-	2	<2.0	≤2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O C	Rayong
COD *	mg/L	-	25	<25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Conductivity at 25 Degree C *	micromhos/cm	-	0.5	201	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong

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

*D. Changchon*

Dej Changchon  
Senior Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-12/ENAE

S:\reports\AL\_GA.rpt (3.10PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867439-1

Page 3 of 4

Sample Number	23134919-6						
Sampled Date	Dec 12, 2023 11:40 AM						
Sample Description	Surface Water						
Location	คลองปลาดุก บริเวณทางระบายน้ำ 500 เมตร (SW6)						
Date Analysis Commenced	Dec 12, 2023						
Condition of Sample	Contained in two glass vials, one amber glass bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	5.8	≥4	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.39	≤5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Oil & Grease *	mg/L	-	3	<3	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.0-9.0	In-house Method : STM 02-005 based on Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	n	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	140	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	9	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong
Turbidity *	NTU	-	0.1	6.9	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 National Environmental Board, No. 8, B.E.2537 issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 111, Part 16, Dated February 24, B.E. 2537 (Class 3)  
n: Change from Natural condition not more than 3 degree C  
n: Not Change from natural condition

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

*D. Changchon*

Dej Changchon  
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8558  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS

5/202001\_ALS\_GL.rpt (5.57PM)

17094-12/DNAL



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0042

Lot ID: 23134919  
Date Received : Dec 12, 2023  
Date Reported : Dec 19, 2023  
Report Number : 2867439-1

Page 4 of 4

Sampling By : Paramet Sattayakin

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

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8558  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS

5/202001\_ALS\_GL.rpt (5.57PM)

17094-12/DNAL



---

คุณภาพน้ำใต้ดิน



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0009

Lot ID: 23124328

Date Received : Nov 24, 2023

Date Reported : Dec 01, 2023

Report Number : 2850919-1

Page 1 of 3

Sample Number 23124328-1  
Sampled Date Nov 24, 2023 3:15 PM  
Sample Description Ground Water  
Location หมู่ที่ 1 บ้านนาอ้อ 12 ตำบลนาอ้อ (UW1)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Cadmium	mg/L	0.0003	0.0005	Not Detected	Not Detected	≤0.01	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	≤1.0	≤1.5	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	No Standard	No Standard	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	1.32	≤0.5	≤1.0	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	Not Detected	≤0.05	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	0.25	≤0.3	≤0.5	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	Not Detected	≤0.001	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*Sawitree N.*

Sawitree Nosangiam  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/000 20/10/2023

3/Report\_AL\_02.rpt (1:44MB)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0009

Lot ID: 23124328

Date Received : Nov 24, 2023

Date Reported : Dec 01, 2023

Report Number : 2850919-1

Page 2 of 3

Sample Number 23124328-1  
Sampled Date Nov 24, 2023 3:15 PM  
Sample Description Ground Water  
Location หมู่ที่ 1 บ้านนาอ้อ 12 ตำบลนาอ้อ (UW1)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Zinc	mg/L	0.003	0.005	0.01	≤5	≤15	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>								
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	100	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	16	≤250	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.07	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	≤200	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	7.2	7.0-8.5	6.5-9.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	133	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	238	≤600	≤1200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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 N.*

Sawitree Nosangiam  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/000 20/10/2023

5/Report\_AL\_02.rpt (1:44MB)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kao, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124328  
Date Received : Nov 24, 2023  
Date Reported : Dec 01, 2023  
Report Number : 2850919-1

Page 3 of 3

Sample Number : 23124328-1  
Sample Date : Nov 24, 2023 3:15 PM  
Sample Description : Ground Water  
Location : บ่อกู้ 1 บ้านนาถอ 12 ตำบลพนาธิปไตย (UW1)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	100	≤300	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	11.0	≤5	≤20	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 Natural Resource and Environment, dated March 24, B.E.2551 (2008), published in the Royal Government Gazette, Vol. 125, Part 85 D, dated May 21, B.E.2551 (2008).  
(1) Suitable Allowance, (2) Maximum allowable.

Sampling By : นานัต ธรรมสาร นานัตธรรมสาร 3-323-9477, Samart Khumplee นานัตธรรมสาร 3-204-97830

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 Noisangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

5/16/2023, 16:24:58 (8:44PM)

17004 J2/0902



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kao, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124328  
Date Received : Nov 24, 2023  
Date Reported : Dec 01, 2023  
Report Number : 2850920-1

Page 1 of 3

Sample Number : 23124328-2  
Sample Date : Nov 24, 2023 3:55 PM  
Sample Description : Ground Water  
Location : บ่อกู้ 6 บ้านนาถอ 12 ตำบลพนาธิปไตย (UM2)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Cadmium	mg/L	0.0003	0.0005	Not Detected	Not Detected	≤0.01	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	≤1.0	≤1.5	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	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3509-Cr B	Bangkok
Iron	mg/L	0.003	0.005	0.08	≤0.5	≤1.0	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	Not Detected	≤0.05	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	0.64	≤0.3	≤0.5	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	Not Detected	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

5/16/2023, 16:24:58 (8:45PM)

17004 J2/0902



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0009

Lot ID: 23124328

Date Received : Nov 24, 2023

Date Reported : Dec 01, 2023

Report Number : 2850920-1

Page 2 of 3

Sample Number	23124328-2
Sampled Date	Nov 24, 2023 3:55 PM
Sample Description	Ground Water
Location	จุดที่ 6 บริเวณสระน้ำ สำหรับทดสอบ (UM2)
Date Analysis Commenced	Nov 24, 2023
Condition of Sample	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Zinc	mg/L	0.003	0.005	Not Detected	≤5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>								
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	133	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	31	≤250	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.17	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	12	≤200	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	6.8	7.0-8.5	6.5-9.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	133	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	208	≤600	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17009-21/UM2

S:\Report\AL\_23\_01 (E-05AM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING

No.0009

Lot ID: 23124328

Date Received : Nov 24, 2023

Date Reported : Dec 01, 2023

Report Number : 2850920-1

Page 2 of 3

Sample Number	23124328-2
Sampled Date	Nov 24, 2023 3:55 PM
Sample Description	Ground Water
Location	จุดที่ 6 บริเวณสระน้ำ สำหรับทดสอบ (UM2)
Date Analysis Commenced	Nov 24, 2023
Condition of Sample	Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)
Physical Property	Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	146	≤300	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	0.6	≤5	≤20	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 Natural Resource and Environment, dated March 24, B.E.2551 (2008), published in the Royal Government Gazette, Vol. 125, Part 85 D, dated May 21, B.E.2551 (2008),  
(1) Suitable Allowance, (2) Maximum allowable.

Sampling By : Narurat thammassaro โทร 09-94777, Samart Khumplhee โทร 09-204-7830

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.

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17009-21/UM2

S:\Report\AL\_23\_01 (E-05AM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd ~ 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124328  
Date Received : Nov 24, 2023  
Date Reported : Dec 01, 2023  
Report Number : 2850921-1

Page 1 of 3

Sample Number 23124328-3  
Sampled Date Nov 24, 2023 3:35 PM  
Sample Description Ground Water  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลพนาธิเบศ (UM3)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Cadmium	mg/L	0.0003	0.0005	Not Detected	Not Detected	≤0.01	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	0.004	≤1.0	≤1.5	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	No Standard	No Standard	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	0.005	≤0.5	≤1.0	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	0.002	Not Detected	≤0.05	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	0.15	≤0.3	≤0.5	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	Not Detected	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision 1E	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 this report is not reproduced except in full.

Approved by

*Savitree N.*  
Savitree Naisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE 466 0 2760 3000 | FAX 466 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS. FREIGHT. EMPLOYMENT

17004-21/19M

5: (Report) AL\_25C.rpt (R-4596)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd ~ 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124328  
Date Received : Nov 24, 2023  
Date Reported : Dec 01, 2023  
Report Number : 2850921-1

Page 2 of 3

Sample Number 23124328-3  
Sampled Date Nov 24, 2023 3:35 PM  
Sample Description Ground Water  
Location หมู่ที่ 1 บ้านหนองหว้า ตำบลพนาธิเบศ (UM3)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Metals Testing</b>								
Zinc	mg/L	0.003	0.005	0.02	≤5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>								
Carbonate Hardness as CaCO3 *	mg/L	-	1	14	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	27	≤250	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	16.9	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 (E)	Rayong
Non-Carbonate Hardness as CaCO3 *	mg/L	-	1	22	≤200	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *		-	-	5.8	7.0-8.5	6.5-9.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Total Alkalinity as CaCO3 *	mg/L	1	1	14	No Standard	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	192	≤600	≤1200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

*Savitree N.*  
Savitree Naisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE 466 0 2760 3000 | FAX 466 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS. FREIGHT. EMPLOYMENT

17004-21/19M

5: (Report) AL\_25C.rpt (R-4596)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7,  
Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124328  
Date Received : Nov 24, 2023  
Date Reported : Dec 01, 2023  
Report Number : 2850921-1

Page 3 of 3

Sample Number : 23124328-3  
Sampled Date : Nov 24, 2023 3:35 PM  
Sample Description : Ground Water  
Location : หมู่ที่ 3 บ้านหนองหว้า ตำบลพนาธิเบศ (UM3)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Water Testing</b>								
Total Hardness as CaCO <sub>3</sub> *	mg/L		1	36	≤300	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU		0.1	0.2	≤5	≤20	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 Natural Resource and Environment, dated March 24, B.E.2551 (2008), published in the Royal Government Gazette, Vol. 125, Part 85 D, dated May 21, B.E.2551 (2008).  
(1) Suitable Allowance, (2) Maximum allowable.

Sampling By : Narusit thammesaro โทรศัพท์ 0-323-9-9477, Samart Khumplinee โทรศัพท์ 0-204-9-7830

### Remark :

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

*Sawitree N.*

Sawitree Nisangiam  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17069-231 (FMS)

S:\reports\AL\_02\_rpt (6.50PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009  
Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850930-1

Page 1 of 1

Sample Number : 23124329-1  
Sampled Date : Nov 24, 2023 1:45 PM  
Sample Description : Ground Water  
Location : แปลงเพื่อการปล่อยน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (U11)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.0007	≤1.0	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	≤0.05	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	0.35	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	<0.0005	≤0.01	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	0.03	≤0.5	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	≤0.001	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*Sawitree N.*

Sawitree Nisangiam  
Manager

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17069-231 (FMS)

S:\reports\AL\_02\_rpt (6.50PM)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850930-1

Page 2 of 3

Sample Number : 23124329-1  
Sampled Date : Nov 24, 2023 1:45 PM  
Sample Description : Ground Water  
Location : บ่อสังเกตการณ์คุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันตกเฉียงใต้ของโครงการ (U11)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Zinc	mg/L	0.003	0.005	Not Detected	≤5.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	—	1	31	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	23	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	11.5	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (C)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	—	1	12	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	—	—	—	6.0	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	31	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	—	5	210	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

1/2004-21/10/06

8:30pm\_01\_01\_01 (4/5/09)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850930-1

Page 3 of 3

Sample Number : 23124329-1  
Sampled Date : Nov 24, 2023 1:45 PM  
Sample Description : Ground Water  
Location : บ่อสังเกตการณ์คุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันตกเฉียงใต้ของโครงการ (U11)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Colorless, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Hardness as CaCO <sub>3</sub> *	mg/L	—	1	43	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	—	0.1	20.0	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 National Environmental Board, No. 20, B.E.2543

Sampling By : Nanarat thamasaro , Samart Khumphanee

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.

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

1/2004-21/10/06

5:30pm\_01\_01\_01 (4/5/09)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850931-1

Page 1 of 1

Sample Number 23124329-2  
Sample Date Nov 24, 2023 2:15 PM  
Sample Description Ground Water  
Location ปอสังกะการอุบลกาฬนาโสดัน บริเวณพื้นที่สีเขียวด้านทิศเหนือติดกับหนองน้ำพ่นล่อ 1 ของโครงการ (UI2)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.002	≤1.0	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	≤0.05	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	2.85	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	0.005	≤0.01	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	0.17	≤0.5	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	≤0.001	In-house method : STM 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 this report is not reproduced except in full.

Approved by

*Savitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1004-12/EN6

1004-12/EN6



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850931-1

Page 2 of 3

Sample Number 23124329-2  
Sample Date Nov 24, 2023 2:15 PM  
Sample Description Ground Water  
Location ปอสังกะการอุบลกาฬนาโสดัน บริเวณพื้นที่สีเขียวด้านทิศเหนือติดกับหนองน้ำพ่นล่อ 1 ของโครงการ (UI2)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Zinc	mg/L	0.003	0.005	0.005	≤5.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	28	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	13	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.89	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	6.4	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	50	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	160	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

*Savitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1004-12/EN6

1004-12/EN6





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850931-1

Page 3 of 3

Sample Number : 23124329-2  
Sample Date : Nov 24, 2023 2:15 PM  
Sample Description : Ground Water  
Location : บ่อส่งผลการทดลองน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศเหนือติดกับบ่อหลุมบ่งน้ำผิวดินที่ 1 ของโครงการ (UI2)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	28	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	110	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 National Environmental Board, No. 20, B.E.2543

Sampling By : Narunat thammassaro , Samart Khumplee

### 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 Noisangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. PROUDLY. PROVEN. PEOPLE.

17004-D1/0002

3 (Reports)\_AL\_GL\_rpt (4/30/19)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850932-1

Page 1 of 3

Sample Number : 23124329-3  
Sample Date : Nov 24, 2023 11:50 AM  
Sample Description : Ground Water  
Location : บ่อส่งผลการทดลองน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกติดกับบ่อหลุมบ่งน้ำผิวดินของโครงการ (UI3)  
Date Analysis Commenced : Nov 24, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property : Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.0005	≤1.0	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	≤0.05	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	0.36	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	≤0.01	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	0.14	≤0.5	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	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. PROUDLY. PROVEN. PEOPLE.

17004-D1/0002

3 (Reports)\_AL\_GL\_rpt (4/30/19)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329

Date Received : Nov 24, 2023

Date Reported : Nov 30, 2023

Report Number : 2850932-1

Page 2 of 3

Sample Number 23124329-3  
Sampled Date Nov 24, 2023 11:50 AM  
Sample Description Ground Water  
Location ปลัดึงผลการตรวจคุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของเหมืองโครงการ (UI3)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Zinc	mg/L	0.003	0.005	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
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	46	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
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
Nitrate as N *	mg/L	0.015	0.05	1.10	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	7.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	116	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	170	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENR

S:\Biodata\AL\_GL.pdf (5.509K)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329

Date Received : Nov 24, 2023

Date Reported : Nov 30, 2023

Report Number : 2850932-1

Page 3 of 3

Sample Number 23124329-3  
Sampled Date Nov 24, 2023 11:50 AM  
Sample Description Ground Water  
Location ปลัดึงผลการตรวจคุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของเหมืองโครงการ (UI3)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	46	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	22.0	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 National Environmental Board, No. 20, B.E.2543

Sampling By : Narunat Ithamasaro, Samart Khumplhee

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.

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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-21/ENR

S:\Biodata\AL\_GL.pdf (5.509K)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850933-1

Page 1 of 3

Sample Number 23124329-4  
Sample Date Nov 24, 2023 1:10 PM  
Sample Description Ground Water  
Location บ่อสังเกตการณ์คุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (U14)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.003	≤1.0	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	≤0.05	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	2.90	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	0.008	≤0.01	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	1.15	≤0.5	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	≤0.001	In-house method : STM 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) Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PLACE RIGHT TIME

3/2004-12/2006



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 23124329  
Date Received : Nov 24, 2023  
Date Reported : Nov 30, 2023  
Report Number : 2850933-1

Page 2 of 3

Sample Number 23124329-4  
Sample Date Nov 24, 2023 1:10 PM  
Sample Description Ground Water  
Location บ่อสังเกตการณ์คุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (U14)  
Date Analysis Commenced Nov 24, 2023  
Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)  
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Zinc	mg/L	0.003	0.005	0.006	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	68	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	13	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.53	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	6.7	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	132	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	216	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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

Approved by

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PLACE RIGHT TIME

3/2004-12/2006



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location: WHA Rayong 36

TESTING

No.0009

Lot ID: 23124329

Date Received : Nov 24, 2023

Date Reported : Nov 30, 2023

Report Number : 2850933-1

Page 3 of 3

Sample Number 23124329-4

Sampled Date Nov 24, 2023 1:10 PM

Sample Description Ground Water

Location บ่อเก็บน้ำดิบสำหรับผลิตน้ำดื่ม บริเวณพื้นที่สีเขียวภายในโครงการ (U14)

Date Analysis Commenced Nov 24, 2023

Condition of Sample Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Total Hardness as CaCO <sub>3</sub> *	mg/l	—	1	68	No Standard	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	—	0.1	230	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 National Environmental Board, No. 20, B.E.2543

Sampling By : Narunat thammassaro , Samart Khumphilee

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.

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 N.*

Sawitree Nolsangiam  
Manager

ADDRESS: 104 Phatthanakan Rd., Phatthanakan 40, Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE: +66 0 2750 3000 FAX: +66 0 2760 3187  
ALS LABORATORY GROUP (THAI) AND CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-22/ENR

S:\Report\AL\_GL\enr (6.9819)



---

โลหะหนักในตะกอนดิน



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23120612  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 1 of 12

**Sample Number** 23120612-1  
**Sampled Date** Oct 17, 2023 12:06 PM  
**Sample Description** ตะกอนดิน (น้ำตกคลองวัง)  
**Location** คลองวังน้ำเค็ม คลองไหลผ่านพื้นที่โครงการ (SW1)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	—	1.00	605	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	—	0.50	2.32	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	—	1.00	16.3	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	—	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	—	1.00	<1.00	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050A and 7196A	Bangkok
Iron	mg/kg	—	1.00	1808	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	—	1.00	4.72	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	—	1.00	154	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	—	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

Technical Management

*Savitree N.*

Savitree Nongsiam  
Manager

โทร: 02-04-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager

โทร: 02-04-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

17004-21/TH/MS

S:\Reports\AL\_G2.rpt ( 6.40KB)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23120612  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 2 of 12

**Sample Number** 23120612-1  
**Sampled Date** Oct 17, 2023 12:06 PM  
**Sample Description** ตะกอนดิน (น้ำตกคลองวัง)  
**Location** คลองวังน้ำเค็ม คลองไหลผ่านพื้นที่โครงการ (SW1)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	—	1.00	2.37	≤120	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	—	0.1	12.4	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

**Guideline :** Notification of The National Environmental Board B.E.2565, for protect benthic animals

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Samart Khumthilee โทร: 02-04-47830

Remark :

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

Technical Management

*Savitree N.*

Savitree Nongsiam  
Manager

โทร: 02-04-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager

โทร: 02-04-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

17004-21/TH/MS

S:\Reports\AL\_G2.rpt ( 6.40KB)





**Project Location:** WHA Rayong 36

Report Number : 2807555-1

Page 3 of 12

Sample Number	23120612-2
Sampled Date	Oct 17, 2023 11:35 AM
Sample Description	ตะกอนดิน (น้ำตื้นคลอง)
Location	คลองหาคะจาดเขียว หลังโหนดผ่านพื้นที่โครงการ (SW2)
Date Analysis Commenced	Oct 19, 2023
Condition of Sample	Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	650	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	2.73	≤10	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	20.1	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	2751	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	5.40	≤36	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	168	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok

### Technical Management

เลขทะเบียนการค้า: ๖-๒๐๔-๖-๔๗๐๙

Approved by

โทรสาร : 0-204-8-6111

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197  
ALC LABORATORY GROUP/THAI ANCH CO., LTD. An ALC Limited Company

LIVE SIMULATIONS

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS DWIGHT F. JOHNSON III

© 2004 Blackwell Publishing Ltd, *Journal of Clinical Pharmacy and Therapeutics*, 29, 403–410



Project Location: WHA Bayong 36

Report Number : 2807555-1

Page 4 of 12

Sample Number	23120612-2
Sampled Date	Oct 17, 2023 11:35 AM
Sample Description	ตะกอนดิน (น้ำตกแม่หวด)
Location	คลองจากเจ็ดฝาย หลังโหนดผ่านพื้นที่โครงการ (SW2)
Date Analysis Commenced	Oct 19, 2023
Condition of Sample	Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	1.99	≤120	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	16.8	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

**Guideline :** Notification of The National Environmental Board B.E.2565, for protect benthic animals

**Note :** Analysis Results expressed on dry basis

Sampling By : Samart Khumohlee wafinwaru@ 2-204-2-7830

Remark :

LDR : Limit of Detection

\* < : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

### Technical Management

ทะเบียนเลขที่ ๖-204-๔-4709

Approved by \_\_\_\_\_

หมายเลข 7-204-ค-6111

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

LAPORATION OF THE TONGUE

[www.alsglobal.com](http://www.alsglobal.com)

**RIGHT SOLUTIONS** RIGHT PARTS FROM

5/18/2005, All 12, rpt (5-0000)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23120612  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2807555-1

Page 5 of 12

Sample Number : 23120612-3  
Sampled Date : Oct 17, 2023 10:04 AM  
Sample Description : ตะกอนดิน (น้ำดิบก่อนกรอง)  
Location : คลองหจก คลองโหล่งน้ำดินที่โครงการ (SW3)  
Date Analysis Commenced : Oct 19, 2023  
Condition of Sample : Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	506	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	0.86	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	9.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	1336	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	2.34	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	32.3	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

Technical Management

*Savitree N.*

Savitree Nosangiam  
Manager  
โทร: 02-204-4-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
โทร: 02-204-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1709A 23/10/23

S:\Report\AL\_GL\pc (18-0090)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23120612  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2807555-1

Page 6 of 12

Sample Number : 23120612-3  
Sampled Date : Oct 17, 2023 10:04 AM  
Sample Description : ตะกอนดิน (น้ำดิบก่อนกรอง)  
Location : คลองหจก คลองโหล่งน้ำดินที่โครงการ (SW3)  
Date Analysis Commenced : Oct 19, 2023  
Condition of Sample : Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	2.54	≤120	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	21.0	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

Guideline : Notification of The National Environmental Board B.E.2565, for protect benthic animals

Note : Analysis Results expressed on dry basis.

Sampling By : Samart Khumphaee โทร: 02-204-4-7830

Remark :

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

Technical Management

*Savitree N.*

Savitree Nosangiam  
Manager  
โทร: 02-204-4-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
โทร: 02-204-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1709A 23/10/23

S:\Report\AL\_GL\pc (18-0090)





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23120612**  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 7 of 12

**Sample Number** 23120612-4  
**Sampled Date** Oct 17, 2023 10:25 AM  
**Sample Description** ตะกอนดิน (น้ำดิบดิบ) (SW4)  
**Location** คลองปลวกแดง บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	796	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	2.55	≤10	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	8.79	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	1.03	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	2397	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	5.02	≤36	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	89.1	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok

Technical Management

*Sawitree N.*

Sawitree Nongsiam  
Manager

โทร: 02-04-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager

โทร: 02-04-6111

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

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

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL\_GL\_rpt (1) 8-10-2023

17094-21/10/2023



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23120612**  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 8 of 12

**Sample Number** 23120612-4  
**Sampled Date** Oct 17, 2023 10:25 AM  
**Sample Description** ตะกอนดิน (น้ำดิบดิบ) (SW4)  
**Location** คลองปลวกแดง บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	-	1.00	3.63	≤120	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	17.7	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

**Guideline :** Notification of The National Environmental Board B.E.2565, for protect benthic animals

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Samart Khumpliee โทร: 02-04-47830

**Remark :**

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

Technical Management

*Sawitree N.*

Sawitree Nongsiam  
Manager

โทร: 02-04-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager

โทร: 02-04-6111

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

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

LINE SERVICES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL\_GL\_rpt (1) 8-10-2023

17094-21/10/2023



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23120612  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 9 of 12

**Sample Number** 23120612-5  
**Sampled Date** Oct 17, 2023 10:45 AM  
**Sample Description** ตะกอนดิน (น้ำท่วมขัง)  
**Location** คลองปลวกแดง บริเวณจุดตรวจน้ำทิ้ง (SW5)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	487	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	2.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	13.6	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	1120	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	2.64	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	276	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager  
โทรศัพท์ 2-204-4-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
โทรศัพท์ 2-204-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/004-21/ENR

S:\Reports\AL\_GL.rpt (4/4096)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23120612  
**Date Received :** Oct 17, 2023  
**Date Reported :** Oct 26, 2023  
**Report Number :** 2807555-1

Page 10 of 12

**Sample Number** 23120612-5  
**Sampled Date** Oct 17, 2023 10:45 AM  
**Sample Description** ตะกอนดิน (น้ำท่วมขัง)  
**Location** คลองปลวกแดง บริเวณจุดตรวจน้ำทิ้ง (SW5)  
**Date Analysis Commenced** Oct 19, 2023  
**Condition of Sample** Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	2.55	≤120	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	11.2	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

**Guideline :** Notification of The National Environmental Board B.E.2565, for protect benthic animals

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Samart Khumplhee โทรศัพท์ 2-204-4-7830

Remark :

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

Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager  
โทรศัพท์ 2-204-4-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager  
โทรศัพท์ 2-204-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1/004-21/ENR

S:\Reports\AL\_GL.rpt (4/4096)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23120612  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2807555-1

Page 11 of 12

Sample Number : 23120612-6  
Sampled Date : Oct 17, 2023 11:05 AM  
Sample Description : ตะกอนดิน (น้ำตกคลองวัง)  
Location : คลองปลวกแก้ว บริเวณทางจุดตรวจน้ำทิ้ง 500 เมตร (SW6)  
Date Analysis Commenced : Oct 19, 2023  
Condition of Sample : Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	1835	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	4.34	≤10	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	26.9	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤1	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤31.5	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	1954	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	6.26	≤36	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	621	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	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	≤23	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok

Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager  
โทร: 02-04-4-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
โทร: 02-04-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

1309-21/09/25

S:\000001\_ALS\01 (1-10000)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23120612  
Date Received : Oct 17, 2023  
Date Reported : Oct 26, 2023  
Report Number : 2807555-1

Page 12 of 12

Sample Number : 23120612-6  
Sampled Date : Oct 17, 2023 11:05 AM  
Sample Description : ตะกอนดิน (น้ำตกคลองวัง)  
Location : คลองปลวกแก้ว บริเวณทางจุดตรวจน้ำทิ้ง 500 เมตร (SW6)  
Date Analysis Commenced : Oct 19, 2023  
Condition of Sample : Packed in one plastic bag and two glass bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	-	1.00	6.34	≤120	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	25.0	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

Guideline : Notification of The National Environmental Board B.E.2565, for protect benthic animals

Note : Analysis Results expressed on dry basis.

Sampling By : Smart Khumplinee โทร: 02-04-4-7830

Remark :

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

Technical Management

*Sawitree N.*

Sawitree Nisangiam  
Manager  
โทร: 02-04-4-4709

Approved by

*Kanokorn Anek*

Kanokorn Anek  
Senior Manager  
โทร: 02-04-4-6111

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

1309-21/09/25

S:\000001\_ALS\01 (1-10000)

---

คุณภาพดิน





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124330  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 1 of 12

**Sample Number** 23124330-1  
**Sampled Date** Nov 24, 2023 1:45 PM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่บริเวณด้านทิศตะวันตกของโครงการ (S1)  
**Date Analysis Commenced** Nov 25, 2023  
**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
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	12906	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	8.66	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	81.9	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	4.03	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7195A	Bangkok
Iron	mg/kg	-	1.00	10373	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	18.0	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	314	≤19540	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	4.93	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR		-	1.00	<1.00	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	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 this report is not reproduced except in full.

Approved by

*Sawitree N.*

Sawitree Naisangiam  
Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand / PHONE: +66 0 2760 3000 / FAX: +66 0 2760 3137  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

27004-22 (ENQ)

1 (Report)\_AL\_01\_01 (1.5.4096)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID:** 23124330  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 2 of 12

**Sample Number** 23124330-1  
**Sampled Date** Nov 24, 2023 1:45 PM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่บริเวณด้านทิศตะวันตกของโครงการ (S1)  
**Date Analysis Commenced** Nov 25, 2023  
**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
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	<0.50	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Soluble Calcium	mg/kg	-	20.0	41.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	13.0	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	3.4	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
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	15.3	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)		-	-	7.2	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

**Guideline :** Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564  
Class 2: Soil usage for commercial, agricultural and others.

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 N.*

Sawitree Naisangiam  
Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand / PHONE: +66 0 2760 3000 / FAX: +66 0 2760 3137  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

27004-22 (ENQ)

1 (Report)\_AL\_01\_01 (1.5.4096)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
Date Received : Nov 24, 2023  
Date Reported : Dec 07, 2023  
Report Number : 2816283-1

Page 3 of 12

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Samart Khumpithee

**Remark :**

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



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
Date Received : Nov 24, 2023  
Date Reported : Dec 07, 2023  
Report Number : 2816283-1

Page 4 of 12

**Sample Number :** 23124330-2  
**Sampled Date :** Nov 24, 2023 2:20 PM  
**Sample Description :** Soil (Dry basis)  
**Location :** พื้นที่สีเขียวด้านทิศเหนือติดกับถนนวงแหวนรอบตัว 1 ของโครงการ (S2)  
**Date Analysis Commenced :** Nov 25, 2023  
**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
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	9809	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	8.25	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	55.7	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	3.45	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	12043	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	12.0	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	119	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	3.96	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR	-	-	1.00	3.60	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok

Approved by

*Sawitree N*

Sawitree Nonsangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094 21/ 1996

3/ 2023/ 21/ 1996

Approved by

*Sawitree N*

Sawitree Nonsangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094 21/ 1996

3/ 2023/ 21/ 1996





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124330

Date Received : Nov 24, 2023

Date Reported : Dec 07, 2023

Report Number : 2816283-1

Page 5 of 12

Sample Number : 23124330-2

Sampled Date : Nov 24, 2023 2:20 PM

Sample Description : Soil (Dry basis)

Location : พื้นที่บริเวณด้านทิศเหนือของพื้นที่แปลงที่ 1 ของโครงการ (S2)

Date Analysis Commenced : Nov 25, 2023

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
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	<0.50	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Soluble Calcium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	10.5	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	3.2	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
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	13.3	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	-	-	-	5.6	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

Guideline : Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564

Class 2: Soil usage for commercial, agricultural and others.

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

*Savitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12004.23/THAIL

5180001\_AL\_GL.rpt (3.44KB)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230025

Project Name : Monitoring

Project Location : WHA Rayong 36

Lot ID: 23124330

Date Received : Nov 24, 2023

Date Reported : Dec 07, 2023

Report Number : 2816283-1

Page 6 of 12

Note : Analysis Results expressed on dry basis.

Sampling By : Samart Khumplilee

Remark :

- LOD : Limit of Detection  
- "c" : 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

*Savitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

12004.23/THAIL

5180001\_AL\_GL.rpt (3.44KB)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 7 of 12

**Sample Number** 23124330-3  
**Sampled Date** Nov 24, 2023 11:55 AM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่สีเขียวด้านทิศตะวันออกของเขตรักษาพันธุ์สัตว์ป่า (S3)  
**Date Analysis Commenced** Nov 25, 2023  
**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
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	5032	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	4.69	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	35.9	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	1.74	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	6939	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	11.9	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	144	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	<1.00	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR	-	-	1.00	1.37	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	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 this report is not reproduced except in full.

Approved by

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-25/17004

3:00pm\_18\_12\_2023



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 8 of 12

**Sample Number** 23124330-3  
**Sampled Date** Nov 24, 2023 11:55 AM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่สีเขียวด้านทิศตะวันออกของเขตรักษาพันธุ์สัตว์ป่า (S3)  
**Date Analysis Commenced** Nov 25, 2023  
**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
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	<0.50	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Soluble Calcium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	2.16	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	4.8	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
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	10.7	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	-	-	-	5.3	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

**Guideline :** Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564  
**Class 2:** Soil usage for commercial, agricultural and others.

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

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-25/17004

3:00pm\_18\_12\_2023





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 9 of 12

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Samart Khumthilee

**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 N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

0304/22/ENG

5/Report/AL\_GL\_01 (3-4000)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230025  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 23124330**  
**Date Received :** Nov 24, 2023  
**Date Reported :** Dec 07, 2023  
**Report Number :** 2816283-1

Page 10 of 12

**Sample Number** 23124330-4

**Sampled Date** Nov 24, 2023 11:55 AM

**Sample Description** Soil (Dry basis)

**Location** พื้นที่สีเขียวภายในโครงการบ้านเดี่ยวของโครงการ (S4)

**Date Analysis Commenced** Nov 25, 2023

**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
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	8735	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	12.9	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	84.4	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤262	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	7.64	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7195A	Bangkok
Iron	mg/kg	-	1.00	13729	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	51.7	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	127	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	2.52	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR		-	1.00	<1.00	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	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 this report is not reproduced except in full.

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER.

1/009-12/ENG

5/Report/AL\_GL\_01 (3-4000)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124330  
Date Received : Nov 24, 2023  
Date Reported : Dec 07, 2023  
Report Number : 2816283-1

Page 11 of 12

Sample Number : 23124330-4  
Sample Date : Nov 24, 2023 11:55 AM  
Sample Description : Soil (Dry basis)  
Location : พื้นที่สีเขียวภายในโครงการและบริเวณใกล้เคียงโครงการ (S4)  
Date Analysis Commenced : Nov 25, 2023  
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
<b>Metals Testing</b>							
Selenium	mg/kg	--	0.50	<0.50	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Silver	mg/kg	--	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Soluble Calcium	mg/kg	--	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	--	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	--	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	--	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	--	1.00	18.8	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Physical Parameters</b>							
Moisture	%	--	0.1	3.1	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
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	--	1	14.0	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	--	--	--	6.3	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

Guideline : Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564  
Class 2: Soil usage for commercial, agricultural and others.

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 N.*  
Sawitree Noisangiam  
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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Science

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

12094-21/THAIL

S:\Reports\AL\_GL.rpt (5.44MB)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230025  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 23124330  
Date Received : Nov 24, 2023  
Date Reported : Dec 07, 2023  
Report Number : 2816283-1

Page 12 of 12

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

*Sawitree N.*  
Sawitree Noisangiam  
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  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Science

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

12094-21/THAIL

S:\Reports\AL\_GL.rpt (5.44MB)



---

นิเวศวิทยาทางน้ำ



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : WHA Rayong 36 Company Limited

Address : 777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,

Bang Phli , Samut Prakan, Thailand, 10540

Project Name : Monitoring

Project Location : WHA Rayong 36

#### รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
Division Cyanophyta						
Class Cyanophyceae						
Order Chroococcales						
Family Chroococcaceae						
1. <i>Microcystis aeruginosa</i>	71,000	45,000	-	-	-	32,000
Order Nostocales						
Family Oscillatoriaceae						
2. <i>Lyngbya</i> sp.	-	-	-	-	16,000	-
3. <i>Oscillatoria anguina</i>	71,000	-	-	-	-	-
4. <i>Oscillatoria brevis</i>	-	9,000	9,000	25,000	57,000	-
5. <i>Oscillatoria planctonica</i>	244,000	81,000	44,000	28,392,000	22,032,000	13,760,000
6. <i>Oscillatoria princeps</i>	20,000	36,000	-	84,000	16,000	48,000
7. <i>Oscillatoria</i> sp.	487,000	108,000	-	-	-	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
8. <i>Oscillatoria tenuis</i>	41,000	90,000	18,000	-	138,000	40,000
9. <i>Spirulina platensis</i>	30,000	-	-	-	-	-
Family Nostocaceae						
10. <i>Anabaena azollae</i>	-	-	-	17,000	-	-
11. <i>Anabaenopsis arnoldii</i>	-	54,000	-	-	-	-
Family Rivulariaceae						
12. <i>Calothrix parietana</i>	-	36,000	-	-	81,000	16,000
Division Chlorophyta						
Class Chlorophyceae						
Order Volvocales						
Family Volvocaceae						
13. <i>Eudorina elegans</i>	-	216,000	708,000	302,000	292,000	480,000
14. <i>Gonium sociale</i>	10,000	-	-	-	-	-
15. <i>Pandorina morum</i>	-	36,000	566,000	42,000	41,000	32,000
16. <i>Volvox aureus</i>	-	9,000	-	17,000	8,000	-
Order Tetrasporales						
Family Palmellaceae						
17. <i>Sphaerocystis shroeteri</i>	-	2,250,000	186,000	59,000	146,000	400,000
Order Chlorococcales						
Family Hydrodictyaceae						
18. <i>Pediastrum duplex</i>	112,000	324,000	44,000	269,000	65,000	128,000
19. <i>Pediastrum simplex</i>	112,000	-	-	8,000	32,000	-
Family Coelastraceae						
20. <i>Coelastrum microporum</i>	-	-	-	168,000	146,000	-
21. <i>Coelastrum sphaericum</i>	20,000	18,000	-	25,000	-	-
Family Oocystaceae						
22. <i>Ankistrodesmus falcatus</i>	-	-	-	17,000	16,000	-



ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
23. <i>Chlorella vulgaris</i>	-	45,000	-	50,000	-	-
24. <i>Dictyosphaerium pulchellum</i>	-	-	35,000	34,000	89,000	120,000
25. <i>Kirchneriella lunaris</i>	-	162,000	-	25,000	-	-
26. <i>Kirchneriella subsolitaria</i>	-	-	-	-	8,000	-
27. <i>Oocystis elliptica</i>	91,000	207,000	-	8,000	-	-
28. <i>Planktosphaeria gelatinosa</i>	-	63,000	-	42,000	-	-
29. <i>Selenastrum gracile</i>	203,000	-	-	-	-	-
30. <i>Tetraedron gracile</i>	10,000	27,000	-	67,000	81,000	16,000
31. <i>Tetraedron trigonum</i>	-	-	-	151,000	122,000	112,000
<b>Family Scenedesmeaceae</b>						
32. <i>Actinastrum hantzschii</i>	20,000	-	-	-	-	-
33. <i>Crucigenia apiculata</i>	-	-	-	1,008,000	243,000	640,000
34. <i>Micractinium bornhemiense</i>	-	-	-	59,000	16,000	-
35. <i>Micractinium pusillum</i>	-	-	62,000	185,000	373,000	560,000
36. <i>Micractinium quadrisetum</i>	-	-	62,000	202,000	97,000	64,000
37. <i>Scenedesmus acuminatus</i>	10,000	-	18,000	-	-	-
38. <i>Scenedesmus armatus</i>	61,000	45,000	-	168,000	194,000	32,000
39. <i>Scenedesmus denticulatus</i>	10,000	-	-	160,000	81,000	-
40. <i>Scenedesmus dimorphus</i>	10,000	-	248,000	42,000	-	-
41. <i>Scenedesmus opoliensis</i>	-	225,000	142,000	8,000	-	-
42. <i>Scenedesmus</i> sp.	-	72,000	27,000	25,000	227,000	32,000
<b>Order Ulotrichales</b>						
<b>Family Ulotrichaceae</b>						
43. <i>Ulothrix zonata</i>	-	-	-	-	-	16,000
<b>Order Zygomatales</b>						
<b>Family Desmidiaceae</b>						
44. <i>Closterium ehrenbergii</i>	-	-	80,000	-	32,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
45. <i>Cosmarium</i> sp.	-	9,000	-	-	-	-
<b>Class Euglenophyceae</b>						
<b>Order Euglenales</b>						
<b>Family Euglenaceae</b>						
46. <i>Euglena acus</i>	61,000	234,000	106,000	1,344,000	745,000	504,000
47. <i>Euglena oxyuris</i>	41,000	45,000	18,000	370,000	259,000	160,000
48. <i>Euglena viridis</i>	41,000	45,000	18,000	126,000	146,000	24,000
49. <i>Lepocinclis ovum</i>	102,000	630,000	177,000	269,000	32,000	360,000
50. <i>Phacus angulatus</i>	61,000	18,000	-	17,000	-	-
51. <i>Phacus hamatus</i>	20,000	45,000	-	185,000	8,000	-
52. <i>Phacus longicauda</i>	41,000	9,000	80,000	34,000	130,000	192,000
53. <i>Phacus myersi</i>	386,000	185,000	-	76,000	41,000	16,000
54. <i>Phacus platea</i>	-	108,000	35,000	25,000	-	-
55. <i>Phacus pleuronectes</i>	-	9,000	-	-	-	-
56. <i>Phacus ramula</i>	-	36,000	-	134,000	97,000	72,000
57. <i>Phacus tortus</i>	30,000	72,000	-	25,000	-	-
58. <i>Staurastrum manfeldtii</i>	-	18,000	-	8,000	49,000	-
59. <i>Strombomonas australica</i>	-	-	9,000	-	-	-
60. <i>Strombomonas deflandrei</i>	10,000	117,000	9,000	34,000	-	-
61. <i>Strombomonas gibberosa</i>	-	9,000	9,000	50,000	-	-
62. <i>Strombomonas girardiana</i>	-	27,000	-	25,000	-	-
63. <i>Strombomonas</i> sp.	41,000	-	-	-	24,000	-
64. <i>Trachelomonas crebea</i>	-	63,000	18,000	25,000	32,000	-
65. <i>Trachelomonas dangerdiana</i>	-	-	-	168,000	65,000	96,000
66. <i>Trachelomonas hispida</i>	264,000	189,000	-	588,000	154,000	120,000
67. <i>Trachelomonas mirabilis</i>	-	-	18,000	25,000	-	-
68. <i>Trachelomonas superba</i>	-	-	-	34,000	105,000	64,000

๑๖๖๖ ผลการวิเคราะห์แฟลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแฟลงก์ตอนพืช	ปริมาณแฟลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
<b>Division Chromophyta</b>						
<b>Class Bacillariophyceae</b>						
<b>Order Biddulphiales</b>						
<b>Suborder Coscinodiscineae</b>						
<b>Family Thalassiosiraceae</b>						
69. <i>Cyclotella stelligera</i>	20,000	-	-	25,000	-	-
<b>Family Aulacoseiraceae</b>						
70. <i>Aulacoseira granulata</i>	20,000	252,000	124,000	71,400,000	53,460,000	47,200,000
<b>Order Bacillariales</b>						
<b>Suborder Fragilariineae</b>						
<b>Family Fragilariaceae</b>						
71. <i>Fragilaria capricornis</i>	142,000	180,000	221,000	151,000	122,000	104,000
72. <i>Synedra rumpens</i>	30,000	-	-	-	-	24,000
73. <i>Synedra uba</i>	122,000	396,000	230,000	504,000	389,000	256,000
<b>Family Licmophoriaceae</b>						
74. <i>Licmophora abbreviata</i>	-	-	18,000	-	-	-
<b>Suborder Bacillariineae</b>						
<b>Family Eunotiaceae</b>						
75. <i>Eunotia pectinalis</i>	81,000	9,000	80,000	34,000	49,000	-
<b>Family Cymbellaceae</b>						
76. <i>Cymbella</i> sp.	-	-	44,000	-	-	-
77. <i>Gomphonema parvulum</i>	-	45,000	89,000	25,000	24,000	16,000
<b>Family Naviculaceae</b>						
78. <i>Amphora ovalis</i>	-	36,000	27,000	-	24,000	-
79. <i>Fristulia vulgaris</i>	-	27,000	-	17,000	-	-
80. <i>Gyrosigma acuminatum</i>	51,000	81,000	-	118,000	-	-
81. <i>Gyrosigma attenuatum</i>	112,000	144,000	-	59,000	162,000	40,000

๑๖๖๖ ผลการวิเคราะห์แฟลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแฟลงก์ตอนพืช	ปริมาณแฟลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
82. <i>Gyrosigma scalproides</i>	-	-	-	76,000	-	-
83. <i>Gyrosigma</i> sp.	-	-	18,000	-	-	-
84. <i>Navicula cuspidata</i>	-	-	-	17,000	32,000	-
85. <i>Navicula lanceolata</i>	-	45,000	-	84,000	24,000	-
86. <i>Navicula</i> sp.	102,000	27,000	9,000	-	-	-
87. <i>Pinnularia gibba</i>	102,000	90,000	53,000	84,000	-	8,000
<b>Family Bacillariaceae</b>						
68. <i>Nitzschia linearis</i>	10,000	-	-	-	-	-
89. <i>Nitzschia sigmoidea</i>	20,000	27,000	-	25,000	-	-
90. <i>Nitzschia</i> sp.	-	45,000	-	-	-	-
<b>Family Rhopalodiaceae</b>						
91. <i>Epithemia argus</i>	-	18,000	-	17,000	8,000	-
<b>Family Surirellaceae</b>						
92. <i>Surirella elegans</i>	81,000	162,000	-	76,000	81,000	8,000
93. <i>Surirella linearis</i>	20,000	153,000	9,000	176,000	57,000	32,000
94. <i>Surirella ovata</i>	41,000	-	-	8,000	-	16,000
95. <i>Surirella robusta</i>	365,000	504,000	-	17,000	32,000	24,000
96. <i>Surirella tenera</i>	91,000	63,000	-	34,000	57,000	-
<b>Class Cryosphyceae</b>						
<b>Order Synurales</b>						
<b>Family Mallomonadaceae</b>						
97. <i>Mallomonas acaroides</i>	-	-	-	-	24,000	-
98. <i>Mallomonas litomesa</i>	-	9,000	-	-	16,000	-
99. <i>Mallomonas</i> sp.	10,000	-	-	-	-	-



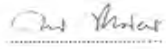
ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)


(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
<b>Class Dinophyceae</b>						
<b>Order Gonyaulacales</b>						
<b>Family Ceratiaceae</b>						
100. <i>Ceratium hirundinella</i>	7,000	117,000	--	-	41,000	88,000
<b>Order Peridiniales</b>						
<b>Family Peridiniaceae</b>						
101. <i>Peridinium cunningtonii</i>	1,462,000	468,000	--	-	113,000	-
102. <i>Peridinium gatunense</i>	-	18,000	9,000	-	16,000	-
103. <i>Peridinium</i> sp.	325,000	99,000	-	-	-	56,000
<b>ชนิดแพลงก์ตอนพืช</b>	<b>52</b>	<b>65</b>	<b>39</b>	<b>69</b>	<b>59</b>	<b>41</b>
<b>ปริมาณแพลงก์ตอนพืช</b>	<b>5,945,000</b>	<b>9,041,000</b>	<b>3,677,000</b>	<b>108,168,000</b>	<b>81,267,000</b>	<b>66,008,000</b>
<b>ดัชนีความหลากหลายแพลงก์ตอนพืช</b>	<b>3.1108</b>	<b>3.2885</b>	<b>2.9384</b>	<b>1.0862</b>	<b>1.0686</b>	<b>0.9945</b>
<b>ดัชนีความสม่ำเสมอแพลงก์ตอนพืช</b>	<b>0.7873</b>	<b>0.7878</b>	<b>0.8021</b>	<b>0.2565</b>	<b>0.2621</b>	<b>0.2678</b>

- Sample Location :**
1. สถานี 23120619-1 : คลองซากเจ็ดเดียว ก่อนไหลผ่านพื้นที่โครงการ (SW1)
  2. สถานี 23120619-2 : คลองซากเจ็ดเดียว หลังไหลผ่านพื้นที่โครงการ (SW2)
  3. สถานี 23120619-3 : คลองพูล ก่อนไหลผ่านพื้นที่โครงการ (SW3)
  4. สถานี 23120619-4 : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)
  5. สถานี 23120619-5 : คลองปลวกแก้ว บริเวณจุดระบายน้ำทั้ง (SW5)
  6. สถานี 23120619-6 : คลองปลวกแก้ว บริเวณท้ายจุดระบายน้ำทั้ง 500 เมตร (SW6)

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

  
(นางสาวกนกวรรณ ขาวค้อน)  
ผู้วิเคราะห์

  
(นายอลงกต อินทรชาติ)  
หัวหน้าสถานีวิจัยประมงศรีราชา



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

Client : WHA Rayong 36 Company Limited

Address : 777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,

Bang Phli, Samut Prakan, Thailand, 10540

Project Name : Monitoring

Project Location : WHA Rayong 36

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
<b>Phylum Protozoa</b>						
<b>Subphylum Plasmodroma</b>						
<b>Class Sarcodina</b>						
<b>Subclass Rhizopoda</b>						
<b>Order Testacida</b>						
<b>Family Arcellidae</b>						
1. <i>Arcella</i> sp.	30,000	36,000	9,000	34,000	8,000	8,000
2. <i>Arcella vulgaris</i>	51,000	36,000	18,000	42,000	65,000	104,000
<b>Family Diffugiidae</b>						
3. <i>Diffugia acuminata</i>	10,000	-	-	-	8,000	8,000
4. <i>Diffugia lobostoma</i>	51,000	-	-	-	16,000	-
5. <i>Diffugia</i> sp.	-	9,000	-	-	-	8,000

ตาราง ผลการวิเคราะห์แหล่งกักต่อนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยคือลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
<b>Family Euglyphidae</b>						
6. <i>Euglypha acanthophora</i>	-	45,000	18,000	-	8,000	-
7. <i>Euglypha rotunda</i>	-	-	-	8,000	16,000	40,000
8. <i>Euglypha</i> sp.	10,000	54,000	-	8,000	8,000	16,000
<b>Subphylum Ciliophora</b>						
<b>Class Ciliata</b>						
<b>Subclass Holotricha</b>						
<b>Order Gymnostomatida</b>						
9. <i>Coleps</i> sp.	30,000	36,000	9,000	8,000	-	-
10. <i>Didinium</i> sp.	41,000	18,000	18,000	-	24,000	32,000
<b>Order Hymenostomatida</b>						
11. <i>Paramecium</i> sp.	10,000	9,000	-	-	-	-
<b>Subclass Spirotricha</b>						
<b>Order Hypotrichida</b>						
12. <i>Euplotes</i> sp.	-	9,000	-	-	-	-
<b>Subclass Peritricha</b>						
<b>Order Peritrichida</b>						
13. <i>Carchesium</i> sp.	-	-	27,000	-	-	32,000
14. <i>Pyxicola</i> sp.	10,000	-	-	-	-	8,000
15. <i>Vorticella</i> sp.	-	-	-	25,000	-	-
<b>Phylum Rotifera</b>						
<b>Class Monogononta</b>						
<b>Order Ploima</b>						
<b>Family Brachionidae</b>						
16. <i>Anuraeopsis coelata</i>	-	9,000	-	-	-	-
17. <i>Anuraeopsis fissa</i>	-	9,000	9,000	50,000	-	-
18. <i>Brachionus caudatus</i>	-	18,000	-	-	8,000	-

ตาราง ผลการวิเคราะห์แหล่งกักต่อนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

(ต่อ)

ชนิดแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยคือลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
19. <i>Brachionus fulcatus</i>	10,000	-	-	-	-	-
20. <i>Brachionus</i> sp.	-	-	-	8,000	-	-
21. <i>Colewella obtusa</i>	10,000	18,000	-	-	8,000	8,000
22. <i>Keratella vulga</i>	-	-	-	8,000	8,000	8,000
23. <i>Lepadella acuminata</i>	-	-	-	-	8,000	-
<b>Family Lecanidae</b>						
24. <i>Lecane decipiens</i>	-	-	-	-	-	8,000
25. <i>Lecane inermis</i>	20,000	-	-	-	16,000	16,000
26. <i>Lecane thienemanni</i>	-	-	9,000	-	-	-
<b>Family Notommatidae</b>						
27. <i>Cephalodella gibba</i>	-	18,000	9,000	-	-	-
<b>Family Tricercidae</b>						
28. <i>Trichocerca pusilla</i>	132,000	81,000	62,000	25,000	-	-
29. <i>Trichocerca similis</i>	-	-	-	34,000	32,000	8,000
<b>Family TGastropodidae</b>						
30. <i>Ascomorpha ovalis</i>	-	-	-	67,000	57,000	8,000
31. <i>Ascomorpha</i> sp.	-	9,000	-	42,000	81,000	40,000
<b>Family Asplanchnidae</b>						
32. <i>Asplanchna priodonta</i>	-	36,000	9,000	-	16,000	64,000
<b>Family Synchaetidae</b>						
33. <i>Polyarthra dolichoptera</i>	-	9,000	274,000	34,000	49,000	16,000
34. <i>Polyarthra vulgaris</i>	10,000	18,000	319,000	160,000	105,000	24,000
35. <i>Synchaeta oblonga</i>	20,000	-	-	-	8,000	-
36. <i>Synchaeta</i> sp.	-	9,000	-	-	-	-
<b>Order Flosculariacea</b>						
<b>Family Testudinellidae</b>						
37. <i>Filinia opoliensis</i>	-	-	9,000	-	-	-



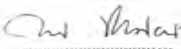
ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)


(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	23120619-1	23120619-2	23120619-3	23120619-4	23120619-5	23120619-6
38. <i>Filinia terminalis</i>	-	-	-	17,000	-	8,000
39. <i>Testudinella patina</i>	-	-	27,000	-	-	-
<b>Family Hexarthridae</b>						
40. <i>Hexarthra mira</i>	-	-	-	8,000	-	-
<b>Family Flosculariidae</b>						
41. <i>Ptygura</i> sp.	-	-	18,000	-	-	-
<b>Class Digononta</b>						
<b>Family Philodinidae</b>						
42. <i>Philodina</i> sp.	-	-	-	-	8,000	-
43. <i>Rotaria rotatoria</i>	-	18,000	-	25,000	-	8,000
<b>Phylum Arthropoda</b>						
<b>Class Crustacea</b>						
<b>Subclass Copepoda</b>						
44. Copepod nauplius	30,000	45,000	44,000	8,000	-	8,000
<b>Order Cyclopoida</b>						
45. Cyclopoid copepod	-	-	9,000	-	-	-
<b>ชนิดแพลงก์ตอนสัตว์</b>	<b>16</b>	<b>22</b>	<b>18</b>	<b>19</b>	<b>21</b>	<b>22</b>
<b>ปริมาณแพลงก์ตอนสัตว์</b>	<b>475,000</b>	<b>549,000</b>	<b>897,000</b>	<b>611,000</b>	<b>557,000</b>	<b>480,000</b>
<b>ดัชนีความหลากหลายแพลงก์ตอนสัตว์</b>	<b>2.4055</b>	<b>2.8466</b>	<b>1.9565</b>	<b>2.5378</b>	<b>2.6097</b>	<b>2.6840</b>
<b>ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์</b>	<b>0.8676</b>	<b>0.9209</b>	<b>0.6769</b>	<b>0.8619</b>	<b>0.8572</b>	<b>0.8683</b>

- Sample Location :
- สถานี 23120619-1 : คลองชักเจ้าเดียว ก่อนไหลผ่านพื้นที่โครงการ (SW1)
  - สถานี 23120619-2 : คลองชักเจ้าเดียว หลังไหลผ่านพื้นที่โครงการ (SW2)
  - สถานี 23120619-3 : คลองพลู ก่อนไหลผ่านพื้นที่โครงการ (SW3)
  - สถานี 23120619-4 : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)
  - สถานี 23120619-5 : คลองปลวกแก้ว บริเวณจุดระบายน้ำทั้ง (SW5)
  - สถานี 23120619-6 : คลองปลวกแก้ว บริเวณท้ายจุดระบายน้ำทั้ง 500 เมตร (SW6)

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

  
(นางสาวกนกวรรณ ขาวค้อน)  
ผู้วิเคราะห์

  
(นางsongกต อินทรชาติ)  
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : WHA Rayong 36 Company Limited

Address : 777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo,

Bang Phli , Samut Prakan, Thailand, 10540

Project Name : Monitoring

Project Location : WHA Rayong 36

#### รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)					
	23120750-1	23120750-2	23120750-3	23120750-4	23120750-5	23120750-6
<b>Phylum Annelida</b>						
<b>Class Clitellata</b>						
<b>Order Lumbriculida</b>						
<b>Family Lumbriculidae</b>						
<i>Lumbriculus</i> sp. (ไส้เดือนน้ำ)	45	267	-	45	-	-
<b>Order Tubificida</b>						
<b>Family Naididae</b>						
<i>Branchiura</i> sp. (ไส้เดือนน้ำ)	-	-	-	15	-	-
<b>Phylum Arthropoda</b>						
<b>Order Diptera</b>						
<b>Family Ceratopogonidae</b>						
<i>Culicoides</i> sp. (ตัวอ่อนวัน)	-	-	-	30	-	-
<b>Family Chironomidae</b>						
<i>Chironomus</i> sp. (หนอนแดง)	15	15	30	30	30	60

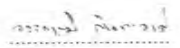
ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 17 ตุลาคม 2566) (ต่อ)


สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)					
	23120750-1	23120750-2	23120750-3	23120750-4	23120750-5	23120750-6
<b>Family Limoniidae</b>						
<i>Antocha</i> sp.	-	-	-	60	-	-
(ตัวอ่อนแมลงวันแมงมุม)						
<b>Phylum Mollusca</b>						
<b>Class Gastropoda</b>						
<b>Order Architaenioglossa</b>						
<b>Family Thiaridae</b>						
<i>Melanoides</i> sp. (หอยเชอรี่)	15	-	-	-	-	-
<b>Family Viviparidae</b>						
<i>Trochotaia</i> sp. (หอยเวียน)	-	-	-	30	-	-
<b>Class Bivalvia</b>						
<b>Order Venerida</b>						
<b>Family Cyrenidae</b>						
<i>Corbicula</i> sp. (หอยทราย)	-	-	-	30	-	15
<b>สกุลสัตว์หน้าดิน</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>2</b>
<b>ปริมาณสัตว์หน้าดิน</b>	<b>75</b>	<b>282</b>	<b>30</b>	<b>240</b>	<b>30</b>	<b>75</b>
<b>ค่าดัชนีความหลากหลายสัตว์หน้าดิน</b>	<b>0.9503</b>	<b>0.2078</b>	<b>0.0000</b>	<b>1.8735</b>	<b>0.0000</b>	<b>0.5004</b>

- Sample Location :**
1. สถานี 23120750-1 : คลองขากเจ้าเดียว ก่อนไหลผ่านพื้นที่โครงการ (SW1)
  2. สถานี 23120750-2 : คลองขากเจ้าเดียว หลังไหลผ่านพื้นที่โครงการ (SW2)
  3. สถานี 23120750-3 : คลองพูล ก่อนไหลผ่านพื้นที่โครงการ (SW3)
  4. สถานี 23120750-4 : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)
  5. สถานี 23120750-5 : คลองปลวกแก้ว บริเวณจุดระบายน้ำทั้ง (SW5)
  6. สถานี 23120750-6 : คลองปลวกแก้ว บริเวณท้ายจุดระบายน้ำทั้ง 500 เมตร (SW6)



Condition of Sample : contained in one plastic zip bag

  
.....  
(นายอรรธวุฒิ กันทะวงศ์)  
ผู้วิเคราะห์

  
.....  
(นายอลงกต อินทรชาติ)  
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : WHA Rayong 36 Company Limited

Address : 777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli , Samut Prakan, Thailand, 10540

Project Name : Monitoring

Project Location : WHA Rayong 36

รายงานผลการวิเคราะห์สัตว์น้ำ

ตาราง ผลการวิเคราะห์สัตว์น้ำ (Aquatic animal) (เก็บตัวอย่างเมื่อวันที่ 17 ตุลาคม 2566)

ชนิดสัตว์น้ำ	ปริมาณสัตว์น้ำ (ตัว)						ช่วงขนาด (ซม.)	น้ำหนักรวม (กรัม)
	23120616-1	23120616-2	23120616-3	23120616-4	23120616-5	23120616-6		
Phylum Chordata								
Class Actinopterygii								
Order Cypriniformes								
Family Cyprinidae								
<i>Barbonymus gonionotus</i> (ปลาคะเพียนขาว)	2	5	2	-	-	-	4.80-11.50	61.80

ตาราง ผลการวิเคราะห์สัตว์น้ำ (Aquatic animal) (เก็บตัวอย่างเมื่อวันที่ 17 ตุลาคม 2566) (ต่อ)

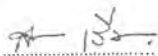
ชนิดสัตว์น้ำ	ปริมาณสัตว์น้ำ (ตัว)						ช่วงขนาด (ซม.)	น้ำหนักรวม (กรัม)
	23120616-1	23120616-2	23120616-3	23120616-4	23120616-5	23120616-6		
<i>Puntius brevis</i> (ปลาคะเพียนทราย)	2	-	6	3	4	1	4.40-10.20	68.80
<i>Rasbora paviana</i> (ปลาจิ๋วควายแถบดำ)	6	-	2	5	2	2	6.20-10.50	83.80
<i>Systemus rubripinnus</i> (ปลาแก้มซีก)	2	-	-	-	-	-	10.40-11.00	39.00
Order Gobiiformes								
Family Butidae								
<i>Oxyeleotris marmorata</i> (ปลานูทราย)	-	-	-	-	-	1	19.50	105.00
Order Perciformes								
Family Ambassidae								
<i>Parambassis siamensis</i> (ปลาแป้นแก้ว)	-	-	-	-	1	-	4.10	0.70
Order Siluriformes								
Family Bagridae								
<i>Hemibagrus filamentus</i> (ปลากดเหลือง)	-	1	-	-	-	-	26.00	95.00
ชนิดสัตว์น้ำ	4	2	3	2	3	3	4.10-26.00	454.10
ปริมาณสัตว์น้ำ	12	6	10	8	7	4		
ดัชนีความหลากหลายสัตว์น้ำ	1.2425	0.4506	0.9503	0.6616	0.9557	1.0397		



**Sample Location :**

1. สถานี 23120616-1 : คลองซากเจ้าเตียว ก่อนไหลผ่านพื้นที่โครงการ (SW1)
2. สถานี 23120616-2 : คลองซากเจ้าเตียว หลังไหลผ่านพื้นที่โครงการ (SW2)
3. สถานี 23120616-3 : คลองพลู ก่อนไหลผ่านพื้นที่โครงการ (SW3)
4. สถานี 23120616-4 : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)
5. สถานี 23120616-5 : คลองปลวกแก้ว บริเวณจุดระบายน้ำทั้ง (SW5)
6. สถานี 23120616-6 : คลองปลวกแก้ว บริเวณท้ายจุดระบายน้ำทั้ง 500 เมตร (SW6)

**Condition of Sample :** fishing gear



(นายสาโรจน์ เร่มดำริห์)

ผู้วิเคราะห์



(นายอลงกต ชินทราชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา

---

ผลการตรวจวัดก่อนเปิดดำเนินการ



---

คุณภาพน้ำใต้ดิน



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

Page 1 of 12

Sample Number : 2322037-1  
Sampled Date : Jun 20, 2023 12:40 PM  
Sample Description : Ground Water  
Location : บ่อส่งผลการทดลองการนำน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันตกเฉียงใต้ของโครงการ (UI1)  
Date Analysis Commenced : Jun 20, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.002	≤1.0	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	≤0.05	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	1.05	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	≤0.01	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	≤0.5	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	≤0.001	In-house method : STM 05-907 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Zinc	mg/L	0.003	0.005	<0.005	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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 or any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reprinted except in full.

Approved by

*Savitree N.*  
Savitree Naisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 5000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13004 21/ENAL

S:\Reports\AL\_GL\ref (6-0399)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

Page 2 of 12

Sample Number : 2322037-1  
Sampled Date : Jun 20, 2023 12:40 PM  
Sample Description : Ground Water  
Location : บ่อส่งผลการทดลองการนำน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันตกเฉียงใต้ของโครงการ (UI1)  
Date Analysis Commenced : Jun 20, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	—	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
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
Nitrate as N *	mg/L	0.015	0.05	12.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	—	1	46	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	—	—	—	5.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	17	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	—	5	230	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO <sub>3</sub> *	mg/L	—	1	46	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
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 National Environmental Board, No. 20, B.E.2543

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 or any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reprinted except in full.

Approved by

*Savitree N.*  
Savitree Naisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 5000 | FAX +66 0 2760 3197  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13004 21/ENAL

S:\Reports\AL\_GL\ref (6-0399)





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0009

**Lot ID: 2322037**  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

**Sampling By :** Paramet Sattayakun

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

Page 3 of 12

Approved by

*Savitree N.*  
Savitree Noisangiam  
Manager

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

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17009-21/ENGL

5-Reports\_ML\_GL\_08 (6/2019)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



TESTING  
No.0009

**Lot ID: 2322037**  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

Page 4 of 12

**Sample Number** 2322037-2  
**Sampled Date** Jun 20, 2023 1:55 PM  
**Sample Description** Ground Water  
**Location** ปลัดขังผลการกักตุนน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศเหนือของ/บริเวณทุ่งน้ำฝนบ่อที่ 1 ของโครงการ (UI2)  
**Date Analysis Commenced** Jun 20, 2023  
**Condition of Sample** Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.010	≤1.0	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	≤0.05	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	7.11	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	0.01	≤0.01	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	0.18	≤0.5	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	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Zinc	mg/L	0.003	0.005	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

Approved by

*Savitree N.*  
Savitree Noisangiam  
Manager

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

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17009-21/ENGL

5-Reports\_ML\_GL\_08 (6/2019)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230005

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037

Date Received : Jun 20, 2023

Date Reported : Jun 26, 2023

Report Number : 2660138-1

Page 5 of 12

Sample Number : 2322037-2  
Sampled Date : Jun 20, 2023 1:55 PM  
Sample Description : Ground Water  
Location : ห้องปฏิบัติการคุณภาพน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศเหนือของแปลงน้ำฝนแปลงที่ 1 ของโครงการ (UEZ)  
Date Analysis Commenced : Jun 20, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
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
Nitrate as N *	mg/L	0.015	0.05	1.78	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C *	-	-	-	6.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	171	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	340	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 National Environmental Board, No. 20, B.E.2543

The above results are valid only for the analyzed 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

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-217 EN03

3/16/2021, AL, GL.rpt ( 6/03/19)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited

777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang Kaeo, Bang Phli, Samut Prakan Thailand 10540

P/O : 54230005

Project Name : Monitoring

Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037

Date Received : Jun 20, 2023

Date Reported : Jun 26, 2023

Report Number : 2660138-1

Page 6 of 12

Sampling By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* as/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.

The above results are valid only for the analyzed 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

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-217 EN03

3/16/2021, AL, GL.rpt ( 6/03/19)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

Page 7 of 12

Sample Number : 2322037-3  
Sample Date : Jun 20, 2023 11:00 AM  
Sample Description : Ground Water  
Location : บ่อส่งผลการตรวจคุณภาพน้ำดิบ บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (UE3) (บ่อใหม่)  
Date Analysis Commenced : Jun 20, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	≤1.0	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	≤0.05	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3500 Cr 6	Bangkok
Iron	mg/L	0.003	0.005	3.86	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	0.009	≤0.01	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	0.19	≤0.5	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	≤0.001	In-house method - STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Zinc	mg/L	0.003	0.005	0.14	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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) always recommends that this report is not reproduced except in full.

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERSHIP

17094-23/THAILAND



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36



TESTING  
No.0009

Lot ID: 2322037  
Date Received : Jun 20, 2023  
Date Reported : Jun 26, 2023  
Report Number : 2660138-1

Page 8 of 12

Sample Number : 2322037-3  
Sample Date : Jun 20, 2023 11:00 AM  
Sample Description : Ground Water  
Location : บ่อส่งผลการตรวจคุณภาพน้ำดิบ บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (UE3) (บ่อใหม่)  
Date Analysis Commenced : Jun 20, 2023  
Condition of Sample : Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	19	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 Cl (B)	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.74	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	52	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C	-	-	-	6.4	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	52	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	176	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	52	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	650	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 National Environmental Board, No. 20, B.E.2543

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) always recommends that this report is not reproduced except in full.

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERSHIP

17094-23/THAILAND

17094-23/THAILAND



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
**No.0009**

**Lot ID: 2322037**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jun 26, 2023  
**Report Number :** 2660138-1

Page 9 of 12

**Sampling By :** Paramet Sattayakun

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

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

Approved by

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-12/12NAE

S:\Report\AL\_GL.rpt (6/20PM)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
**No.0009**

**Lot ID: 2322037**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jun 26, 2023  
**Report Number :** 2660138-1

Page 10 of 12

**Sample Number** 2322037-4

**Sampled Date** Jun 20, 2023 2:30 PM

**Sample Description** Ground Water

**Location** แปลงเกษตรกรรมในเขตนาข้าวสีอินทรีย์พื้นที่สีเขียวด้วยเทคโนโลยีการเกษตร (UI4)

**Date Analysis Commenced** Jun 20, 2023

**Condition of Sample** Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤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	0.004	≤1.0	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	≤0.05	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	7.06	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	0.01	≤0.01	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	1.42	≤0.5	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	≤0.001	In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E	Bangkok
Zinc	mg/L	0.003	0.005	0.05	≤5.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

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

Approved by

*Savitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-12/12NAE

S:\Report\AL\_GL.rpt (6/20PM)





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
**No.0009**

**Lot ID: 2322037**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jun 26, 2023  
**Report Number :** 2660138-1

Page 11 of 12

**Sample Number** 2322037-4  
**Sampled Date** Jun 20, 2023 2:30 PM  
**Sample Description** Ground Water  
**Location** บ่อส่งผลการทดลองทางน้ำใต้ดิน บริเวณพื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (U14)  
**Date Analysis Commenced** Jun 20, 2023  
**Condition of Sample** Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Chloride as Cl *	mg/L	0.5	1	19	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)	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-NO <sub>3</sub> (E)	Rayong
Non-Carbonate Hardness as CaCO <sub>3</sub> *	mg/L	-	1	88	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
pH at 25 degree C		-	-	6.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	1	1	224	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2320 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	404	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Hardness as CaCO <sub>3</sub> *	mg/L	-	1	88	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Rayong
Turbidity *	NTU	-	0.1	650	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 National Environmental Board, No. 20, B.E.2543

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

S:\Reports\AL\_GL\pt 1 & 0199

17096-23 (09/06)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36



**TESTING**  
**No.0009**

**Lot ID: 2322037**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jun 26, 2023  
**Report Number :** 2660138-1

Page 12 of 12

**Sampling By :** Paramet Sattayakun

**Remark :**

- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* as/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 Noisangiam  
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNERS.

S:\Reports\AL\_GL\pt 1 & 0199

13094-23 (19/06)

---

โลหะหนักในตะกอนดิน





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 1 of 12

Sample Number : 2322038-1  
Sampled Date : Mar 15, 2023 10:40 AM  
Sample Description : ตะกอนดิน (น้ำดิบตกตะกอน)  
Location : คลองระบายน้ำดิบ ก่อนไหลเข้าพื้นที่โรงการ (SW1)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	451	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	8.11	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	5757	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	4.17	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	48.4	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

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

Approved by

*Sawitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17006-211 ENGL

S:\Report\AL\_GZ.rpt (1:30PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 2 of 12

Sample Number : 2322038-1  
Sampled Date : Mar 15, 2023 10:40 AM  
Sample Description : ตะกอนดิน (น้ำดิบตกตะกอน)  
Location : คลองระบายน้ำดิบ ก่อนไหลเข้าพื้นที่โรงการ (SW1)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	2.22	≤80	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	4.7	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพสิ่งแวดล้อมในแหล่งน้ำผิวดินเพื่อคุ้มครองสัตว์น้ำขึ้น

Note : Analysis Results expressed on dry basis.

Sampling By : Nanarat thammassaro

Remark :

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

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

Approved by

*Sawitree N.*

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17006-211 ENGL

S:\Report\AL\_GZ.rpt (1:30PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 3 of 12

Sample Number : 2322038-2  
Sampled Date : Mar 15, 2023 11:00 AM  
Sample Description : ตะกอนดิน (น้ำพริกผัด)  
Location : คลองระบายน้ำเสีย หลังโหล่งผ่านพื้นที่โครงการ (SW2)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	518	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	28.2	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	6672	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	3.03	≤36	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	330	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	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 3050B and 60100	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17006-21/ENR

S:\Report\AL\_GL\_rpt (1-3099)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 4 of 12

Sample Number : 2322038-2  
Sampled Date : Mar 15, 2023 11:00 AM  
Sample Description : ตะกอนดิน (น้ำพริกผัด)  
Location : คลองระบายน้ำเสีย หลังโหล่งผ่านพื้นที่โครงการ (SW2)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	-	1.00	2.45	≤80	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	16.3	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพสิ่งแวดล้อมในแหล่งน้ำผิวดินเพื่อคุ้มครองสัตว์น้ำพื้น

Note : Analysis Results expressed on dry basis.

Sampling By : Narunat thammassaro

Remark :

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

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17006-21/ENR

S:\Report\AL\_GL\_rpt (1-3099)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 5 of 12

Sample Number : 2322038-3  
Sampled Date : Mar 15, 2023 10:30 AM  
Sample Description : ตะกอนดิน (น้ำดิบก่อนกรอง)  
Location : คลองพญ ควบน้ำไหลผ่านพื้นที่โครงการ (SW3)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	14169	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	55.9	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	4.46	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	19426	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	15.3	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	147	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤0.2	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	5.10	≤27.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER

1209421/1902

S:\Reports\AL\_GL.rpt (1/3/2023)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 6 of 12

Sample Number : 2322038-3  
Sampled Date : Mar 15, 2023 10:30 AM  
Sample Description : ตะกอนดิน (น้ำดิบก่อนกรอง)  
Location : คลองพญ ควบน้ำไหลผ่านพื้นที่โครงการ (SW3)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	28.5	≤80	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	50.2	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพอากาศจากฝุ่นในแหล่งน้ำดิบเพื่อคุ้มครองสุขภาพประชาชน

Note : Analysis Results expressed on dry basis.

Sampling By : Narurat thammasaro

Remark :

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

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PARTNER

1209421/1902

S:\Reports\AL\_GL.rpt (1/3/2023)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 7 of 12

Sample Number : 2322038-4  
Sampled Date : Mar 15, 2023 9:35 AM  
Sample Description : ตะกอนดิน (น้ำตกคลองห้วย)  
Location : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminum	mg/kg	—	1.00	464	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	—	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	—	1.00	7.91	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	—	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	—	1.00	<1.00	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	—	1.00	2087	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	—	1.00	2.57	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	—	1.00	72.9	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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 3050B and 6010D	Bangkok
Selenium	mg/kg	—	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1709-21 (MIL)

S:\Reports\AL\_GL\_rpt (8-3099)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 8 of 12

Sample Number : 2322038-4  
Sampled Date : Mar 15, 2023 9:35 AM  
Sample Description : ตะกอนดิน (น้ำตกคลองห้วย)  
Location : คลองปลวกแก้ว บริเวณเหนือจุดระบายน้ำทั้ง 500 เมตร (SW4)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	—	1.00	2.01	≤80	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	—	0.1	10.4	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง มาตรฐานคุณภาพตะกอนดินในแหล่งน้ำผิวน้ำเพื่อคุ้มครองสิ่งแวดล้อม

Note : Analysis Results expressed on dry basis.

Sampling By : Narurat thamasaro

Remark :

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

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

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

1709-21 (MIL)

S:\Reports\AL\_GL\_rpt (8-3099)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 9 of 12

Sample Number : 2322038-5  
Sampled Date : Mar 15, 2023 10:00 AM  
Sample Description : ตะกอนดิน (น้ำหยดกรอง)  
Location : คลองปลวกแดง บริเวณจุดระบายน้ำทิ้ง (SWS)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminium	mg/kg	—	1.00	517	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	—	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	—	1.00	15.5	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	—	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	—	1.00	<1.00	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7195A	Bangkok
Iron	mg/kg	—	1.00	1028	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	—	1.00	3.33	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	—	1.00	271	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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 3050B and 6010D	Bangkok
Selenium	mg/kg	—	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

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) Limited. We warrant that this report is not reproduced except in full.

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-11/19A0

S:\Report\AL\_GL\rt (S-2099)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 10 of 12

Sample Number : 2322038-5  
Sampled Date : Mar 15, 2023 10:00 AM  
Sample Description : ตะกอนดิน (น้ำหยดกรอง)  
Location : คลองปลวกแดง บริเวณจุดระบายน้ำทิ้ง (SWS)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	—	1.00	2.57	≤80	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	—	0.1	19.9	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพสิ่งแวดล้อมในแหล่งน้ำผิวดินเพื่อคุ้มครองสัตว์น้ำพันธุ์

Note : Analysis Results expressed on dry basis.

Sampling By : Narurat thamasaro

Remark :

LOD : Limit of Detection

<LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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) Limited. We warrant that this report is not reproduced except in full.

Approved by

*Sawitree N.*

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17004-11/19A0

S:\Report\AL\_GL\rt (S-2099)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 11 of 12

Sample Number : 2322038-6  
Sampled Date : Mar 15, 2023 10:15 AM  
Sample Description : ตะกอนดิน (น้ำดิบตกตะกอน)  
Location : คลองชลประทาน บริเวณท้ายสระระยะน้ำถึง 500 เมตร (SW6)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Aluminum	mg/kg	-	1.00	504	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	<0.50	≤10	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	13.4	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.16	<0.16	≤0.16	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	<1.00	≤21.5	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	1214	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	3.30	≤36	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	384	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	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 3050B and 6010D	Bangkok
Selenium	mg/kg	-	0.50	<0.50	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand : PHONE +66 0 2760 3000 : FAX +66 0 2760 3192  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-23/19MIL

5-Volcano, AL, U.S.A. (9:30PM)



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
Phana Nikom, Nikom Phatthana, Rayong Thailand 21180  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322038  
Date Received : Mar 15, 2023  
Date Reported : Mar 24, 2023  
Report Number : 2579185-1

Page 12 of 12

Sample Number : 2322038-6  
Sampled Date : Mar 15, 2023 10:15 AM  
Sample Description : ตะกอนดิน (น้ำดิบตกตะกอน)  
Location : คลองชลประทาน บริเวณท้ายสระระยะน้ำถึง 500 เมตร (SW6)  
Date Analysis Commenced : Mar 17, 2023  
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
<b>Metals Testing</b>							
Trivalent Chromium	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	2.07	≤80	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Physical Parameters</b>							
Moisture	%	-	0.1	14.7	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

Guideline : ประกาศกรมควบคุมมลพิษ เรื่อง เกณฑ์คุณภาพอากาศแบบดินในแหล่งน้ำผิวดินเพื่อคุ้มครองสุขภาพ

Note : Analysis Results expressed on dry basis.

Sampling By : Narunat thamasaro

Remark :

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

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

Approved by

*Savitree N.*

Savitree Noisangiam  
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand : PHONE +66 0 2760 3000 : FAX +66 0 2760 3192  
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-23/19MIL

5-Volcano, AL, U.S.A. (9:30PM)



---

คุณภาพดิน



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jul 11, 2023  
**Report Number :** 2579187-1

Page 1 of 8

**Sample Number** : 2322039-1  
**Sample Date** : Jun 20, 2023 12:25 PM  
**Sample Description** : Soil (Dry basis)  
**Location** : พื้นที่สีเขียวภายในโครงการ (S1)  
**Date Analysis Commenced** : Jun 21, 2023  
**Condition of Sample** : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	5063	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	9.78	≤25	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	80.2	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	3.51	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	7077	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	19.5	≤800	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	404	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	3.99	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
SAR	-	-	1.00	1.06	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13094-21 (EN)

S:\Report\AL\_GL\pt (4.5799)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jul 11, 2023  
**Report Number :** 2579187-1

Page 2 of 8

**Sample Number** : 2322039-1  
**Sample Date** : Jun 20, 2023 12:25 PM  
**Sample Description** : Soil (Dry basis)  
**Location** : พื้นที่สีเขียวภายในโครงการ (S1)  
**Date Analysis Commenced** : Jun 21, 2023  
**Condition of Sample** : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	0.56	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Soluble Calcium	mg/kg	-	20.0	31.8	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	24.7	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	14.0	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	-	1.00	14.4	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	8.6	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	-	-	-	8.1	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

**Guideline :** Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564

**Class 2:** Soil usage for commercial, agricultural and basis.

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Pattarapol Sawangjaitam

Remark :

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

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

13094-21 (EN)

S:\Report\AL\_GL\pt (4.5799)





## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322039  
Date Received : Jun 20, 2023  
Date Reported : Jul 11, 2023  
Report Number : 2579187-1

Page 3 of 8

Sample Number : 2322039-2  
Sample Date : Jun 20, 2023 1:00 PM  
Sample Description : Soil (Dry basis)  
Location : พื้นที่สีเขียวด้านทิศเหนือติดกับแปลงนาแปลงที่ 1 ของโครงการ (S2)  
Date Analysis Commenced : Jun 21, 2023  
Condition of Sample : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	6427	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Arsenic	mg/kg	-	0.50	10.1	<25	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Barium	mg/kg	-	1.00	72.7	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Copper	mg/kg	-	1.00	3.58	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	11107	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Lead	mg/kg	-	1.00	16.2	≤800	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Manganese	mg/kg	-	1.00	169	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	8.17	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
SAR	-	-	1.00	1.04	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok

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

Approved by

Siriluk P.  
Siriluk Puengpaeng  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS

12046-21/ENGL

5/2020/AL/EN/12046-21/ENGL



## Analysis / Test Report

Client : WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
P/O : 54230005  
Project Name : Monitoring  
Project Location : WHA Rayong 36

Lot ID: 2322039  
Date Received : Jun 20, 2023  
Date Reported : Jul 11, 2023  
Report Number : 2579187-1

Page 4 of 8

Sample Number : 2322039-2  
Sample Date : Jun 20, 2023 1:00 PM  
Sample Description : Soil (Dry basis)  
Location : พื้นที่สีเขียวด้านทิศเหนือติดกับแปลงนาแปลงที่ 1 ของโครงการ (S2)  
Date Analysis Commenced : Jun 21, 2023  
Condition of Sample : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	0.71	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Soluble Calcium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	29.2	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
Zinc	mg/kg	-	1.00	13.3	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 60100	Bangkok
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	11.5	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	-	-	-	4.8	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

Guideline : Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564

Class 2: Soil usage for commercial, agricultural and others.

Note : Analysis Results expressed on dry basis.

Sampling By : Pattarapol Sawangjittam

Remark :

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

Approved by

Siriluk P.  
Siriluk Puengpaeng  
Section Head

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

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS

12046-21/ENGL

5/2020/AL/EN/12046-21/ENGL



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jul 11, 2023  
**Report Number :** 2579187-1

Page 5 of 6

**Sample Number** : 2322039-3  
**Sampled Date** : Jun 20, 2023 10:15 AM  
**Sample Description** : Soil (Dry basis)  
**Location** : พื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (S3)  
**Date Analysis Commenced** : Jun 21, 2023  
**Condition of Sample** : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	-	1.00	1538	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	-	0.50	2.20	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	-	1.00	34.1	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	-	1.00	1.93	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	-	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7196A	Bangkok
Iron	mg/kg	-	1.00	2728	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	9.08	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	-	1.00	196	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	-	1.00	3.30	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR	-	-	1.00	<1.00	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-12/1900

5/0606/AL\_GLP (1.4.5796)



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
**Date Received :** Jun 20, 2023  
**Date Reported :** Jul 11, 2023  
**Report Number :** 2579187-1

Page 6 of 6

**Sample Number** : 2322039-3  
**Sampled Date** : Jun 20, 2023 10:15 AM  
**Sample Description** : Soil (Dry basis)  
**Location** : พื้นที่สีเขียวด้านทิศตะวันออกของโครงการ (S3)  
**Date Analysis Commenced** : Jun 21, 2023  
**Condition of Sample** : Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Selenium	mg/kg	-	0.50	<0.50	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Silver	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Soluble Calcium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	-	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	-	1.00	8.72	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	-	1.00	5.08	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	-	1	7.6	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	-	-	-	5.5	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

**Guideline :** Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564

**Class 2:** Soil usage for commercial, agricultural and others.

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Pattarapol Sawangjaitam

Remark :

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

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

17094-12/1900

5/0606/AL\_GLP (1.4.5796)





## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
Date Received : Jun 20, 2023  
Date Reported : Jul 11, 2023  
Report Number : 2579187-1

Page 7 of 8

**Sample Number** 2322039-4  
**Sampled Date** Jun 20, 2023 11:45 AM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่สีเขียวภายในโครงการนิคมอุตสาหกรรม (S4)  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Aluminium	mg/kg	—	1.00	3659	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Arsenic	mg/kg	—	0.50	15.9	≤25	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Barium	mg/kg	—	1.00	117	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	—	0.50	<0.50	≤762	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Copper	mg/kg	—	1.00	3.62	≤35040	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Hexavalent Chromium	mg/kg	—	1.00	<1.00	≤212	United States Environmental Protection Agency, EPA Method 3060A and 7195A	Bangkok
Iron	mg/kg	—	1.00	10499	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	—	1.00	46.0	≤800	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Manganese	mg/kg	—	1.00	234	≤19640	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	—	0.10	<0.10	≤263	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Nickel	mg/kg	—	1.00	2.72	≤5205	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
SAR	—	—	1.00	<1.00	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS

S:\reports\_ALS\2322039-4

13066-21/09/23



## Analysis / Test Report

**Client :** WHA Rayong 36 Company Limited  
777 Moo 13 WHA TOWER, 23rd - 25th Floor, Debaratna Road (Bangna-Trad) KM.7, Bang  
Kaeo, Bang Phli, Samut Prakan Thailand 10540  
**P/O :** 54230005  
**Project Name :** Monitoring  
**Project Location :** WHA Rayong 36

**Lot ID: 2322039**  
Date Received : Jun 20, 2023  
Date Reported : Jul 11, 2023  
Report Number : 2579187-1

Page 8 of 8

**Sample Number** 2322039-4  
**Sampled Date** Jun 20, 2023 11:45 AM  
**Sample Description** Soil (Dry basis)  
**Location** พื้นที่สีเขียวภายในโครงการนิคมอุตสาหกรรม (S4)  
**Date Analysis Commenced** Jun 21, 2023  
**Condition of Sample** Packed in one glass bottle and one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Metals Testing</b>							
Selenium	mg/kg	—	0.50	0.78	≤4380	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Silver	mg/kg	—	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Soluble Calcium	mg/kg	—	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Magnesium	mg/kg	—	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Soluble Sodium	mg/kg	—	20.0	<20.0	No Standard	Soil Test Methods - Southern Cooperative Series Bulletin No. 419 (2014)	Bangkok
Trivalent Chromium	mg/kg	—	1.00	9.26	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Zinc	mg/kg	—	1.00	16.7	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
<b>Soil Testing</b>							
Cation Exchange Capacity	cmol/kg	—	1	10.2	No Standard	Soil Chemical Methods - Australasia (2011)	Bangkok
pH aqueous phase 50% (w/v)	—	—	—	5.7	No Standard	United States Environmental Protection Agency, EPA Method 9045 D	Bangkok

**Guideline :** Notification of National Environmental Board B.E. 2564 (2021), published in the Royal Government Gazette No. 138 Special Part 54 D dated March 11, B.E.2564

**Class 2:** Soil usage for commercial, agricultural and others.

**Note :** Analysis Results expressed on dry basis.

**Sampling By :** Pattarapol Sawangjittam

**Remark :**

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

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

Approved by

Siriluk P.

Siriluk Puengpang  
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNERS

S:\reports\_ALS\2322039-4

13066-21/09/23

ภาคผนวก ค-2

---

สถิติอุบัติเหตุบนทางหลวงหมายเลข 36  
และถนน รย.ถ. 10063 (ทางหลวงหมายเลข 3375 เดิม)  
และทางหลวงหมายเลข 2026 ประจำปี พ.ศ. 2566



วันที่เกิดเหตุ	เวลา	หน่วยงาน	รหัสสายงาน	สายงาน	พ.ว.	พ.นอ.	รถที่ไป	เป้าหมาย/กิจกรรม/สถานที่	ผลเบื้องต้น/เป้าหมาย	สาเหตุ / วัตถุประสงค์/ปัญหา	LAUT/ODE	LOK/PUCE	จำนวนรถ (รถที่ไป 1)	จำนวนรถ (รถที่ไปนอก)	จำนวนยานยนต์	รถยนต์ส่วนบุคคล/รถยนต์อื่นที่นำรถ	รถติดเกิน 4 ชม	รถบรรทุก 6 ล้อ ไปเกิน 10 ล้อ	รถบรรทุกมากกว่า 10 ล้อ (รถขข)	ตัว	รถติดเกิน	จำนวน ผู้เสียชีวิต	จำนวน ผู้บาดเจ็บ	จำนวน ผู้บาดเจ็บ	รถจักรยาน
2/1/2023	7:55	กรุงเทพมหานคร	36	พระราชวัง-มหาวิทยาลัย	24.65	รองอธิบดี	รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	คน/รถ/สัตว์/คน/รถ/คน/รถ	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.85505243	101.0944114	2	2	1	0	1	0	0	0	0	0	0	2	2
3/1/2023	11:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	39.304	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.7617955	101.1830582	2	2	1	1	0	0	0	0	0	0	0	1	1
21/1/2023	20:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	34.1	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.79586896	101.1514977	1	1	0	0	0	0	0	0	0	0	0	0	0
23/1/2023	7:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	26.44	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.84793381	101.1083589	1	1	0	0	1	0	0	0	0	0	0	0	0
27/1/2023	23:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	41.82	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.74775561	101.1967185	1	1	0	0	0	0	0	0	0	0	0	0	0
31/1/2023	18:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	18.07	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.80224323	101.2935584	2	2	0	0	2	0	0	0	0	0	0	0	0
2/2/2023	11:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	53.38	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.69345965	101.2903025	2	2	0	1	0	0	0	0	0	0	0	0	0
9/2/2023	17:45	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	5.62	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.900461	101.117941	2	2	0	0	2	0	0	0	0	0	1	0	1
11/2/2023	17:45	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	5.62	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.900461	101.117941	3	3	0	1	2	0	0	0	0	0	3	1	4
11/2/2023	18:15	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	26.51	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.84698989	101.1089033	1	1	0	0	1	0	0	0	0	0	0	0	0
16/2/2023	4:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	27.19	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.84405501	101.1142018	1	1	0	0	0	0	0	0	0	0	0	0	0
16/2/2023	19:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	32.38	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.80854814	101.1428777	2	2	0	0	0	0	0	0	0	0	0	1	1
14/2/2023	9:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	48.505	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.70438861	101.2423277	1	1	0	0	0	0	0	0	0	0	0	0	0
26/2/2023	9:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	13.1	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.845799	101.160182	2	2	1	0	0	0	0	0	0	0	1	0	1
29/2/2023	9:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	36.67	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.78492065	101.1601515	1	1	0	0	1	0	0	0	0	0	0	1	1
29/2/2023	9:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	35.6	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.77905212	1	2	2	0	1	0	0	0	0	0	0	0	0	0
29/2/2023	9:40	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	35.85	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.78378074	101.1612806	1	1	0	0	0	0	0	0	0	0	0	0	0
30/2/2023	11:09	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	58.2	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.67782841	101.303215	0	0	0	0	0	0	0	0	0	0	0	0	0
2/3/2023	5:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	29.05	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.83310705	101.1262063	1	1	0	0	1	0	0	0	3	2	0	2	0
11/3/2023	20:45	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	42.49	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.73813656	101.2051063	1	2	0	0	1	0	0	0	1	1	0	0	0
14/3/2023	10:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	53.26	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.69443402	101.2848324	2	2	1	0	0	0	0	0	0	0	0	0	0
14/3/2023	17:50	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	49.2	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.70203554	101.2481093	2	2	0	0	0	0	0	0	0	0	5	0	0
14/3/2023	22:10	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	22.2	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.85656061	101.0753109	2	2	0	0	0	0	0	0	0	0	0	3	3
14/3/2023	23:30	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	38.6	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.76261542	101.1786101	3	3	1	1	0	0	0	0	0	0	3	0	3
15/3/2023	7:20	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	27.7	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.8141451	101.1317446	1	1	0	0	1	0	0	0	0	0	0	0	0
27/3/2023	4:00	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	22.2	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.85656061	101.0753109	1	1	0	0	0	0	0	0	0	0	0	5	5
27/3/2023	7:50	กรุงเทพมหานคร	36	มหาวิทยาลัย-มหาวิทยาลัย	36.85	รองอธิบดี	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	ทางหลวง-โหล่งจันทน์	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	รถติดเกิน 4 ชม/รถติดเกิน 4 ชม	12.85552679	101.1155224	1	1	0	0	1	0	0	0	0	0	0	1	1