



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (Sillom 3) Asia Sermkij Tower, 7th Floor, Sillom Road, Bang Rak, Bangkok
Thailand 10500
P/O : **Project Name** : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270001-1

Page 1 of 2

Sample Number : 2211209-1
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าประตูหน้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
10:00 AM - 10:05 AM	57.7	48.5	12:40 PM - 12:45 PM	55.8	48.9
10:05 AM - 10:10 AM	52.9	46.2	12:45 PM - 12:50 PM	54.1	47.0
10:10 AM - 10:15 AM	55.1	47.5	12:50 PM - 12:55 PM	51.7	46.0
10:15 AM - 10:20 AM	55.5	44.0	12:55 PM - 01:00 PM	53.8	46.4
10:20 AM - 10:25 AM	53.6	45.6	01:00 PM - 01:05 PM	55.2	46.3
10:25 AM - 10:30 AM	53.2	47.1	01:05 PM - 01:10 PM	52.4	46.5
10:30 AM - 10:35 AM	55.4	46.8	01:10 PM - 01:15 PM	54.4	44.8
10:35 AM - 10:40 AM	53.3	46.1	01:15 PM - 01:20 PM	55.8	48.8
10:40 AM - 10:45 AM	56.0	47.1	01:20 PM - 01:25 PM	56.6	48.1
10:45 AM - 10:50 AM	53.0	45.4	01:25 PM - 01:30 PM	53.7	48.6
10:50 AM - 10:55 AM	56.3	47.0	01:30 PM - 01:35 PM	54.2	46.1
10:55 AM - 11:00 AM	58.5	47.1	01:35 PM - 01:40 PM	55.4	47.6
11:00 AM - 11:05 AM	55.4	46.2	01:40 PM - 01:45 PM	54.1	46.8
11:05 AM - 11:10 AM	58.1	46.3	01:45 PM - 01:50 PM	53.9	47.9
11:10 AM - 11:15 AM	59.8	46.5	01:50 PM - 01:55 PM	55.0	47.6
11:15 AM - 11:20 AM	57.7	47.5	01:55 PM - 02:00 PM	53.3	47.0
11:20 AM - 11:25 AM	56.8	48.5	02:00 PM - 02:05 PM	56.1	49.4
11:25 AM - 11:30 AM	55.1	47.5	02:05 PM - 02:10 PM	56.8	49.4
11:30 AM - 11:35 AM	57.4	45.4	02:10 PM - 02:15 PM	53.7	47.0
11:35 AM - 11:40 AM	56.6	50.1	02:15 PM - 02:20 PM	53.2	48.1
11:40 AM - 11:45 AM	55.3	50.0	02:20 PM - 02:25 PM	54.2	49.0
11:45 AM - 11:50 AM	56.8	48.7	02:25 PM - 02:30 PM	58.7	48.4
11:50 AM - 11:55 AM	55.2	46.7	02:30 PM - 02:35 PM	56.8	48.7
11:55 AM - 12:00 PM	56.1	48.6	02:35 PM - 02:40 PM	57.1	49.6
12:00 PM - 12:05 PM	57.6	49.1	02:40 PM - 02:45 PM	55.4	49.7
12:05 PM - 12:10 PM	53.9	47.9	02:45 PM - 02:50 PM	53.7	47.7
12:10 PM - 12:15 PM	55.3	48.0	02:50 PM - 02:55 PM	53.7	46.9
12:15 PM - 12:20 PM	53.8	46.5	02:55 PM - 03:00 PM	52.6	46.2
12:20 PM - 12:25 PM	54.7	46.6	03:00 PM - 03:05 PM	54.1	46.1
12:25 PM - 12:30 PM	54.1	47.8	03:05 PM - 03:10 PM	55.5	47.6
12:30 PM - 12:35 PM	54.6	45.7	03:10 PM - 03:15 PM	53.4	47.1
12:35 PM - 12:40 PM	55.2	49.2	03:15 PM - 03:20 PM	52.4	46.4

This document is valid only for the test and analysis performed on the date of the report. No other data or information is included in this report. If you need a copy of this report, please contact the laboratory. (This report is not valid for legal purposes.)

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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (Sillom 3) Asia Sermkij Tower, 7th Floor, Sillom Road, Bang Rak, Bangkok
Thailand 10500
P/O : **Project Name** : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270001-1

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Sample Number : 2211209-1
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าประตูหน้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90	Mar 15 - Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 PM - 06:05 PM	52.2	44.1	06:40 PM - 06:45 PM	64.7	49.2	11:20 PM - 11:25 PM	70.8	52.3
06:05 PM - 06:10 PM	59.2	43.8	06:45 PM - 06:50 PM	53.9	43.0	11:25 PM - 11:30 PM	55.3	51.2
06:10 PM - 06:15 PM	58.7	46.1	06:50 PM - 06:55 PM	60.8	49.6	11:30 PM - 11:35 PM	60.2	51.0
06:15 PM - 06:20 PM	51.8	45.1	06:55 PM - 07:00 PM	53.1	46.8	11:35 PM - 11:40 PM	54.2	48.8
06:20 PM - 06:25 PM	55.0	47.4	07:00 PM - 07:05 PM	51.7	43.7	11:40 PM - 11:45 PM	62.2	54.8
06:25 PM - 06:30 PM	54.4	47.3	07:05 PM - 07:10 PM	60.1	51.6	11:45 PM - 11:50 PM	60.3	55.6
06:30 PM - 06:35 PM	53.2	47.2	07:10 PM - 07:15 PM	60.3	51.3	11:50 PM - 11:55 PM	56.3	51.4
06:35 PM - 06:40 PM	55.8	48.2	07:15 PM - 07:20 PM	53.0	46.9	11:55 PM - 12:00 AM	59.2	49.9
06:40 PM - 06:45 PM	49.8	41.4	07:20 PM - 07:25 PM	51.9	46.8	12:00 AM - 12:05 AM	56.2	55.5
06:45 PM - 06:50 PM	54.7	48.7	07:25 PM - 07:30 PM	57.8	48.4	12:05 AM - 12:10 AM	57.7	51.2
06:50 PM - 06:55 PM	52.8	45.9	07:30 PM - 07:35 PM	65.5	44.4	12:10 AM - 12:15 AM	64.0	56.4
06:55 PM - 07:00 PM	55.0	44.6	07:35 PM - 07:40 PM	60.3	46.0	12:15 AM - 12:20 AM	56.1	50.8
07:00 PM - 07:05 PM	53.2	43.3	07:40 PM - 07:45 PM	52.3	44.8	12:20 AM - 12:25 AM	56.9	51.3
07:05 PM - 07:10 PM	52.8	45.1	07:45 PM - 07:50 PM	65.2	49.5	12:25 AM - 12:30 AM	55.3	51.7
07:10 PM - 07:15 PM	47.9	40.0	07:50 PM - 07:55 PM	53.1	49.0	12:30 AM - 12:35 AM	55.8	52.6
07:15 PM - 07:20 PM	62.5	49.4	07:55 PM - 08:00 PM	60.7	51.1	12:35 AM - 12:40 AM	57.2	47.7
07:20 PM - 07:25 PM	64.7	46.7	08:00 PM - 08:05 PM	60.1	53.7	12:40 AM - 12:45 AM	53.7	49.9
07:25 PM - 07:30 PM	53.4	49.4	08:05 PM - 08:10 PM	56.2	50.8	12:45 AM - 12:50 AM	59.2	49.4
07:30 PM - 07:35 PM	50.3	45.0	08:10 PM - 08:15 PM	60.0	52.8	12:50 AM - 12:55 AM	53.0	48.2
07:35 PM - 07:40 PM	51.7	43.8	08:15 PM - 08:20 PM	61.6	49.1	12:55 AM - 01:00 AM	51.7	47.1
07:40 PM - 07:45 PM	52.7	47.2	08:20 PM - 08:25 PM	54.6	49.9	01:00 AM - 01:05 AM	54.1	48.7
07:45 PM - 07:50 PM	51.5	47.7	08:25 PM - 08:30 PM	53.3	48.8	01:05 AM - 01:10 AM	55.9	48.5
07:50 PM - 07:55 PM	62.3	49.0	08:30 PM - 08:35 PM	53.9	48.6	01:10 AM - 01:15 AM	50.4	45.9
07:55 PM - 08:00 PM	58.8	48.9	08:35 PM - 08:40 PM	50.5	45.4	01:15 AM - 01:20 AM	53.3	48.8
08:00 PM - 08:05 PM	59.1	46.8	08:40 PM - 08:45 PM	51.5	46.4	01:20 AM - 01:25 AM	65.2	48.5
08:05 PM - 08:10 PM	53.4	48.2	08:45 PM - 08:50 PM	50.9	44.4	01:25 AM - 01:30 AM	53.0	48.2
08:10 PM - 08:15 PM	50.3	44.9	08:50 PM - 08:55 PM	53.5	49.0	01:30 AM - 01:35 AM	55.1	49.8
08:15 PM - 08:20 PM	53.4	47.3	08:55 PM - 09:00 PM	53.2	45.7	01:35 AM - 01:40 AM	63.4	49.7
08:20 PM - 08:25 PM	61.0	41.3	09:00 PM - 09:05 PM	53.1	46.0	01:40 AM - 01:45 AM	57.4	51.8
08:25 PM - 08:30 PM	61.9	44.5	09:05 PM - 09:10 PM	55.9	50.0	01:45 AM - 01:50 AM	66.2	54.3
08:30 PM - 08:35 PM	53.3	43.3	09:10 PM - 09:15 PM	55.8	49.2	01:50 AM - 01:55 AM	64.6	54.5
08:35 PM - 08:40 PM	53.3	46.1	09:15 PM - 09:20 PM	61.8	50.4	01:55 AM - 02:00 AM	66.3	55.2

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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
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Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (Sillom 3) Asia Sermkij Tower, 7th Floor, Sillom Road, Bang Rak, Bangkok
Thailand 10500
P/O : **Project Name** : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270001-1

Page 3 of 2

Sample Number : 2211209-1
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าประตูหน้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	72.6	70.6	04:40 AM - 04:45 AM	59.9	58.5	07:20 AM - 07:25 AM	54.5	50.2
02:05 AM - 02:10 AM	74.6	69.7	04:45 AM - 04:50 AM	60.7	58.7	07:25 AM - 07:30 AM	52.9	48.1
02:10 AM - 02:15 AM	69.0	62.2	04:50 AM - 04:55 AM	62.5	58.6	07:30 AM - 07:35 AM	55.9	51.3
02:15 AM - 02:20 AM	73.2	70.0	04:55 AM - 05:00 AM	63.8	62.0	07:35 AM - 07:40 AM	53.3	47.7
02:20 AM - 02:25 AM	71.8	70.4	05:00 AM - 05:05 AM	63.4	62.2	07:40 AM - 07:45 AM	50.8	47.1
02:25 AM - 02:30 AM	73.7	72.3	05:05 AM - 05:10 AM	61.8	62.4	07:45 AM - 07:50 AM	55.3	47.8
02:30 AM - 02:35 AM	72.6	75.5	05:10 AM - 05:15 AM	61.2	59.9	07:50 AM - 07:55 AM	54.6	49.4
02:35 AM - 02:40 AM	78.0	76.8	05:15 AM - 05:20 AM	59.6	57.3	07:55 AM - 08:00 AM	52.9	47.5
02:40 AM - 02:45 AM	76.6	75.8	05:20 AM - 05:25 AM	58.8	56.7	08:00 AM - 08:05 AM	54.6	47.7
02:45 AM - 02:50 AM	75.8	74.2	05:25 AM - 05:30 AM	58.7	56.3	08:05 AM - 08:10 AM	56.8	52.0
02:50 AM - 02:55 AM	76.8	75.2	05:30 AM - 05:35 AM	59.3	57.1	08:10 AM - 08:15 AM	52.4	49.6
02:55 AM - 03:00 AM	78.1	77.6	05:35 AM - 05:40 AM	59.5	55.5	08:15 AM - 08:20 AM	57.2	53.6
03:00 AM - 03:05 AM	78.1	77.5	05:40 AM - 05:45 AM	56.6	54.0	08:20 AM - 08:25 AM	60.5	58.6
03:05 AM - 03:10 AM	76.7	76.0	05:45 AM - 05:50 AM	58.0	54.3	08:25 AM - 08:30 AM	60.5	58.9
03:10 AM - 03:15 AM	77.0	76.4	05:50 AM - 05:55 AM	58.1	55.0	08:30 AM - 08:35 AM	60.5	59.2
03:15 AM - 03:20 AM	75.8	74.0	05:55 AM - 06:00 AM	60.5	54.4	08:35 AM - 08:40 AM	60.9	59.8
03:20 AM - 03:25 AM	72.7	71.5	06:00 AM - 06:05 AM	58.1	53.9	08:40 AM - 08:45 AM	62.8	60.6
03:25 AM - 03:30 AM	71.9	69.4	06:05 AM - 06:10 AM	58.3	54.6	08:45 AM - 08:50 AM	62.3	60.9
03:30 AM - 03:35 AM	66.9	65.4	06:10 AM - 06:15 AM	56.9	53.0	08:50 AM - 08:55 AM	62.8	61.5
03:35 AM - 03:40 AM	68.9	65.7	06:15 AM - 06:20 AM	54.8	51.3	08:55 AM - 09:00 AM	64.6	62.5
03:40 AM - 03:45 AM	71.5	70.0	06:20 AM - 06:25 AM	54.7	50.4	09:00 AM - 09:05 AM	67.2	66.5
03:45 AM - 03:50 AM	71.5	70.1	06:25 AM - 06:30 AM	55.1	50.6	09:05 AM - 09:10 AM	67.7	66.8
03:50 AM - 03:55 AM	66.9	64.9	06:30 AM - 06:35 AM	57.3	50.9	09:10 AM - 09:15 AM	66.3	64.9
03:55 AM - 04:00 AM	65.1	64.2	06:35 AM - 06:40 AM	55.4	49.3	09:15 AM - 09:20 AM	66.7	65.0
04:00 AM - 04:05 AM	64.6	63.9	06:40 AM - 06:45 AM	53.7	50.7	09:20 AM - 09:25 AM	68.2	68.2
04:05 AM - 04:10 AM	64.1	62.9	06:45 AM - 06:50 AM	54.5	51.2	09:25 AM - 09:30 AM	71.1	70.0
04:10 AM - 04:15 AM	63.3	61.5	06:50 AM - 06:55 AM	53.5	49.2	09:30 AM - 09:35 AM	71.8	70.2
04:15 AM - 04:20 AM	62.5	59.9	06:55 AM - 07:00 AM	53.8	48.8	09:35 AM - 09:40 AM	73.0	71.9
04:20 AM - 04:25 AM	62.4	59.3	07:00 AM - 07:05 AM	56.5	52.0	09:40 AM - 09:45 AM	74.3	73.9
04:25 AM - 04:30 AM	60.6	58.5	07:05 AM - 07:10 AM	56.1	50.9	09:45 AM - 09:50 AM	74.5	73.9
04:30 AM - 04:35 AM	61.9	60.1	07:10 AM - 07:15 AM	53.0	48.4	09:50 AM - 09:55 AM	73.4	72.6
04:35 AM - 04:40 AM	61.5	59.8	07:15 AM - 07:20 AM	55.2	50.5	09:55 AM - 10:00 AM	72.7	72.7



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermk Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-2
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270002-1

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	2211209-2	Parameter	Noise Level (Leq 5 min)					
Location	N1 (หน้าอาคาร) (GPS 47P 0726474,1407389)	Measurement Date	Mar 16 - Mar 17, 2022					
Measurement by	Nontachai Uppathamp	Sound Level meter	Serial No. 01222723					
Mar 16, 2022	Leq Time	L90 dBA(A)	Mar 16, 2022 Time	Leq dBA(A)	L90 dBA(A)	Mar 16 - Mar 17, 2022 Time	Leq dBA(A)	L90 dBA(A)
06:00 PM - 06:05 PM	54.8	50.3	08:40 PM - 08:45 PM	53.0	51.1	11:20 PM - 11:25 PM	52.3	47.8
06:05 PM - 06:10 PM	54.4	49.6	08:45 PM - 08:50 PM	54.3	49.0	11:25 PM - 11:30 PM	51.1	47.7
06:10 PM - 06:15 PM	54.0	48.3	08:50 PM - 08:55 PM	52.5	48.2	11:30 PM - 11:35 PM	54.1	48.0
06:15 PM - 06:20 PM	53.6	49.0	08:55 PM - 09:00 PM	58.6	50.9	11:35 PM - 11:40 PM	55.0	48.6
06:20 PM - 06:25 PM	53.0	48.0	09:00 PM - 09:05 PM	58.8	51.9	11:40 PM - 11:45 PM	56.8	50.1
06:25 PM - 06:30 PM	55.4	50.7	09:05 PM - 09:10 PM	56.5	49.8	11:45 PM - 11:50 PM	54.3	49.9
06:30 PM - 06:35 PM	54.3	50.6	09:10 PM - 09:15 PM	56.0	51.6	11:50 PM - 11:55 PM	57.0	52.1
06:35 PM - 06:40 PM	63.7	52.1	09:15 PM - 09:20 PM	52.9	48.4	11:55 PM - 12:00 AM	55.2	49.0
06:40 PM - 06:45 PM	56.0	47.9	09:20 PM - 09:25 PM	59.1	52.4	12:00 AM - 12:05 AM	57.6	50.7
06:45 PM - 06:50 PM	55.8	51.6	09:25 PM - 09:30 PM	56.3	51.7	12:05 AM - 12:10 AM	53.4	48.3
06:50 PM - 06:55 PM	54.0	49.2	09:30 PM - 09:35 PM	59.0	52.5	12:10 AM - 12:15 AM	57.2	47.5
06:55 PM - 07:00 PM	56.6	48.3	09:35 PM - 09:40 PM	56.8	51.9	12:15 AM - 12:20 AM	60.7	50.0
07:00 PM - 07:05 PM	56.1	51.8	09:40 PM - 09:45 PM	58.4	49.5	12:20 AM - 12:25 AM	54.7	48.9
07:05 PM - 07:10 PM	52.3	48.7	09:45 PM - 09:50 PM	57.8	48.9	12:25 AM - 12:30 AM	53.1	48.2
07:10 PM - 07:15 PM	54.7	50.4	09:50 PM - 09:55 PM	59.3	52.4	12:30 AM - 12:35 AM	56.4	47.8
07:15 PM - 07:20 PM	56.2	51.5	09:55 PM - 10:00 PM	55.6	51.8	12:35 AM - 12:40 AM	55.0	47.2
07:20 PM - 07:25 PM	53.8	48.8	10:00 PM - 10:05 PM	55.0	51.2	12:40 AM - 12:45 AM	57.6	51.2
07:25 PM - 07:30 PM	63.0	50.3	10:05 PM - 10:10 PM	59.4	51.1	12:45 AM - 12:50 AM	58.0	54.4
07:30 PM - 07:35 PM	66.8	53.3	10:10 PM - 10:15 PM	61.1	51.8	12:50 AM - 12:55 AM	58.0	50.5
07:35 PM - 07:40 PM	57.4	51.3	10:15 PM - 10:20 PM	66.6	51.3	12:55 AM - 01:00 AM	57.0	48.2
07:40 PM - 07:45 PM	58.9	54.0	10:20 PM - 10:25 PM	62.1	51.5	01:00 AM - 01:05 AM	53.8	49.1
07:45 PM - 07:50 PM	55.2	48.9	10:25 PM - 10:30 PM	60.8	47.2	01:05 AM - 01:10 AM	54.2	47.9
07:50 PM - 07:55 PM	61.2	53.4	10:30 PM - 10:35 PM	56.6	50.8	01:10 AM - 01:15 AM	57.3	52.5
07:55 PM - 08:00 PM	61.5	51.8	10:35 PM - 10:40 PM	56.7	48.7	01:15 AM - 01:20 AM	65.3	50.3
08:00 PM - 08:05 PM	59.1	51.5	10:40 PM - 10:45 PM	56.6	49.3	01:20 AM - 01:25 AM	61.4	53.2
08:05 PM - 08:10 PM	55.7	51.3	10:45 PM - 10:50 PM	56.7	51.6	01:25 AM - 01:30 AM	61.0	52.9
08:10 PM - 08:15 PM	54.7	50.6	10:50 PM - 10:55 PM	54.6	49.5	01:30 AM - 01:35 AM	59.2	49.7
08:15 PM - 08:20 PM	54.8	48.6	10:55 PM - 11:00 PM	53.6	48.2	01:35 AM - 01:40 AM	60.0	53.0
08:20 PM - 08:25 PM	57.7	52.7	11:00 PM - 11:05 PM	60.9	49.5	01:40 AM - 01:45 AM	60.4	52.4
08:25 PM - 08:30 PM	62.4	51.3	11:05 PM - 11:10 PM	54.8	50.7	01:45 AM - 01:50 AM	56.2	47.2
08:30 PM - 08:35 PM	55.4	50.8	11:10 PM - 11:15 PM	54.0	46.1	01:50 AM - 01:55 AM	55.5	52.4
08:35 PM - 08:40 PM	53.4	49.2	11:15 PM - 11:20 PM	55.4	48.6	01:55 AM - 02:00 AM	53.4	49.9

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermk Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-3
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270002-1

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	2211209-3	Parameter	Noise Level (Leq 5 min)								
Location	N1 (หน้าอาคาร) (GPS 47P 0726474,1407389)	Measurement Date	Mar 16 - Mar 17, 2022								
Measurement by	Nontachai Uppathamp	Sound Level meter	Serial No. 01222723								
Mar 17, 2022	Time	Leq dBA	L90 dBA	Mar 17, 2022	Time	Leq dBA	L90 dBA	Mar 17, 2022	Time	Leq dBA	L90 dBA
02:00 AM - 02:05 AM	60.1	50.3	04:40 AM - 04:45 AM	63.5	54.7	07:20 AM - 07:25 AM	63.5	53.7			
02:05 AM - 02:10 AM	57.0	52.0	04:45 AM - 04:50 AM	59.5	49.0	07:25 AM - 07:30 AM	56.0	51.2			
02:10 AM - 02:15 AM	57.3	51.2	04:50 AM - 04:55 AM	58.7	51.3	07:30 AM - 07:35 AM	55.4	52.5			
02:15 AM - 02:20 AM	57.2	48.7	04:55 AM - 05:00 AM	59.9	50.2	07:35 AM - 07:40 AM	56.4	51.9			
02:20 AM - 02:25 AM	57.6	50.7	05:00 AM - 05:05 AM	54.7	50.9	07:40 AM - 07:45 AM	57.4	52.7			
02:25 AM - 02:30 AM	53.6	48.2	05:05 AM - 05:10 AM	55.0	50.0	07:45 AM - 07:50 AM	54.2	51.1			
02:30 AM - 02:35 AM	55.5	46.9	05:10 AM - 05:15 AM	54.5	49.1	07:50 AM - 07:55 AM	56.9	52.6			
02:35 AM - 02:40 AM	63.0	51.6	05:15 AM - 05:20 AM	56.1	52.4	07:55 AM - 08:00 AM	56.0	53.6			
02:40 AM - 02:45 AM	60.2	51.8	05:20 AM - 05:25 AM	58.1	54.7	08:00 AM - 08:05 AM	55.1	52.8			
02:45 AM - 02:50 AM	55.9	50.6	05:25 AM - 05:30 AM	56.3	53.2	08:05 AM - 08:10 AM	59.3	52.2			
02:50 AM - 02:55 AM	56.4	53.0	05:30 AM - 05:35 AM	53.3	48.5	08:10 AM - 08:15 AM	58.5	53.6			
02:55 AM - 03:00 AM	52.7	48.8	05:35 AM - 05:40 AM	55.4	52.1	08:15 AM - 08:20 AM	57.9	52.7			
03:00 AM - 03:05 AM	55.9	51.2	05:40 AM - 05:45 AM	56.7	51.4	08:20 AM - 08:25 AM	55.9	52.2			
03:05 AM - 03:10 AM	54.8	50.4	05:45 AM - 05:50 AM	56.8	53.0	08:25 AM - 08:30 AM	57.0	51.3			
03:10 AM - 03:15 AM	57.0	51.7	05:50 AM - 05:55 AM	56.6	53.1	08:30 AM - 08:35 AM	55.9	51.6			
03:15 AM - 03:20 AM	54.5	51.6	05:55 AM - 06:00 AM	55.6	49.8	08:35 AM - 08:40 AM	55.0	51.8			
03:20 AM - 03:25 AM	57.9	52.9	06:00 AM - 06:05 AM	57.2	49.3	08:40 AM - 08:45 AM	58.0	55.2			
03:25 AM - 03:30 AM	56.3	52.1	06:05 AM - 06:10 AM	61.2	55.5	08:45 AM - 08:50 AM	58.4	52.2			
03:30 AM - 03:35 AM	61.7	52.7	06:10 AM - 06:15 AM	56.2	52.5	08:50 AM - 08:55 AM	58.3	54.7			
03:35 AM - 03:40 AM	67.5	51.8	06:15 AM - 06:20 AM	51.7	49.8	08:55 AM - 09:00 AM	57.0	52.7			
03:40 AM - 03:45 AM	65.7	54.6	06:20 AM - 06:25 AM	55.4	51.7	09:00 AM - 09:05 AM	56.8	53.1			
03:45 AM - 03:50 AM	63.0	53.8	06:25 AM - 06:30 AM	57.2	52.7	09:05 AM - 09:10 AM	56.4	53.0			
03:50 AM - 03:55 AM	64.0	53.2	06:30 AM - 06:35 AM	60.1	53.1	09:10 AM - 09:15 AM	56.1	51.5			
03:55 AM - 04:00 AM	55.7	51.5	06:35 AM - 06:40 AM	53.8	50.8	09:15 AM - 09:20 AM	56.3	53.2			
04:00 AM - 04:05 AM	67.5	52.1	06:40 AM - 06:45 AM	58.6	52.2	09:20 AM - 09:25 AM	56.8	52.4			
04:05 AM - 04:10 AM	60.8	53.8	06:45 AM - 06:50 AM	58.6	52.5	09:25 AM - 09:30 AM	56.0	51.2			
04:10 AM - 04:15 AM	57.8	52.5	06:50 AM - 06:55 AM	56.8	51.9	09:30 AM - 09:35 AM	66.1	52.7			
04:15 AM - 04:20 AM	59.4	54.5	06:55 AM - 07:00 AM	64.1	52.8	09:35 AM - 09:40 AM	60.6	53.0			
04:20 AM - 04:25 AM	55.7	52.1	07:00 AM - 07:05 AM	63.7	54.4	09:40 AM - 09:45 AM	56.5	52.9			
04:25 AM - 04:30 AM	58.7	52.7	07:05 AM - 07:10 AM	54.4	49.4	09:45 AM - 09:50 AM	55.2	52.0			
04:30 AM - 04:35 AM	57.7	52.5	07:10 AM - 07:15 AM	56.7	48.7	09:50 AM - 09:55 AM	55.2	51.4			
04:35 AM - 04:40 AM	66.4	54.8	07:15 AM - 07:20 AM	55.8	53.1	09:55 AM - 10:00 AM	58.5	53.8			

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermk Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-3
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270003-1

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	2211209-3										
Parameter	Noise Level (Leq 5 min)										
Location	N1 (หน้าอาคาร) (GPS 47P 0726474,1407389)										
Measurement Date	Mar 17 - Mar 18, 2022										
Measurement by	Nontachai Uppathamp										
Sound Level meter	Serial No. 01222723										
Mar 17, 2022			Mar 17, 2022			Mar 17, 2022			Mar 17, 2022		
Time	Leq dBA	L90 dBA	Time	Leq dBA	L90 dBA	Time	Leq dBA	L90 dBA	Time	Leq dBA	L90 dBA
10:00 AM - 10:05 AM	56.3	52.6	12:40 PM - 12:45 PM	55.4	50.3	03:20 PM - 03:25 PM	56.7	53.7			
10:05 AM - 10:10 AM	56.8	54.5	12:45 PM - 12:50 PM	64.5	53.8	03:25 PM - 03:30 PM	54.9	51.8			
10:10 AM - 10:15 AM	57.1	54.0	12:50 PM - 12:55 PM	55.4	51.7	03:30 PM - 03:35 PM	58.3	55.4			
10:15 AM - 10:20 AM	56.0	53.2	12:55 PM - 01:00 PM	54.5	51.9	03:35 PM - 03:40 PM	54.3	52.3			
10:20 AM - 10:25 AM	57.3	52.7	01:00 PM - 01:05 PM	55.5	51.2	03:40 PM - 03:45 PM	59.9	53.5			
10:25 AM - 10:30 AM	58.2	54.5	01:05 PM - 01:10 PM	54.7	52.1	03:45 PM - 03:50 PM	55.5	52.6			
10:30 AM - 10:35 AM	56.8	54.5	01:10 PM - 01:15 PM	54.6	52.0	03:50 PM - 03:55 PM	56.4	52.3			
10:35 AM - 10:40 AM	58.0	52.2	01:15 PM - 01:20 PM	53.7	49.7	03:55 PM - 04:00 PM	56.6	52.5			
10:40 AM - 10:45 AM	54.9	52.0	01:20 PM - 01:25 PM	54.9	51.2	04:00 PM - 04:05 PM	56.2	52.1			
10:45 AM - 10:50 AM	57.2	55.1	01:25 PM - 01:30 PM	53.3	49.8	04:05 PM - 04:10 PM	58.8	53.1			
10:50 AM - 10:55 AM	55.1	51.6	01:30 PM - 01:35 PM	56.5	54.0	04:10 PM - 04:15 PM	54.6	52.0			
10:55 AM - 11:00 AM	55.1	49.5	01:35 PM - 01:40 PM	56.0	51.0	04:15 PM - 04:20 PM	57.4	51.9			
11:00 AM - 11:05 AM	56.2	52.8	01:40 PM - 01:45 PM	55.1	52.7	04:20 PM - 04:25 PM	54.6	52.5			
11:05 AM - 11:10 AM	66.3	51.0	01:45 PM - 01:50 PM	50.7	54.7	04:25 PM - 04:30 PM	56.6	51.6			
11:10 AM - 11:15 AM	68.2	53.8	01:50 PM - 01:55 PM	54.7	51.6	04:30 PM - 04:35 PM	54.1	51.6			
11:15 AM - 11:20 AM	59.2	52.2	01:55 PM - 02:00 PM	57.0	49.6	04:35 PM - 04:40 PM	56.3	49.2			
11:20 AM - 11:25 AM	57.8	53.1	02:00 PM - 02:05 PM	55.6	53.4	04:40 PM - 04:45 PM	52.3	48.7			
11:25 AM - 11:30 AM	61.8	54.9	02:05 PM - 02:10 PM	63.0	52.8	04:45 PM - 04:50 PM	54.3	49.3			
11:30 AM - 11:35 AM	64.0	55.1	02:10 PM - 02:15 PM	58.3	54.2	04:50 PM - 04:55 PM	57.5	52.0			
11:35 AM - 11:40 AM	63.2	61.1	02:15 PM - 02:20 PM	53.5	50.5	04:55 PM - 05:00 PM	56.5	51.1			
11:40 AM - 11:45 AM	63.2	61.9	02:20 PM - 02:25 PM	53.3	51.2	05:00 PM - 05:05 PM	56.4	50.0			
11:45 AM - 11:50 AM	62.6	60.4	02:25 PM - 02:30 PM	56.5	53.3	05:05 PM - 05:10 PM	55.5	48.1			
11:50 AM - 11:55 AM	56.8	58.1	02:30 PM - 02:35 PM	56.1	55.4	05:10 PM - 05:15 PM	54.7	49.7			
11:55 AM - 12:00 PM	57.1	54.8	02:35 PM - 02:40 PM	55.1	51.5	05:15 PM - 05:20 PM	52.2	48.6			
12:00 PM - 12:05 PM	55.7	49.1	02:40 PM - 02:45 PM	55.3	52.8	05:20 PM - 05:25 PM	52.4	49.5			
12:05 PM - 12:10 PM	57.0	52.8	02:45 PM - 02:50 PM	56.7	53.0	05:25 PM - 05:30 PM	54.2	50.7			
12:10 PM - 12:15 PM	55.3	51.7	02:50 PM - 02:55 PM	55.6	51.7	05:30 PM - 05:35 PM	54.8	50.8			
12:15 PM - 12:20 PM	56.1	52.2	02:55 PM - 03:00 PM	56.3	53.1	05:35 PM - 05:40 PM	54.6	50.7			
12:20 PM - 12:25 PM	56.5	52.6	03:00 PM - 03:05 PM	54.9	52.0	05:40 PM - 05:45 PM	53.4	49.0			
12:25 PM - 12:30 PM	57.0	50.2	03:05 PM - 03:10 PM	54.4	52.3	05:45 PM - 05:50 PM	52.2	48.8			
12:30 PM - 12:35 PM	57.1	54.2	03:10 PM - 03:15 PM	54.7	52.0	05:50 PM - 05:55 PM	53.8	50.2			
12:35 PM - 12:40 PM	55.5	51.1	03:15 PM - 03:20 PM	58.3	54.2	05:55 PM - 06:00 PM	56.4	49.4			



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270004-1

Page 2 of 2

Sample Number : 2211209-3
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าศูนย์การค้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	52.6	48.1	04:40 AM - 04:45 AM	48.8	47.5	07:20 AM - 07:25 AM	48.9	46.9
02:05 AM - 02:10 AM	51.6	47.9	04:45 AM - 04:50 AM	48.8	47.2	07:25 AM - 07:30 AM	49.5	46.8
02:10 AM - 02:15 AM	48.7	47.6	04:50 AM - 04:55 AM	50.0	47.2	07:30 AM - 07:35 AM	53.4	48.2
02:15 AM - 02:20 AM	51.4	47.8	04:55 AM - 05:00 AM	50.0	46.6	07:35 AM - 07:40 AM	49.8	47.0
02:20 AM - 02:25 AM	52.2	47.2	05:00 AM - 05:05 AM	53.2	47.3	07:40 AM - 07:45 AM	51.4	46.4
02:25 AM - 02:30 AM	52.4	48.2	05:05 AM - 05:10 AM	54.5	47.6	07:45 AM - 07:50 AM	49.1	47.1
02:30 AM - 02:35 AM	54.0	48.7	05:10 AM - 05:15 AM	48.7	46.4	07:50 AM - 07:55 AM	52.0	47.4
02:35 AM - 02:40 AM	55.2	48.7	05:15 AM - 05:20 AM	53.6	49.5	07:55 AM - 08:00 AM	52.3	46.4
02:40 AM - 02:45 AM	55.3	51.6	05:20 AM - 05:25 AM	55.5	47.2	08:00 AM - 08:05 AM	50.2	47.1
02:45 AM - 02:50 AM	52.7	47.7	05:25 AM - 05:30 AM	57.8	49.2	08:05 AM - 08:10 AM	53.2	47.0
02:50 AM - 02:55 AM	52.1	48.0	05:30 AM - 05:35 AM	52.4	45.6	08:10 AM - 08:15 AM	52.3	46.9
02:55 AM - 03:00 AM	52.3	47.9	05:35 AM - 05:40 AM	49.0	46.7	08:15 AM - 08:20 AM	50.2	46.9
03:00 AM - 03:05 AM	50.3	46.5	05:40 AM - 05:45 AM	54.1	47.9	08:20 AM - 08:25 AM	57.1	47.0
03:05 AM - 03:10 AM	52.0	47.6	05:45 AM - 05:50 AM	52.0	47.3	08:25 AM - 08:30 AM	52.3	46.3
03:10 AM - 03:15 AM	53.2	46.8	05:50 AM - 05:55 AM	64.0	46.9	08:30 AM - 08:35 AM	54.0	46.8
03:15 AM - 03:20 AM	58.0	47.8	05:55 AM - 06:00 AM	55.9	48.5	08:35 AM - 08:40 AM	50.3	49.2
03:20 AM - 03:25 AM	52.4	48.6	06:00 AM - 06:05 AM	56.9	48.0	08:40 AM - 08:45 AM	52.0	48.4
03:25 AM - 03:30 AM	50.1	47.4	06:05 AM - 06:10 AM	57.3	49.0	08:45 AM - 08:50 AM	50.6	48.6
03:30 AM - 03:35 AM	50.7	47.5	06:10 AM - 06:15 AM	57.0	46.8	08:50 AM - 08:55 AM	51.1	50.1
03:35 AM - 03:40 AM	55.9	47.9	06:15 AM - 06:20 AM	50.7	46.9	08:55 AM - 09:00 AM	49.2	47.4
03:40 AM - 03:45 AM	51.1	48.2	06:20 AM - 06:25 AM	49.9	46.0	09:00 AM - 09:05 AM	51.5	47.4
03:45 AM - 03:50 AM	52.9	48.1	06:25 AM - 06:30 AM	51.5	47.6	09:05 AM - 09:10 AM	50.6	47.3
03:50 AM - 03:55 AM	52.0	48.1	06:30 AM - 06:35 AM	55.4	47.8	09:10 AM - 09:15 AM	57.9	49.5
03:55 AM - 04:00 AM	54.6	47.5	06:35 AM - 06:40 AM	49.5	47.3	09:15 AM - 09:20 AM	52.8	49.4
04:00 AM - 04:05 AM	48.4	47.0	06:40 AM - 06:45 AM	54.6	49.2	09:20 AM - 09:25 AM	52.0	49.4
04:05 AM - 04:10 AM	50.4	47.4	06:45 AM - 06:50 AM	50.1	48.2	09:25 AM - 09:30 AM	49.5	48.3
04:10 AM - 04:15 AM	50.6	47.4	06:50 AM - 06:55 AM	53.3	47.7	09:30 AM - 09:35 AM	50.6	47.9
04:15 AM - 04:20 AM	50.3	47.6	06:55 AM - 07:00 AM	49.4	47.4	09:35 AM - 09:40 AM	52.7	48.1
04:20 AM - 04:25 AM	52.8	48.2	07:00 AM - 07:05 AM	48.9	46.2	09:40 AM - 09:45 AM	50.7	47.4
04:25 AM - 04:30 AM	51.2	48.4	07:05 AM - 07:10 AM	51.4	47.0	09:45 AM - 09:50 AM	50.3	47.7
04:30 AM - 04:35 AM	53.6	48.5	07:10 AM - 07:15 AM	51.2	46.8	09:50 AM - 09:55 AM	49.2	47.7
04:35 AM - 04:40 AM	51.3	47.9	07:15 AM - 07:20 AM	50.0	47.9	09:55 AM - 10:00 AM	50.1	47.3

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270004-1

Page 1 of 2

Sample Number : 2211209-4
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าศูนย์การค้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
10:00 AM - 10:05 AM	49.2	47.6	12:40 PM - 12:45 PM	49.7	45.9	02:20 PM - 02:25 PM	48.9	45.1
10:05 AM - 10:10 AM	51.5	46.4	12:45 PM - 12:50 PM	48.0	45.8	02:25 PM - 02:30 PM	47.9	45.2
10:10 AM - 10:15 AM	51.0	47.0	12:50 PM - 12:55 PM	47.6	45.6	02:30 PM - 02:35 PM	49.4	45.4
10:15 AM - 10:20 AM	53.7	46.9	12:55 PM - 01:00 PM	47.2	45.9	02:35 PM - 02:40 PM	51.8	46.8
10:20 AM - 10:25 AM	49.4	46.0	01:00 PM - 01:05 PM	50.2	45.9	02:40 PM - 02:45 PM	48.6	45.9
10:25 AM - 10:30 AM	50.9	47.9	01:05 PM - 01:10 PM	47.6	45.3	02:45 PM - 02:50 PM	48.6	45.6
10:30 AM - 10:35 AM	49.6	45.2	01:10 PM - 01:15 PM	46.8	45.2	02:50 PM - 02:55 PM	49.0	46.9
10:35 AM - 10:40 AM	49.4	44.8	01:15 PM - 01:20 PM	51.9	45.7	02:55 PM - 03:00 PM	46.7	45.8
10:40 AM - 10:45 AM	53.7	47.3	01:20 PM - 01:25 PM	47.3	45.4	03:00 PM - 03:05 PM	47.7	45.8
10:45 AM - 10:50 AM	55.0	46.4	01:25 PM - 01:30 PM	47.3	45.3	03:05 PM - 03:10 PM	48.5	46.9
10:50 AM - 10:55 AM	46.7	45.7	01:30 PM - 01:35 PM	47.4	45.0	03:10 PM - 03:15 PM	48.6	46.2
10:55 AM - 11:00 AM	48.3	46.1	01:35 PM - 01:40 PM	50.1	47.1	03:15 PM - 03:20 PM	52.4	46.9
11:00 AM - 11:05 AM	49.3	47.1	01:40 PM - 01:45 PM	49.0	45.9	03:20 PM - 03:25 PM	51.4	47.4
11:05 AM - 11:10 AM	48.7	45.6	01:45 PM - 01:50 PM	49.0	46.0	03:25 PM - 03:30 PM	51.6	46.9
11:10 AM - 11:15 AM	48.5	46.8	01:50 PM - 01:55 PM	47.0	45.8	03:30 PM - 03:35 PM	46.1	45.2
11:15 AM - 11:20 AM	48.8	45.6	01:55 PM - 02:00 PM	46.7	46.0	03:35 PM - 03:40 PM	47.1	45.8
11:20 AM - 11:25 AM	49.7	47.0	02:00 PM - 02:05 PM	45.9	45.1	03:40 PM - 03:45 PM	47.1	45.4
11:25 AM - 11:30 AM	47.7	46.1	02:05 PM - 02:10 PM	46.7	45.0	03:45 PM - 03:50 PM	48.6	46.0
11:30 AM - 11:35 AM	50.8	47.2	02:10 PM - 02:15 PM	46.0	45.1	03:50 PM - 03:55 PM	47.9	45.4
11:35 AM - 11:40 AM	50.2	47.1	02:15 PM - 02:20 PM	46.9	45.2	03:55 PM - 04:00 PM	50.0	45.4
11:40 AM - 11:45 AM	48.1	45.5	02:20 PM - 02:25 PM	48.2	45.9	04:00 PM - 04:05 PM	49.0	45.7
11:45 AM - 11:50 AM	50.1	43.2	02:25 PM - 02:30 PM	47.2	46.3	04:05 PM - 04:10 PM	48.8	46.7
11:50 AM - 11:55 AM	55.9	47.2	02:30 PM - 02:35 PM	51.6	47.4	04:10 PM - 04:15 PM	50.0	47.2
11:55 AM - 12:00 PM	49.3	45.7	02:35 PM - 02:40 PM	48.1	46.3	04:15 PM - 04:20 PM	49.7	47.2
12:00 PM - 12:05 PM	47.1	44.6	02:40 PM - 02:45 PM	48.1	46.6	04:20 PM - 04:25 PM	50.3	46.5
12:05 PM - 12:10 PM	47.9	45.1	02:45 PM - 02:50 PM	49.2	47.1	04:25 PM - 04:30 PM	49.9	46.7
12:10 PM - 12:15 PM	50.9	45.5	02:50 PM - 02:55 PM	51.2	46.2	04:30 PM - 04:35 PM	53.0	46.8
12:15 PM - 12:20 PM	49.5	45.9	02:55 PM - 03:00 PM	46.1	46.9	04:35 PM - 04:40 PM	49.0	47.2
12:20 PM - 12:25 PM	47.3	44.4	03:00 PM - 03:05 PM	49.5	47.4	04:40 PM - 04:45 PM	47.7	46.1
12:25 PM - 12:30 PM	44.6	43.4	03:05 PM - 03:10 PM	47.7	46.8	04:45 PM - 04:50 PM	46.6	45.2
12:30 PM - 12:35 PM	46.7	44.7	03:10 PM - 03:15 PM	49.3	46.1	04:50 PM - 04:55 PM	47.0	46.1
12:35 PM - 12:40 PM	49.1	45.8	03:15 PM - 03:20 PM	49.0	45.4	04:55 PM - 05:00 PM	47.7	45.9

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270004-1

Page 2 of 2

Sample Number : 2211209-4
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน้าศูนย์การค้า) (GPS 47P 0726474,1407389)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18 - Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 PM - 06:05 PM	49.8	46.6	06:40 PM - 06:45 PM	50.1	43.9	11:20 PM - 11:25 PM	64.9	46.3
06:05 PM - 06:10 PM	49.4	46.8	06:45 PM - 06:50 PM	46.1	44.1	11:25 PM - 11:30 PM	61.4	46.7
06:10 PM - 06:15 PM	49.8	46.3	06:50 PM - 06:55 PM	53.4	44.6	11:30 PM - 11:35 PM	52.3	44.9
06:15 PM - 06:20 PM	51.1	45.5	06:55 PM - 07:00 PM	47.1	44.7	11:35 PM - 11:40 PM	51.8	45.5
06:20 PM - 06:25 PM	46.8	45.7	07:00 PM - 07:05 PM	47.0	44.6	11:40 PM - 11:45 PM	49.7	45.6
06:25 PM - 06:30 PM	46.1	45.3	07:05 PM - 07:10 PM	45.4	44.3	11:45 PM - 11:50 PM	53.3	45.8
06:30 PM - 06:35 PM	47.5	44.9	07:10 PM - 07:15 PM	48.7	45.0	11:50 PM - 11:55 PM	47.0	44.8
06:35 PM - 06:40 PM	46.4	44.6	07:15 PM - 07:20 PM	45.8	44.7	11:55 PM - 12:00 AM	58.4	44.2
06:40 PM - 06:45 PM	46.9	44.8	07:20 PM - 07:25 PM	46.2	45.0	12:00 AM - 12:05 AM	47.0	44.8
06:45 PM - 06:50 PM	47.1	44.7	07:25 PM - 07:30 PM	46.2	45.0	12:05 AM - 12:10 AM	45.8	43.7
06:50 PM - 06:55 PM	50.5	45.8	07:30 PM - 07:35 PM	47.6	45.7	12:10 AM - 12:15 AM	46.1	43.6
06:55 PM - 07:00 PM	45.5	44.2	07:35 PM - 07:40 PM	47.7	44.9	12:15 AM - 12:20 AM	46.3	44.0
07:00 PM - 07:05 PM	47.4	44.4	07:40 PM - 07:45 PM	47.1	44.7	12:20 AM - 12:25 AM	45.8	44.3
07:05 PM - 07:10 PM	47.4	44.7	07:45 PM - 07:50 PM	45.6	44.7	12:25 AM - 12:30 AM	49.0	43.8
07:10 PM - 07:15 PM	47.5	44.5	07:50 PM - 07:55 PM	49.2	45.0	12:30 AM - 12:35 AM	47.7	44.6
07:15 PM - 07:20 PM	45.0	43.7	07:55 PM - 10:00 PM	47.6	44.3	12:35 AM - 12:40 AM	48.0	44.1
07:20 PM - 07:25 PM	45.3	44.2	10:00 PM - 10:05 PM	46.7	44.4	12:40 AM - 12:45 AM	45.3	43.8
07:25 PM - 07:30 PM	49.8	45.1	10:05 PM - 10:10 PM	46.9	45.1	12:45 AM - 12:50 AM	45.8	43.6
07:30 PM - 07:35 PM	46.2	44.9	10:10 PM - 10:15 PM	47.3	45.0	12:50 AM - 12:55 AM	46.9	43.9
07:35 PM - 07:40 PM	46.8	44.7	10:15 PM - 10:20 PM	46.0	44.7	12:55 AM - 01:00 AM	49.8	44.3
07:40 PM - 07:45 PM	51.2	45.0	10:20 PM - 10:25 PM	49.2	45.2	01:00 AM - 01:05 AM	45.2	43.7
07:45 PM - 07:50 PM	48.9	44.9	10:25 PM - 10:30 PM	45.8	45.0	01:05 AM - 01:10 AM	44.9	43.4
07:50 PM - 07:55 PM	50.8	45.9	10:30 PM - 10:35 PM	44.8	44.2	01:10 AM - 01:15 AM	45.2	44.0
07:55 PM - 08:00 PM	47.4	45.3	10:35 PM - 10:40 PM	53.1	44.5	01:15 AM - 01:20 AM	44.3	43.4
08:00 PM - 08:05 PM	46.9	45.1	10:40 PM - 10:45 PM	48.1	45.0	01:20 AM - 01:25 AM	46.0	42.9
08:05 PM - 08:10 PM	45.3	44.3	10:45 PM - 10:50 PM	51.4	45.6	01:25 AM - 01:30 AM	45.9	42.8
08:10 PM - 08:15 PM	49.9	45.1	10:50 PM - 10:55 PM	51.5	44.6	01:30 AM - 01:35 AM	49.8	43.4
08:15 PM - 08:20 PM	49.9	46.2	10:55 PM - 11:00 PM	49.9	44.7	01:35 AM - 01:40 AM	46.6	43.8
08:20 PM - 08:25 PM	66.2	46.0	11:00 PM - 11:05 PM	46.1	44.7	01:40 AM - 01:45 AM	45.6	43.4
08:25 PM - 08:30 PM	52.6	45.1	11:05 PM - 11:10 PM	49.0	44.7	01:45 AM - 01:50 AM	47.5	43.5
08:30 PM - 08:35 PM	45.3	44.1	11:10 PM - 11:15 PM	49.3	45.3	01:50 AM - 01:55 AM	44.0	43.4
08:35 PM - 08:40 PM	46.1	44.9	11:15 PM - 11:20 PM	52.1	45.0	01:55 AM - 02:00 AM	45.1	43.8



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Sikom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 84999999
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227005-1

Page 1 of 3

Sample Number	2211209-5							
Parameter	Noise Level (Leq 5 min)							
Location	N1 (หน้าด่านสวนหลวง) (GPS 47 0726474, 1407389)							
Measurement Date	Mar 19 - Mar 20, 2022							
Measurement by	Nontachai Uppathamp							
Sound Level meter	Serial No. 01222723							
Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	46.8	43.6	12:40 PM - 12:45 PM	49.0	42.9	03:20 PM - 03:25 PM	48.2	45.3
02:05 AM - 02:10 AM	44.8	43.6	12:45 PM - 12:50 PM	45.6	42.7	03:25 PM - 03:30 PM	46.5	44.9
02:10 AM - 02:15 AM	45.3	43.9	12:50 PM - 12:55 PM	44.5	42.8	03:30 PM - 03:35 PM	49.3	45.8
02:15 AM - 02:20 AM	45.0	44.1	12:55 PM - 01:00 PM	45.8	42.4	03:35 PM - 03:40 PM	50.4	45.7
02:20 AM - 02:25 AM	44.8	43.7	01:00 PM - 01:05 PM	43.0	41.7	03:40 PM - 03:45 PM	46.8	45.5
02:25 AM - 02:30 AM	48.0	44.0	01:05 PM - 01:10 PM	47.2	42.1	03:45 PM - 03:50 PM	48.7	45.7
02:30 AM - 02:35 AM	45.3	44.0	01:10 PM - 01:15 PM	49.2	42.5	03:50 PM - 03:55 PM	48.6	45.8
02:35 AM - 02:40 AM	45.7	44.1	01:15 PM - 01:20 PM	48.8	43.2	03:55 PM - 04:00 PM	49.2	45.8
02:40 AM - 02:45 AM	47.9	43.6	01:20 PM - 01:25 PM	55.9	42.8	04:00 PM - 04:05 PM	50.4	45.7
02:45 AM - 02:50 AM	47.0	44.1	01:25 PM - 01:30 PM	49.4	42.6	04:05 PM - 04:10 PM	50.3	46.4
02:50 AM - 02:55 AM	44.9	43.9	01:30 PM - 01:35 PM	47.0	43.1	04:10 PM - 04:15 PM	47.4	45.8
02:55 AM - 03:00 AM	44.4	43.5	01:35 PM - 01:40 PM	45.9	43.6	04:15 PM - 04:20 PM	50.1	46.7
03:00 AM - 03:05 AM	44.5	43.4	01:40 PM - 01:45 PM	51.4	45.1	04:20 PM - 04:25 PM	52.8	45.6
03:05 AM - 03:10 AM	46.1	43.1	01:45 PM - 01:50 PM	52.0	44.0	04:25 PM - 04:30 PM	50.3	45.1
03:10 AM - 03:15 AM	44.9	43.3	01:50 PM - 01:55 PM	47.4	44.0	04:30 PM - 04:35 PM	48.4	45.0
03:15 AM - 03:20 AM	47.7	43.7	01:55 PM - 02:00 PM	47.5	44.4	04:35 PM - 04:40 PM	45.8	44.4
03:20 AM - 03:25 AM	45.2	43.6	02:00 PM - 02:05 PM	50.5	45.2	04:40 PM - 04:45 PM	46.6	46.0
03:25 AM - 03:30 AM	45.1	43.5	02:05 PM - 02:10 PM	50.6	45.0	04:45 PM - 04:50 PM	45.7	44.4
03:30 AM - 03:35 AM	44.7	43.5	02:10 PM - 02:15 PM	51.9	44.4	04:50 PM - 04:55 PM	50.0	45.1
03:35 AM - 03:40 AM	45.3	43.5	02:15 PM - 02:20 PM	46.3	43.7	04:55 PM - 05:00 PM	52.6	45.6
03:40 AM - 03:45 AM	44.2	42.8	02:20 PM - 02:25 PM	46.3	43.8	05:00 PM - 05:05 PM	50.0	45.7
03:45 AM - 03:50 AM	44.2	43.1	02:25 PM - 02:30 PM	46.2	44.2	05:05 PM - 05:10 PM	49.5	46.1
03:50 AM - 03:55 AM	44.4	43.0	02:30 PM - 02:35 PM	46.2	44.4	05:10 PM - 05:15 PM	47.5	46.4
03:55 AM - 04:00 PM	45.2	43.5	02:35 PM - 02:40 PM	46.6	44.6	05:15 PM - 05:20 PM	50.4	46.1
04:00 PM - 04:05 PM	44.5	43.3	02:40 PM - 02:45 PM	48.1	45.2	05:20 PM - 05:25 PM	49.8	45.5
04:05 PM - 04:10 PM	44.4	43.2	02:45 PM - 02:50 PM	46.8	45.4	05:25 PM - 05:30 PM	52.6	47.6
04:10 PM - 04:15 PM	46.0	43.4	02:50 PM - 02:55 PM	47.8	45.5	05:30 PM - 05:35 PM	50.6	47.6
04:15 PM - 04:20 PM	45.3	43.6	02:55 PM - 03:00 PM	53.5	46.0	05:35 PM - 05:40 PM	48.6	46.4
04:20 PM - 04:25 PM	47.3	43.8	03:00 PM - 03:05 PM	47.6	45.5	05:40 PM - 05:45 PM	49.6	46.3
04:25 PM - 04:30 PM	50.4	43.3	03:05 PM - 03:10 PM	51.1	46.4	05:45 PM - 05:50 PM	52.4	47.8
04:30 PM - 04:35 PM	44.6	43.4	03:10 PM - 03:15 PM	53.2	46.9	05:50 PM - 05:55 PM	52.2	47.3
04:35 PM - 04:40 PM	47.7	43.4	03:15 PM - 03:20 PM	51.5	46.1	05:55 PM - 06:00 PM	52.3	46.8

Approved by

Sarayu Jittrant
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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Sikom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 84999999
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227005-1

Page 2 of 3

Sample Number	2211209-5							
Parameter	Noise Level (Leq 5 min)							
Location	N1 (Southbound) (GPS 47P 0726474, 1407389)							
Measurement Date	Mar 19 - Mar 20, 2022							
Measurement by	Nontachai Uppathamp							
Sound Level meter	Serial No. 01222723							
Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19 - Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 PM - 06:05 PM	51.2	46.5	08:40 PM - 08:45 PM	58.6	51.8	11:20 PM - 11:25 PM	50.6	51.5
06:05 PM - 06:10 PM	50.6	47.1	08:45 PM - 08:50 PM	59.6	51.9	11:25 PM - 11:30 PM	57.4	51.8
06:10 PM - 06:15 PM	52.6	48.3	08:50 PM - 08:55 PM	56.3	51.5	11:30 PM - 11:35 PM	58.3	51.2
06:15 PM - 06:20 PM	51.3	47.4	08:55 PM - 09:00 PM	62.1	54.5	11:35 PM - 11:40 PM	57.6	52.0
06:20 PM - 06:25 PM	54.5	47.2	09:00 PM - 09:05 PM	57.8	51.2	11:40 PM - 11:45 PM	58.9	54.8
06:25 PM - 06:30 PM	61.6	46.6	09:05 PM - 09:10 PM	55.4	50.2	11:45 PM - 11:50 PM	58.2	53.0
06:30 PM - 06:35 PM	62.5	47.8	09:10 PM - 09:15 PM	55.4	51.2	11:50 PM - 11:55 PM	59.8	52.8
06:35 PM - 06:40 PM	58.0	47.0	09:15 PM - 09:20 PM	55.5	51.3	11:55 PM - 12:00 AM	59.2	53.0
06:40 PM - 06:45 PM	51.5	48.3	09:20 PM - 09:25 PM	60.0	52.9	12:00 AM - 12:05 AM	56.5	52.6
06:45 PM - 06:50 PM	57.5	48.3	09:25 PM - 09:30 PM	57.4	52.5	12:05 AM - 12:10 AM	58.4	51.9
06:50 PM - 06:55 PM	55.1	47.8	09:30 PM - 09:35 PM	56.8	51.7	12:10 AM - 12:15 AM	61.0	54.7
06:55 PM - 07:00 PM	51.5	46.9	09:35 PM - 09:40 PM	58.1	54.1	12:15 AM - 12:20 AM	56.5	52.5
07:00 PM - 07:05 PM	58.0	48.1	09:40 PM - 09:45 PM	58.2	54.6	12:20 AM - 12:25 AM	60.9	51.2
07:05 PM - 07:10 PM	57.3	47.7	09:45 PM - 09:50 PM	58.0	53.8	12:25 AM - 12:30 AM	57.5	51.9
07:10 PM - 07:15 PM	51.2	47.3	09:50 PM - 09:55 PM	59.4	53.8	12:30 AM - 12:35 AM	58.3	50.1
07:15 PM - 07:20 PM	49.8	47.0	09:55 PM - 10:00 PM	60.0	55.1	12:35 AM - 12:40 AM	60.4	49.6
07:20 PM - 07:25 PM	53.1	48.2	10:00 PM - 10:05 PM	56.5	53.4	12:40 AM - 12:45 AM	61.2	50.7
07:25 PM - 07:30 PM	56.6	48.1	10:05 PM - 10:10 PM	56.6	53.2	12:45 AM - 12:50 AM	60.3	52.2
07:30 PM - 07:35 PM	51.3	49.0	10:10 PM - 10:15 PM	57.2	54.6	12:50 AM - 12:55 AM	60.4	50.6
07:35 PM - 07:40 PM	57.5	49.3	10:15 PM - 10:20 PM	57.9	55.6	12:55 AM - 01:00 AM	62.3	52.8
07:40 PM - 07:45 PM	61.7	48.7	10:20 PM - 10:25 PM	57.3	54.2	01:00 AM - 01:05 AM	60.5	51.4
07:45 PM - 07:50 PM	61.0	47.7	10:25 PM - 10:30 PM	57.0	54.0	01:05 AM - 01:10 AM	59.9	52.4
07:50 PM - 07:55 PM	60.0	51.4	10:30 PM - 10:35 PM	58.8	54.8	01:10 AM - 01:15 AM	65.5	52.8
07:55 PM - 08:00 PM	57.7	52.5	10:35 PM - 10:40 PM	61.1	53.2	01:15 AM - 01:20 AM	56.1	51.3
08:00 PM - 08:05 PM	60.1	53.1	10:40 PM - 10:45 PM	58.7	54.8	01:20 AM - 01:25 AM	58.0	51.4
08:05 PM - 08:10 PM	62.6	60.2	10:45 PM - 10:50 PM	60.2	52.8	01:25 AM - 01:30 AM	57.0	51.3
08:10 PM - 08:15 PM	61.8	60.2	10:50 PM - 10:55 PM	58.4	52.8	01:30 AM - 01:35 AM	60.0	52.5
08:15 PM - 08:20 PM	62.2	61.0	10:55 PM - 11:00 PM	58.2	50.8	01:35 AM - 01:40 AM	65.0	53.5
08:20 PM - 08:25 PM	63.2	62.3	11:00 PM - 11:05 PM	58.9	54.2	01:40 AM - 01:45 AM	67.2	53.1
08:25 PM - 08:30 PM	64.1	60.8	11:05 PM - 11:10 PM	59.0	53.8	01:45 AM - 01:50 AM	57.9	54.1
08:30 PM - 08:35 PM	64.7	64.1	11:10 PM - 11:15 PM	57.7	53.5	01:50 AM - 01:55 AM	55.9	49.6
08:35 PM - 08:40 PM	64.2	62.7	11:15 PM - 11:20 PM	57.1	52.8	01:55 AM - 02:00 AM	57.1	53.1

Approved by

Sarayu Jittrant
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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Sikom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 84999999
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227005-1

Page 2 of 3

Sample Number	2211209-5					Sample Number	2211209-5				
Parameter	Noise Level (Leq 5 min)					Parameter	Noise Level (Leq 5 min)				
Location	N1 (ทางหลวงแผ่นดิน) (GPS 47°07'26.474, 140°7'38.9)					Location	N1 (ทางหลวงแผ่นดิน) (GPS 47°07'26.474, 140°7'38.9)				
Measurement Date	Mar 19 - Mar 20, 2022					Measurement Date	Mar 19 - Mar 20, 2022				
Measurement by	Nontachai Uppathamp					Measurement by	Nontachai Uppathamp				
Sound Level meter	Serial No. 0122273					Sound Level meter	Serial No. 0122273				
Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	56.5	53.9	04:40 AM - 04:45 AM	54.9	50.5	07:20 AM - 07:25 AM	59.0	52.1	07:20 AM - 07:25 AM	57.9	48.6
02:05 AM - 02:10 AM	56.1	50.5	04:45 AM - 04:50 AM	56.4	51.9	07:25 AM - 07:30 AM	57.9	48.6	07:25 AM - 07:30 AM	57.9	48.6
02:10 AM - 02:15 AM	64.2	51.0	04:50 AM - 04:55 AM	58.7	51.8	07:30 AM - 07:35 AM	59.9	47.1	07:30 AM - 07:35 AM	59.9	47.1
02:15 AM - 02:20 AM	59.0	53.5	04:55 AM - 05:00 AM	57.6	51.9	07:35 AM - 07:40 AM	62.0	48.3	07:35 AM - 07:40 AM	62.0	48.3
02:20 AM - 02:25 AM	57.6	50.0	05:00 AM - 05:05 AM	56.2	50.7	07:40 AM - 07:45 AM	58.8	50.2	07:40 AM - 07:45 AM	58.8	50.2
02:25 AM - 02:30 AM	56.0	52.6	05:05 AM - 05:10 AM	56.3	49.2	07:45 AM - 07:50 AM	55.8	48.6	07:45 AM - 07:50 AM	55.8	48.6
02:30 AM - 02:35 AM	61.4	51.1	05:10 AM - 05:15 AM	58.6	52.9	07:50 AM - 07:55 AM	56.6	49.1	07:50 AM - 07:55 AM	56.6	49.1
02:35 AM - 02:40 AM	56.6	50.5	05:15 AM - 05:20 AM	56.6	50.5	07:55 AM - 08:00 AM	55.6	47.4	07:55 AM - 08:00 AM	55.6	47.4
02:40 AM - 02:45 AM	55.7	49.9	05:20 AM - 05:25 AM	56.9	51.2	08:00 AM - 08:05 AM	56.8	45.0	08:00 AM - 08:05 AM	56.8	45.0
02:45 AM - 02:50 AM	57.8	52.0	05:25 AM - 05:30 AM	55.6	47.8	08:05 AM - 08:10 AM	57.9	51.0	08:05 AM - 08:10 AM	57.9	51.0
02:50 AM - 02:55 AM	56.7	56.4	05:30 AM - 05:35 AM	59.1	52.6	08:10 AM - 08:15 AM	58.1	47.2	08:10 AM - 08:15 AM	58.1	47.2
02:55 AM - 03:00 AM	57.5	49.2	05:35 AM - 05:40 AM	59.3	52.6	08:15 AM - 08:20 AM	60.6	48.0	08:15 AM - 08:20 AM	60.6	48.0
03:00 AM - 03:05 AM	53.7	48.5	05:40 AM - 05:45 AM	53.0	47.6	08:20 AM - 08:25 AM	63.4	50.1	08:20 AM - 08:25 AM	63.4	50.1
03:05 AM - 03:10 AM	59.5	53.4	05:45 AM - 05:50 AM	54.8	48.5	08:25 AM - 08:30 AM	61.0	47.8	08:25 AM - 08:30 AM	61.0	47.8
03:10 AM - 03:15 AM	57.8	52.5	05:50 AM - 05:55 AM	57.8	50.5	08:30 AM - 08:35 AM	58.4	44.4	08:30 AM - 08:35 AM	58.4	44.4
03:15 AM - 03:20 AM	56.5	50.9	05:55 AM - 06:00 AM	57.7	50.7	08:35 AM - 08:40 AM	55.8	45.8	08:35 AM - 08:40 AM	55.8	45.8
03:20 AM - 03:25 AM	59.8	54.5	06:00 AM - 06:05 AM	59.8	51.4	08:40 AM - 08:45 AM	55.2	47.7	08:40 AM - 08:45 AM	55.2	47.7
03:25 AM - 03:30 AM	56.0	50.9	06:05 AM - 06:10 AM	58.0	49.2	08:45 AM - 08:50 AM	53.5	43.2	08:45 AM - 08:50 AM	53.5	43.2
03:30 AM - 03:35 AM	56.9	48.9	06:10 AM - 06:15 AM	56.5	48.9	08:50 AM - 08:55 AM	60.9	47.3	08:50 AM - 08:55 AM	60.9	47.3
03:35 AM - 03:40 AM	52.6	47.2	06:15 AM - 06:20 AM	61.2	53.5	08:55 AM - 09:00 AM	61.6	46.5	08:55 AM - 09:00 AM	61.6	46.5
03:40 AM - 03:45 AM	57.9	54.7	06:20 AM - 06:25 AM	58.5	47.0	09:00 AM - 09:05 AM	53.6	45.9	09:00 AM - 09:05 AM	53.6	45.9
03:45 AM - 03:50 AM	62.4	52.6	06:25 AM - 06:30 AM	62.5	51.7	09:05 AM - 09:10 AM	59.6	45.2	09:05 AM - 09:10 AM	59.6	45.2
03:50 AM - 03:55 AM	55.1	49.0	06:30 AM - 06:35 AM	57.6	56.6	09:10 AM - 09:15 AM	58.4	47.6	09:10 AM - 09:15 AM	58.4	47.6
03:55 AM - 04:00 AM	57.8	54.3	06:35 AM - 06:40 AM	59.8	48.3	09:15 AM - 09:20 AM	59.5	50.0	09:15 AM - 09:20 AM	59.5	50.0
04:00 AM - 04:05 AM	58.5	50.8	06:40 AM - 06:45 AM	60.0	53.1	09:20 AM - 09:25 AM	53.7	47.9	09:20 AM - 09:25 AM	53.7	47.9
04:05 AM - 04:10 AM	57.7	52.4	06:45 AM - 06:50 AM	60.5	47.1	09:25 AM - 09:30 AM	55.2	47.5	09:25 AM - 09:30 AM	55.2	47.5
04:10 AM - 04:15 AM	58.8	51.0	06:50 AM - 06:55 AM	56.2	50.0	09:30 AM - 09:35 AM	54.6	49.4	09:30 AM - 09:35 AM	54.6	49.4
04:15 AM - 04:20 AM	57.5	50.4	06:55 AM - 07:00 AM	63.5	52.9	09:35 AM - 09:40 AM	56.4	49.1	09:35 AM - 09:40 AM	56.4	49.1
04:20 AM - 04:25 AM	56.6	52.0	07:00 AM - 07:05 AM	57.3	48.2	09:40 AM - 09:45 AM	51.3	46.6	09:40 AM - 09:45 AM	51.3	46.6
04:25 AM - 04:30 AM	59.9	51.1	07:05 AM - 07:10 AM	58.1	50.7	09:45 AM - 09:50 AM	52.9	46.2	09:45 AM - 09:50 AM	52.9	46.2
04:30 AM - 04:35 AM	58.0	47.9	07:10 AM - 07:15 AM	64.3	47.3	09:50 AM - 09:55 AM	50.4	44.7	09:50 AM - 09:55 AM	50.4	44.7
04:35 AM - 04:40 AM	61.4	52.5	07:15 AM - 07:20 AM	60.4	52.6	09:55 AM - 10:00 AM	54.4	44.4	09:55 AM - 10:00 AM	54.4	44.4

Approved by

Sarayu Jittrant
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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Sikom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 84999999
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227005-1

Page 3 of 3

Sample Number	2211209-6									
Parameter	Noise Level (Leq 5 min)									
Location	N1 (ถนนสุขุมวิท) (GPS 47P 0726474,1407389)									
Measurement Date	Mar 20 - Mar 21, 2022									
Measurement by	Nontachai Uppathamp									
Sound Level meter	Serial No. 01222723									
Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90		
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)		
10:00 AM - 10:05 AM	53.6	46.4	12:40 PM - 12:45 PM	48.3	41.4	03:00 PM - 03:05 PM	56.2	47.9		
10:05 AM - 10:10 AM	61.6	45.7	12:45 PM - 12:50 PM	50.6	45.1	03:05 PM - 03:10 PM	53.1	44.6		
10:10 AM - 10:15 AM	54.8	46.0	12:50 PM - 12:55 PM	62.2	50.5	03:10 PM - 03:15 PM	53.3	45.1		
10:15 AM - 10:20 AM	55.2	48.9	12:55 PM - 01:00 PM	55.7	44.0	03:15 PM - 03:40 PM	52.1	46.3		
10:20 AM - 10:25 AM	53.0	47.1	01:00 PM - 01:05 PM	55.5	47.7	03:40 PM - 03:45 PM	52.8	45.7		
10:25 AM - 10:30 AM	54.0	48.8	01:05 PM - 01:10 PM	52.2	44.5	03:45 PM - 03:50 PM	52.7	45.0		
10:30 AM - 10:35 AM	50.0	44.6	01:10 PM - 01:15 PM	56.3	43.3	03:50 PM - 03:55 PM	55.1	47.2		
10:35 AM - 10:40 AM	52.4	46.5	01:15 PM - 01:20 PM	50.9	46.3	03:55 PM - 04:00 PM	53.8	47.8		
10:40 AM - 10:45 AM	59.8	43.8	01:20 PM - 01:25 PM	53.0	46.3	04:00 PM - 04:05 PM	63.8	45.1		
10:45 AM - 10:50 AM	53.9	43.7	01:25 PM - 01:30 PM	53.5	47.8	04:05 PM - 04:10 PM	53.1	44.9		
10:50 AM - 10:55 AM	59.1	48.9	01:30 PM - 01:35 PM	52.0	45.8	04:10 PM - 04:15 PM	52.2	45.5		
10:55 AM - 11:00 AM	51.8	45.4	01:35 PM - 01:40 PM	53.9	49.7	04:15 PM - 04:20 PM	56.5	47.0		
11:00 AM - 11:05 AM	64.7	51.6	01:40 PM - 01:45 PM	55.2	46.2	04:20 PM - 04:25 PM	52.5	46.3		
11:05 AM - 11:10 AM	56.4	44.0	01:45 PM - 01:50 PM	52.8	45.7	04:25 PM - 04:30 PM	51.3	45.7		
11:10 AM - 11:15 AM	52.8	46.3	01:50 PM - 01:55 PM	50.7	44.9	04:30 PM - 04:35 PM	52.7	44.6		
11:15 AM - 11:20 AM	56.0	49.8	01:55 PM - 02:00 PM	48.7	41.9	04:35 PM - 04:40 PM	56.2	49.9		
11:20 AM - 11:25 AM	60.3	46.9	02:00 PM - 02:05 PM	49.9	46.5	04:40 PM - 04:45 PM	53.8	47.0		
11:25 AM - 11:30 AM	54.2	43.9	02:05 PM - 02:10 PM	64.7	46.0	04:45 PM - 04:50 PM	55.0	49.4		
11:30 AM - 11:35 AM	52.7	46.9	02:10 PM - 02:15 PM	62.9	46.7	04:50 PM - 04:55 PM	59.8	48.4		
11:35 AM - 11:40 AM	51.2	44.7	02:15 PM - 02:20 PM	49.2	45.0	04:55 PM - 05:00 PM	55.4	49.8		
11:40 AM - 11:45 AM	57.0	50.3	02:20 PM - 02:25 PM	52.7	46.2	05:00 PM - 05:05 PM	54.3	47.0		
11:45 AM - 11:50 AM	51.4	44.4	02:25 PM - 02:30 PM	51.8	47.0	05:05 PM - 05:10 PM	52.1	44.3		
11:50 AM - 11:55 AM	58.4	49.3	02:30 PM - 02:35 PM	54.8	50.2	05:10 PM - 05:15 PM	54.0	48.6		
11:55 AM - 12:00 PM	65.2	46.3	02:35 PM - 02:40 PM	53.8	45.9	05:15 PM - 05:20 PM	53.5	47.2		
12:00 PM - 12:05 PM	63.1	47.4	02:40 PM - 02:45 PM	60.2	46.8	05:20 PM - 05:25 PM	51.1	44.8		
12:05 PM - 12:10 PM	64.7	45.8	02:45 PM - 02:50 PM	55.3	46.7	05:25 PM - 05:30 PM	54.7	44.7		
12:10 PM - 12:15 PM	59.0	49.2	02:50 PM - 02:55 PM	59.9	44.3	05:30 PM - 05:35 PM	53.2	45.2		
12:15 PM - 12:20 PM	59.0	45.2	02:55 PM - 03:00 PM	51.4	50.0	05:35 PM - 05:40 PM	53.3	43.5		
12:20 PM - 12:25 PM	58.5	46.1	03:00 PM - 03:05 PM	56.0	49.1	05:40 PM - 05:45 PM	57.9	50.0		
12:25 PM - 12:30 PM	63.3	43.9	03:05 PM - 03:10 PM	54.5	47.1	05:45 PM - 05:50 PM	54.7	48.8		
12:30 PM - 12:35 PM	52.6	43.7	03:10 PM - 03:15 PM	54.4	46.0	05:50 PM - 05:55 PM	60.5	46.2		
12:35 PM - 12:40 PM	71.6	46.6	03:15 PM - 03:20 PM	52.7	43.0	05:55 PM - 06:00 PM	51.7	43.3		



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270006-1

Page 2 of 3

Sample Number : 2211209-6
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน่วยวัดเสียง) (GPS 47P 0726474,1407389)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20 - Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 PM - 06:05 PM	52.6	45.2	08:40 PM - 08:45 PM	54.3	48.5	11:20 PM - 11:25 PM	54.7	49.8
06:05 PM - 06:10 PM	51.4	43.5	08:45 PM - 08:50 PM	55.7	46.5	11:25 PM - 11:30 PM	54.2	45.5
06:10 PM - 06:15 PM	55.7	45.6	08:50 PM - 08:55 PM	52.1	45.6	11:30 PM - 11:35 PM	54.2	49.5
06:15 PM - 06:20 PM	54.1	48.8	08:55 PM - 09:00 PM	56.2	44.0	11:35 PM - 11:40 PM	62.8	45.5
06:20 PM - 06:25 PM	52.2	45.0	09:00 PM - 09:05 PM	53.1	47.0	11:40 PM - 11:45 PM	65.0	51.2
06:25 PM - 06:30 PM	53.7	46.6	09:05 PM - 09:10 PM	64.7	47.1	11:45 PM - 11:50 PM	57.9	49.6
06:30 PM - 06:35 PM	53.3	45.6	09:10 PM - 09:15 PM	59.1	48.9	11:50 PM - 11:55 PM	61.5	46.9
06:35 PM - 06:40 PM	53.1	45.8	09:15 PM - 09:20 PM	54.3	46.1	11:55 PM - 12:00 AM	63.0	51.0
06:40 PM - 06:45 PM	52.2	44.1	09:20 PM - 09:25 PM	56.6	47.9	12:00 AM - 12:05 AM	57.8	46.9
06:45 PM - 06:50 PM	54.0	46.4	09:25 PM - 09:30 PM	52.5	48.3	12:05 AM - 12:10 AM	61.7	51.3
06:50 PM - 06:55 PM	56.9	41.8	09:30 PM - 09:35 PM	53.1	44.7	12:10 AM - 12:15 AM	63.8	49.0
06:55 PM - 07:00 PM	54.3	47.8	09:35 PM - 09:40 PM	53.5	45.7	12:15 AM - 12:20 AM	54.2	45.5
07:00 PM - 07:05 PM	48.1	42.7	09:40 PM - 09:45 PM	56.7	47.3	12:20 AM - 12:25 AM	60.1	48.9
07:05 PM - 07:10 PM	51.7	47.0	09:45 PM - 09:50 PM	49.2	42.4	12:25 AM - 12:30 AM	53.3	45.0
07:10 PM - 07:15 PM	53.1	46.1	09:50 PM - 09:55 PM	52.9	46.6	12:30 AM - 12:35 AM	52.2	45.6
07:15 PM - 07:20 PM	55.6	48.7	09:55 PM - 10:00 PM	64.9	50.2	12:35 AM - 12:40 AM	55.5	48.3
07:20 PM - 07:25 PM	52.2	45.6	10:00 PM - 10:05 PM	56.5	50.0	12:40 AM - 12:45 AM	53.1	44.8
07:25 PM - 07:30 PM	57.3	45.8	10:05 PM - 10:10 PM	53.4	46.7	12:45 AM - 12:50 AM	58.2	51.5
07:30 PM - 07:35 PM	55.3	48.7	10:10 PM - 10:15 PM	51.8	48.5	12:50 AM - 12:55 AM	59.9	50.4
07:35 PM - 07:40 PM	55.9	47.6	10:15 PM - 10:20 PM	56.0	46.8	12:55 AM - 01:00 AM	64.6	50.3
07:40 PM - 07:45 PM	54.1	47.6	10:20 PM - 10:25 PM	64.5	49.8	01:00 AM - 01:05 AM	52.5	45.0
07:45 PM - 07:50 PM	55.5	46.3	10:25 PM - 10:30 PM	49.5	42.0	01:05 AM - 01:10 AM	55.0	50.8
07:50 PM - 07:55 PM	55.9	45.1	10:30 PM - 10:35 PM	54.8	45.0	01:10 AM - 01:15 AM	56.5	47.7
07:55 PM - 08:00 PM	53.6	47.7	10:35 PM - 10:40 PM	52.7	44.7	01:15 AM - 01:20 AM	53.6	47.6
08:00 PM - 08:05 PM	57.9	46.9	10:40 PM - 10:45 PM	55.9	47.3	01:20 AM - 01:25 AM	55.0	48.3
08:05 PM - 08:10 PM	59.3	52.8	10:45 PM - 10:50 PM	55.4	46.5	01:25 AM - 01:30 AM	55.7	44.4
08:10 PM - 08:15 PM	55.6	44.2	10:50 PM - 10:55 PM	51.2	47.2	01:30 AM - 01:35 AM	51.6	43.4
08:15 PM - 08:20 PM	57.2	44.2	10:55 PM - 11:00 PM	53.2	45.3	01:35 AM - 01:40 AM	53.4	42.6
08:20 PM - 08:25 PM	54.5	48.4	11:00 PM - 11:05 PM	53.0	43.6	01:40 AM - 01:45 AM	54.9	46.2
08:25 PM - 08:30 PM	56.5	41.6	11:05 PM - 11:10 PM	52.0	46.0	01:45 AM - 01:50 AM	48.8	45.2
08:30 PM - 08:35 PM	51.6	44.0	11:10 PM - 11:15 PM	52.1	47.0	01:50 AM - 01:55 AM	53.2	45.2
08:35 PM - 08:40 PM	54.1	45.0	11:15 PM - 11:20 PM	53.1	44.6	01:55 AM - 02:00 AM	58.2	49.0

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | TEL: +66 0 2760 3000 | FAX: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270006-1

Page 3 of 3

Sample Number : 2211209-6
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน่วยวัดเสียง) (GPS 47P 0726474,1407389)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21 - Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	54.6	43.7	04:40 AM - 04:45 AM	54.7	42.3	07:20 AM - 07:25 AM	51.9	43.1
02:05 AM - 02:10 AM	54.1	46.9	04:45 AM - 04:50 AM	58.8	46.2	07:25 AM - 07:30 AM	53.2	49.4
02:10 AM - 02:15 AM	52.9	42.1	04:50 AM - 04:55 AM	51.5	45.0	07:30 AM - 07:35 AM	52.3	41.7
02:15 AM - 02:20 AM	52.7	46.8	04:55 AM - 05:00 AM	50.4	43.1	07:35 AM - 07:40 AM	53.2	44.2
02:20 AM - 02:25 AM	55.5	48.9	05:00 AM - 05:05 AM	53.9	45.7	07:40 AM - 07:45 AM	53.1	48.2
02:25 AM - 02:30 AM	54.6	46.2	05:05 AM - 05:10 AM	56.1	45.4	07:45 AM - 07:50 AM	57.6	50.2
02:30 AM - 02:35 AM	54.1	48.5	05:10 AM - 05:15 AM	56.5	45.9	07:50 AM - 07:55 AM	57.2	46.6
02:35 AM - 02:40 AM	55.0	46.1	05:15 AM - 05:20 AM	52.4	43.0	07:55 AM - 08:00 AM	52.7	48.1
02:40 AM - 02:45 AM	56.2	49.6	05:20 AM - 05:25 AM	60.4	44.3	08:00 AM - 08:05 AM	50.8	45.4
02:45 AM - 02:50 AM	51.3	44.3	05:25 AM - 05:30 AM	60.6	49.8	08:05 AM - 08:10 AM	56.6	54.2
02:50 AM - 02:55 AM	61.3	49.7	05:30 AM - 05:35 AM	61.5	46.6	08:10 AM - 08:15 AM	61.3	50.1
02:55 AM - 03:00 AM	62.4	45.3	05:35 AM - 05:40 AM	59.5	44.1	08:15 AM - 08:20 AM	59.3	50.2
03:00 AM - 03:05 AM	57.3	41.3	05:40 AM - 05:45 AM	59.5	44.1	08:20 AM - 08:25 AM	52.6	42.0
03:05 AM - 03:10 AM	52.8	41.5	05:45 AM - 05:50 AM	60.8	45.4	08:25 AM - 08:30 AM	52.6	46.1
03:10 AM - 03:15 AM	50.7	42.0	05:50 AM - 05:55 AM	53.8	47.2	08:30 AM - 08:35 AM	55.1	47.8
03:15 AM - 03:20 AM	52.5	45.1	05:55 AM - 06:00 AM	61.5	46.6	08:35 AM - 08:40 AM	55.9	49.9
03:20 AM - 03:25 AM	53.3	47.8	06:00 AM - 06:05 AM	50.5	45.7	08:40 AM - 08:45 AM	61.3	51.7
03:25 AM - 03:30 AM	62.2	46.1	06:05 AM - 06:10 AM	54.3	45.8	08:45 AM - 08:50 AM	58.5	52.9
03:30 AM - 03:35 AM	59.7	49.1	06:10 AM - 06:15 AM	52.4	43.6	08:50 AM - 08:55 AM	54.5	46.3
03:35 AM - 03:40 AM	51.6	43.3	06:15 AM - 06:20 AM	52.9	45.8	08:55 AM - 09:00 AM	59.7	49.7
03:40 AM - 03:45 AM	51.2	44.4	06:20 AM - 06:25 AM	51.9	45.8	09:00 AM - 09:05 AM	62.6	49.4
03:45 AM - 03:50 AM	49.5	43.4	06:25 AM - 06:30 AM	54.2	44.3	09:05 AM - 09:10 AM	55.0	48.8
03:50 AM - 03:55 AM	51.6	47.3	06:30 AM - 06:35 AM	60.0	49.1	09:10 AM - 09:15 AM	52.4	43.6
03:55 AM - 04:00 AM	54.0	49.8	06:35 AM - 06:40 AM	54.7	49.8	09:15 AM - 09:20 AM	56.7	50.3
04:00 AM - 04:05 AM	50.1	44.4	06:40 AM - 06:45 AM	52.7	43.6	09:20 AM - 09:25 AM	54.0	45.2
04:05 AM - 04:10 AM	55.1	51.5	06:45 AM - 06:50 AM	58.2	49.6	09:25 AM - 09:30 AM	54.8	50.1
04:10 AM - 04:15 AM	52.6	47.2	06:50 AM - 06:55 AM	52.9	44.7	09:30 AM - 09:35 AM	48.7	43.4
04:15 AM - 04:20 AM	54.4	46.7	06:55 AM - 07:00 AM	60.1	43.8	09:35 AM - 09:40 AM	52.3	42.0
04:20 AM - 04:25 AM	54.6	47.0	07:00 AM - 07:05 AM	50.6	44.4	09:40 AM - 09:45 AM	54.2	48.9
04:25 AM - 04:30 AM	52.8	47.5	07:05 AM - 07:10 AM	60.1	49.0	09:45 AM - 09:50 AM	53.5	47.7
04:30 AM - 04:35 AM	53.5	42.5	07:10 AM - 07:15 AM	50.7	44.2	09:50 AM - 09:55 AM	57.1	50.5
04:35 AM - 04:40 AM	52.9	41.7	07:15 AM - 07:20 AM	51.0	43.3	09:55 AM - 10:00 AM	56.7	53.5

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | TEL: +66 0 2760 3000 | FAX: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270007-1

Page 1 of 3

Sample Number : 2211209-7
Parameter : Noise Level (Leq 5 min)
Location : N1 (หน่วยวัดเสียง) (GPS 47P 0726474,1407389)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 21, 2022			Mar 21, 2022			Mar 21, 2022		
Time	Leq	L90	Time	Leq	L90	Time	Leq	L90
	dB(A)	dB(A)		dB(A)	dB(A)		dB(A)	dB(A)
10:00 AM - 10:05 AM	59.9	49.6	12:40 PM - 12:45 PM	53.6	43.3	03:20 PM - 03:25 PM	51.5	44.9
10:05 AM - 10:10 AM	56.4	50.1	12:45 PM - 12:50 PM	52.8	45.3	03:25 PM - 03:30 PM	50.1	41.5
10:10 AM - 10:15 AM	58.0	47.8	12:50 PM - 12:55 PM	52.1	47.8	03:30 PM - 03:35 PM	49.6	45.5
10:15 AM - 10:20 AM	55.7	44.7	12:55 PM - 01:00 PM	58.6	49.4	03:35 PM - 03:40 PM	51.6	43.9
10:20 AM - 10:25 AM	61.7	47.4	01:00 PM - 01:05 PM	54.0	47.5	03:40 PM - 03:45 PM	50.4	44.5
10:25 AM - 10:30 AM	57.3	49.1	01:05 PM - 01:10 PM	52.5	46.8	03:45 PM - 03:50 PM	52.0	47.7
10:30 AM - 10:35 AM	62.8	52.8	01:10 PM - 01:15 PM	54.6	46.0	03:50 PM - 03:55 PM	61.6	43.3
10:35 AM - 10:40 AM	54.6	47.2	01:15 PM - 01:20 PM	56.0	48.6	03:55 PM - 04:00 PM	64.1	47.3
10:40 AM - 10:45 AM	61.3	51.8	01:20 PM - 01:25 PM	53.8	46.5	04:00 PM - 04:05 PM	50.6	45.0
10:45 AM - 10:50 AM	55.0	46.4	01:25 PM - 01:30 PM	54.7	50.1	04:05 PM - 04:10 PM	63.8	45.4
10:50 AM - 10:55 AM	56.0	47.7	01:30 PM - 01:35 PM	52.4	42.8	04:10 PM - 04:15 PM	63.3	44.2
10:55 AM - 11:00 AM	62.0	48.1	01:35 PM - 01:40 PM	56.8	47.7	04:15 PM - 04:20 PM	63.0	46.2
11:00 AM - 11:05 AM	57.2	49.0	01:40 PM - 01:45 PM	57.2	49.5	04:20 PM - 04:25 PM	54.6	49.4
11:05 AM - 11:10 AM	63.4	45.5	01:45 PM - 01:50 PM	57.2	47.3	04:25 PM - 04:30 PM	53.3	46.8
11:10 AM - 11:15 AM	63.8	44.5	01:50 PM - 01:55 PM	55.2	47.4	04:30 PM - 04:35 PM	63.8	43.0
11:15 AM - 11:20 AM	51.2	45.1	01:55 PM - 02:00 PM	51.6	47.4	04:35 PM - 04:40 PM	60.0	48.9
11:20 AM - 11:25 AM	53.5	48.1	02:00 PM - 02:05 PM	54.7	48.2	04:40 PM - 04:45 PM	57.0	48.2
11:25 AM - 11:30 AM	54.4	49.6	02:05 PM - 02:10 PM	55.2	47.2	04:45 PM - 04:50 PM	61.0	47.7
11:30 AM - 11:35 AM	57.1	47.8	02:10 PM - 02:15 PM	58.1	49.1	04:50 PM - 04:55 PM	53.5	48.8
11:35 AM - 11:40 AM	60.7	50.4	02:15 PM - 02:20 PM	58.6	46.3	04:55 PM - 05:00 PM	52.4	44.9
11:40 AM - 11:45 AM	60.7	44.1	02:20 PM - 02:25 PM	59.5	47.2	05:00 PM - 05:05 PM	47.8	42.7
11:45 AM - 11:50 AM	59.4	51.1	02:25 PM - 02:30 PM	49.9	44.0	05:05 PM - 05:10 PM	56.3	50.3
11:50 AM - 11:55 AM	54.5	48.1	02:30 PM - 02:35 PM			05:10 PM - 05:15 PM	59.7	44.6
11:55 AM - 12:00 PM	62.9	46.8	02:35 PM - 02:40 PM	53.3	46.5	05:15 PM - 05:20 PM	54.4	43.9
12:00 PM - 12:05 PM	52.0	44.8	02:40 PM - 02:45 PM	50.9	44.0	05:20 PM - 05:25 PM	58.7	47.0
12:05 PM - 12:10 PM	58.8	46.5	02:45 PM - 02:50 PM	51.3	45.0	05:25 PM - 05:30 PM	59.4	43.1
12:10 PM - 12:15 PM	51.6	44.7	02:50 PM - 02:55 PM	57.2	46.8	05:30 PM - 05:35 PM	54.0	47.7
12:15 PM - 12:20 PM	51.3	45.3	02:55 PM - 03:00 PM	50.4	45.2	05:35 PM - 05:40 PM	49.1	45.9
12:20 PM - 12:25 PM	54.4	42.1	03:00 PM - 03:05 PM	48.8	47.1	05:40 PM - 05:45 PM	59.3	42.3
12:25 PM - 12:30 PM	50.6	44.8	03:05 PM - 03:10 PM	51.2	46.7	05:45 PM - 05:50 PM	50.0	42.3
12:30 PM - 12:35 PM	53.7	45.3	03:10 PM - 03:15 PM	51.8	45.0	05:50 PM - 05:55 PM	51.9	46.4
12:35 PM - 12:40 PM	51.3	42.1	03:15 PM - 03:20 PM	46.0	44.7	05:55 PM - 06:00 PM	49.1	43.8



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 849979

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270007-1

Page 3 of 3

Sample Number : 2211209-7
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าอาคาร) (GPS 47P 0726474, 1407389)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222723

Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
02:00 AM - 02:05 AM	55.3	47.3	04:40 AM - 04:45 AM	60.2	52.2	07:20 AM - 07:25 AM	53.3	48.6
02:05 AM - 02:10 AM	61.4	49.9	04:45 AM - 04:50 AM	62.6	51.8	07:25 AM - 07:30 AM	55.3	49.8
02:10 AM - 02:15 AM	54.8	46.1	04:50 AM - 04:55 AM	53.3	47.6	07:30 AM - 07:35 AM	56.7	52.5
02:15 AM - 02:20 AM	51.8	47.3	04:55 AM - 05:00 AM	54.8	51.0	07:35 AM - 07:40 AM	53.9	48.2
02:20 AM - 02:25 AM	60.0	51.5	05:00 AM - 05:05 AM	53.0	49.4	07:40 AM - 07:45 AM	56.8	47.7
02:25 AM - 02:30 AM	54.9	49.6	05:05 AM - 05:10 AM	58.5	51.5	07:45 AM - 07:50 AM	53.0	48.0
02:30 AM - 02:35 AM	53.8	48.0	05:10 AM - 05:15 AM	55.5	51.8	07:50 AM - 07:55 AM	61.6	47.8
02:35 AM - 02:40 AM	55.8	48.9	05:15 AM - 05:20 AM	54.0	52.0	07:55 AM - 08:00 AM	60.0	50.0
02:40 AM - 02:45 AM	55.0	49.6	05:20 AM - 05:25 AM	55.3	52.3	08:00 AM - 08:05 AM	60.5	49.3
02:45 AM - 02:50 AM	54.3	48.3	05:25 AM - 05:30 AM	53.4	49.1	08:05 AM - 08:10 AM	56.0	48.6
02:50 AM - 02:55 AM	52.2	45.3	05:30 AM - 05:35 AM	52.9	49.2	08:10 AM - 08:15 AM	57.9	53.4
02:55 AM - 03:00 AM	53.5	45.9	05:35 AM - 05:40 AM	52.6	49.5	08:15 AM - 08:20 AM	56.7	51.4
03:00 AM - 03:05 AM	56.6	46.9	05:40 AM - 05:45 AM	60.2	52.5	08:20 AM - 08:25 AM	56.7	49.5
03:05 AM - 03:10 AM	55.2	51.3	05:45 AM - 05:50 AM	57.2	52.2	08:25 AM - 08:30 AM	58.2	53.0
03:10 AM - 03:15 AM	56.5	49.3	05:50 AM - 05:55 AM	54.9	51.3	08:30 AM - 08:35 AM	56.7	49.4
03:15 AM - 03:20 AM	58.9	45.3	05:55 AM - 06:00 AM	52.2	48.5	08:35 AM - 08:40 AM	52.8	48.2
03:20 AM - 03:25 AM	54.7	46.4	06:00 AM - 06:05 AM	55.1	50.4	08:40 AM - 08:45 AM	54.1	46.8
03:25 AM - 03:30 AM	53.2	45.7	06:05 AM - 06:10 AM	56.4	53.4	08:45 AM - 08:50 AM	53.8	45.8
03:30 AM - 03:35 AM	54.7	50.6	06:10 AM - 06:15 AM	52.4	45.4	08:50 AM - 08:55 AM	53.6	49.0
03:35 AM - 03:40 AM	53.9	47.8	06:15 AM - 06:20 AM	52.0	47.6	08:55 AM - 09:00 AM	56.7	50.6
03:40 AM - 03:45 AM	61.6	47.1	06:20 AM - 06:25 AM	53.7	48.2	09:00 AM - 09:05 AM	54.0	48.8
03:45 AM - 03:50 AM	61.3	49.2	06:25 AM - 06:30 AM	55.9	53.0	09:05 AM - 09:10 AM	53.1	49.0
03:50 AM - 03:55 AM	57.0	51.8	06:30 AM - 06:35 AM	59.1	51.6	09:10 AM - 09:15 AM	62.7	53.2
03:55 AM - 04:00 AM	51.3	48.5	06:35 AM - 06:40 AM	56.6	51.7	09:15 AM - 09:20 AM	55.1	52.0
04:00 AM - 04:05 AM	56.6	47.5	06:40 AM - 06:45 AM	55.1	51.6	09:20 AM - 09:25 AM	52.2	45.7
04:05 AM - 04:10 AM	57.0	49.9	06:45 AM - 06:50 AM	55.5	52.8	09:25 AM - 09:30 AM	53.0	46.8
04:10 AM - 04:15 AM	55.4	49.9	06:50 AM - 06:55 AM	55.8	50.5	09:30 AM - 09:35 AM	56.0	51.3
04:15 AM - 04:20 AM	52.5	47.4	06:55 AM - 07:00 AM	57.3	51.4	09:35 AM - 09:40 AM	55.4	52.1
04:20 AM - 04:25 AM	57.6	52.8	07:00 AM - 07:05 AM	51.4	46.7	09:40 AM - 09:45 AM	55.4	50.5
04:25 AM - 04:30 AM	56.8	51.0	07:05 AM - 07:10 AM	54.4	47.5	09:45 AM - 09:50 AM	52.6	48.5
04:30 AM - 04:35 AM	54.7	51.1	07:10 AM - 07:15 AM	53.6	50.1	09:50 AM - 09:55 AM	57.3	49.8
04:35 AM - 04:40 AM	58.5	51.5	07:15 AM - 07:20 AM	56.0	49.0	09:55 AM - 10:00 AM	61.2	47.9

Approved by

Saranyut Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 9197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 849979

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270008-1

Page 1 of 3

Sample Number : 2211209-8
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าอาคาร) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 AM - 09:05 AM	61.7	58.1	11:40 AM - 11:45 AM	58.2	48.5	02:20 PM - 02:25 PM	66.7	53.6
09:05 AM - 09:10 AM	54.1	44.0	11:45 AM - 11:50 AM	56.6	45.7	02:25 PM - 02:30 PM	58.1	47.2
09:10 AM - 09:15 AM	58.3	48.8	11:50 AM - 11:55 AM	62.7	49.0	02:30 PM - 02:35 PM	59.7	50.1
09:15 AM - 09:20 AM	53.9	44.1	11:55 AM - 12:00 PM	55.9	48.7	02:35 PM - 02:40 PM	70.6	49.0
09:20 AM - 09:25 AM	54.2	44.1	12:00 PM - 12:05 PM	59.5	48.2	02:40 PM - 02:45 PM	61.6	52.7
09:25 AM - 09:30 AM	56.8	47.0	12:05 PM - 12:10 PM	53.9	43.3	02:45 PM - 02:50 PM	51.1	42.6
09:30 AM - 09:35 AM	56.4	49.3	12:10 PM - 12:15 PM	54.4	41.6	02:50 PM - 02:55 PM	58.2	48.4
09:35 AM - 09:40 AM	56.6	48.4	12:15 PM - 12:20 PM	55.9	46.7	02:55 PM - 03:00 PM	57.5	45.5
09:40 AM - 09:45 AM	53.6	48.2	12:20 PM - 12:25 PM	59.6	46.0	03:00 PM - 03:05 PM	56.4	49.0
09:45 AM - 09:50 AM	56.8	53.0	12:25 PM - 12:30 PM	54.0	43.6	03:05 PM - 03:10 PM	51.2	45.0
09:50 AM - 09:55 AM	55.9	46.9	12:30 PM - 12:35 PM	56.7	49.2	03:10 PM - 03:15 PM	55.6	45.6
09:55 AM - 10:00 AM	58.0	51.3	12:35 PM - 12:40 PM	55.6	43.0	03:15 PM - 03:20 PM	57.5	49.3
10:00 AM - 10:05 AM	56.9	47.3	12:40 PM - 12:45 PM	56.9	42.9	03:20 PM - 03:25 PM	52.3	44.5
10:05 AM - 10:10 AM	54.9	44.3	12:45 PM - 12:50 PM	56.9	48.2	03:25 PM - 03:30 PM	57.3	45.5
10:10 AM - 10:15 AM	58.8	51.7	12:50 PM - 12:55 PM	55.1	43.8	03:30 PM - 03:35 PM	60.6	53.7
10:15 AM - 10:20 AM	61.4	45.9	12:55 PM - 01:00 PM	56.3	44.6	03:35 PM - 03:40 PM	57.0	45.2
10:20 AM - 10:25 AM	54.5	47.2	01:00 PM - 01:05 PM	54.1	42.9	03:40 PM - 03:45 PM	58.1	46.3
10:25 AM - 10:30 AM	62.0	49.1	01:05 PM - 01:10 PM	55.4	44.2	03:45 PM - 03:50 PM	68.0	51.6
10:30 AM - 10:35 AM	60.1	47.0	01:10 PM - 01:15 PM	57.5	45.1	03:50 PM - 03:55 PM	58.9	50.4
10:35 AM - 10:40 AM	54.3	48.2	01:15 PM - 01:20 PM	57.3	48.7	03:55 PM - 04:00 PM	57.7	47.2
10:40 AM - 10:45 AM	56.6	46.4	01:20 PM - 01:25 PM	63.1	46.8	04:00 PM - 04:05 PM	58.5	49.6
10:45 AM - 10:50 AM	56.7	48.5	01:25 PM - 01:30 PM	56.0	48.8	04:05 PM - 04:10 PM	62.0	50.7
10:50 AM - 10:55 AM	58.8	47.4	01:30 PM - 01:35 PM	62.4	50.5	04:10 PM - 04:15 PM	62.6	45.6
10:55 AM - 11:00 AM	53.0	46.4	01:35 PM - 01:40 PM	54.2	45.4	04:15 PM - 04:20 PM	62.2	52.5
11:00 AM - 11:05 AM	58.2	44.4	01:40 PM - 01:45 PM	55.6	51.2	04:20 PM - 04:25 PM	58.3	49.9
11:05 AM - 11:10 AM	51.9	44.6	01:45 PM - 01:50 PM	55.2	48.9	04:25 PM - 04:30 PM	58.4	46.0
11:10 AM - 11:15 AM	59.5	50.4	01:50 PM - 01:55 PM	55.0	47.8	04:30 PM - 04:35 PM	63.0	44.6
11:15 AM - 11:20 AM	59.5	49.6	01:55 PM - 02:00 PM	57.0	46.7	04:35 PM - 04:40 PM	60.6	51.5
11:20 AM - 11:25 AM	62.1	51.4	02:00 PM - 02:05 PM	57.3	48.5	04:40 PM - 04:45 PM	55.2	55.2
11:25 AM - 11:30 AM	58.6	50.1	02:05 PM - 02:10 PM	55.4	45.7	04:45 PM - 04:50 PM	59.0	47.4
11:30 AM - 11:35 AM	62.0	47.7	02:10 PM - 02:15 PM	55.4	45.9	04:50 PM - 04:55 PM	56.3	46.3
11:35 AM - 11:40 AM	55.2	44.8	02:15 PM - 02:20 PM	55.9	43.8	04:55 PM - 05:00 PM	62.3	52.5

Approved by

Saranyut Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 9197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 849979

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270008-1

Page 2 of 2

Sample Number : 2211209-8
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าอาคาร) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90	Mar 15 - Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
05:00 PM - 05:05 PM	58.0	51.1	07:40 PM - 07:45 PM	62.7	56.7	10:20 PM - 10:25 PM	60.4	54.6
05:05 PM - 05:10 PM	58.4	48.2	07:45 PM - 07:50 PM	61.6	57.0	10:25 PM - 10:30 PM	58.5	48.2
05:10 PM - 05:15 PM	60.8	49.7	07:50 PM - 07:55 PM	62.6	58.2	10:30 PM - 10:35 PM	63.8	52.0
05:15 PM - 05:20 PM	56.3	45.3	07:55 PM - 08:00 PM	61.3	56.2	10:35 PM - 10:40 PM	57.1	48.6
05:20 PM - 05:25 PM	58.9	47.7	08:00 PM - 08:05 PM	61.6	54.4	10:40 PM - 10:45 PM	61.8	53.9
05:25 PM - 05:30 PM	57.2	48.3	08:05 PM - 08:10 PM	61.1	55.3	10:45 PM - 10:50 PM	59.9	51.1
05:30 PM - 05:35 PM	54.9	43.0	08:10 PM - 08:15 PM	59.5	55.5	10:50 PM - 10:55 PM	56.5	47.1
05:35 PM - 05:40 PM	56.5	48.3	08:15 PM - 08:20 PM	59.4	54.1	10:55 PM - 11:00 PM	59.9	47.1
05:40 PM - 05:45 PM	59.4	43.3	08:20 PM - 08:25 PM	52.2	50.5	11:00 PM - 11:05 PM	54.0	48.1
05:45 PM - 05:50 PM	55.2	46.5	08:25 PM - 08:30 PM	62.7	51.8	11:05 PM - 11:10 PM	59.7	48.8
05:50 PM - 05:55 PM	55.9	47.0	08:30 PM - 08:35 PM	63.2	54.9	11:10 PM - 11:15 PM	56.0	48.7
05:55 PM - 06:00 PM	57.5	49.2	08:35 PM - 08:40 PM	59.6	52.2	11:15 PM - 11:20 PM	59.2	47.5
06:00 PM - 06:05 PM	60.0	51.6	08:40 PM - 08:45 PM	61.3	54.1	11:20 PM - 11:25 PM	56.8	48.2
06:05 PM - 06:10 PM	63.4	52.1	08:45 PM - 08:50 PM	56.1	51.0	11:25 PM - 11:30 PM	58.5	49.7
06:10 PM - 06:15 PM	61.0	54.7	08:50 PM - 08:55 PM	60.7	53.2	11:30 PM - 11:35 PM	54.6	49.0
06:15 PM - 06:20 PM	61.4	50.1	08:55 PM - 09:00 PM	61.1	53.6	11:35 PM - 11:40 PM	59.8	48.2
06:20 PM - 06:25 PM	63.4	53.5	09:00 PM - 09:05 PM	58.7	52.8	11:40 PM - 11:45 PM	56.2	49.2
06:25 PM - 06:30 PM	58.5	49.5	09:05 PM - 09:10 PM	61.0	50.5	11:45 PM - 11:50 PM	58.1	50.3
06:30 PM - 06:35 PM	67.8	50.5	09:10 PM - 09:15 PM	61.9	58.3	11:50 PM - 11:55 PM	57.2	47.1
06:35 PM - 06:40 PM	60.4	54.3	09:15 PM - 09:20 PM	62.3	58.3	11:55 PM - 12:00 AM	57.8	46.8
06:40 PM - 06:45 PM	60.7	67.7	09:20 PM - 09:25 PM	58.4	52.7	12:00 AM - 12:05 AM	56.5	46.1
06:45 PM - 06:50 PM	66.7	61.6	09:25 PM - 09:30 PM	51.5	52.8	12:05 AM - 12:10 AM	56.1	47.6
06:50 PM - 06:55 PM	63.0	60.6	09:30 PM - 09:35 PM	61.6	50.2	12:10 AM - 12:15 AM	59.3	49.3
06:55 PM - 07:00 PM	62.9	60.0	09:35 PM - 09:40 PM	63.3	57.9	12:15 AM - 12:20 AM	64.8	48.4
07:00 PM - 07:05 PM	60.0	53.0	09:40 PM - 09:45 PM	59.1	49.4	12:20 AM - 12:25 AM	58.3	48.5
07:05 PM - 07:10 PM	59.1	56.5	09:45 PM - 09:50 PM	60.1	52.5	12:25 AM - 12:30 AM	59.5	49.9
07:10 PM - 07:15 PM	63.1	53.6	09:50 PM - 09:55 PM	62.4	54.3	12:30 AM - 12:35 AM	57.0	49.5
07:15 PM - 07:20 PM	68.5	60.0	09:55 PM - 10:00 PM	51.0	51.0	12:35 AM - 12:40 AM	56.4	48.7
07:20 PM - 07:25 PM	70.9	70.8	10:00 PM - 10:05 PM	57.8	50.6	12:40 AM - 12:45 AM	60.1	52.8
07:25 PM - 07:30 PM	73.0	68.8	10:05 PM - 10:10 PM	63.2	52.4	12:45 AM - 12:50 AM	58.9	51.0
07:30 PM - 07:35 PM	70.0	68.5	10:10 PM - 10:15 PM	59.6	46.9	12:50 AM - 12:55 AM	61.5	51.3
07:35 PM - 07:40 PM	67.2	59.4	10:15 PM - 10:20 PM	57.9	47.8	12:55 AM - 01:00 AM	59.4	51.4



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Ploet (Sloim 3) Asia Sermik Tower, 7th Floor, Sloim Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270010-1

Page 1 of 3

Sample Number : 2211209-10
Parameter : Noise Level (Leq 5 min)
Location : N2 (ห้วยหมื่น/ห้วยหมื่น) (GPS 47P 0726181,1406270)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 AM - 09:05 AM	59.4	50.2	11:40 AM - 11:45 AM	56.2	49.5	02:30 PM - 02:35 PM	57.5	48.7
09:05 AM - 09:10 AM	56.5	50.2	11:45 AM - 11:50 AM	58.1	50.4	02:35 PM - 02:40 PM	57.5	48.7
09:10 AM - 09:15 AM	57.0	51.0	11:50 AM - 11:55 AM	55.4	47.3	02:40 PM - 02:45 PM	58.3	48.8
09:15 AM - 09:20 AM	56.9	50.6	11:55 AM - 12:00 PM	59.2	49.4	02:45 PM - 02:50 PM	54.9	50.8
09:20 AM - 09:25 AM	58.4	50.7	12:00 PM - 12:05 PM	56.6	48.8	02:50 PM - 02:55 PM	61.6	50.7
09:25 AM - 09:30 AM	56.9	50.4	12:05 PM - 12:10 PM	59.3	50.6	02:55 PM - 03:00 PM	58.1	48.0
09:30 AM - 09:35 AM	54.9	50.5	12:10 PM - 12:15 PM	56.1	49.1	03:00 PM - 03:05 PM	59.3	47.2
09:35 AM - 09:40 AM	57.4	51.5	12:15 PM - 12:20 PM	54.2	46.9	03:05 PM - 03:10 PM	56.7	47.8
09:40 AM - 09:45 AM	59.3	53.2	12:20 PM - 12:25 PM	58.9	48.0	03:10 PM - 03:15 PM	63.4	51.4
09:45 AM - 09:50 AM	58.2	53.1	12:25 PM - 12:30 PM	57.1	49.6	03:15 PM - 03:20 PM	60.9	47.2
09:50 AM - 09:55 AM	57.4	50.5	12:30 PM - 12:35 PM	58.8	50.1	03:20 PM - 03:25 PM	56.7	47.1
09:55 AM - 10:00 AM	58.7	51.4	12:35 PM - 12:40 PM	60.6	54.5	03:25 PM - 03:30 PM	54.4	47.1
10:00 AM - 10:05 AM	61.6	51.3	12:40 PM - 12:45 PM	57.7	48.2	03:30 PM - 03:35 PM	60.0	48.2
10:05 AM - 10:10 AM	55.5	50.7	12:45 PM - 12:50 PM	55.7	47.4	03:35 PM - 03:40 PM	57.2	47.5
10:10 AM - 10:15 AM	58.8	51.9	12:50 PM - 12:55 PM	55.5	48.4	03:40 PM - 03:45 PM	53.1	47.1
10:15 AM - 10:20 AM	55.5	51.2	12:55 PM - 01:00 PM	57.8	48.6	03:45 PM - 03:50 PM	52.5	47.6
10:20 AM - 10:25 AM	58.8	51.1	01:00 PM - 01:05 PM	56.1	47.9	03:50 PM - 03:55 PM	57.0	50.6
10:25 AM - 10:30 AM	58.0	50.7	01:05 PM - 01:10 PM	54.7	46.2	03:55 PM - 04:00 PM	55.8	47.4
10:30 AM - 10:35 AM	56.9	50.8	01:10 PM - 01:15 PM	56.6	48.0	04:00 PM - 04:05 PM	54.7	47.1
10:35 AM - 10:40 AM	62.2	50.9	01:15 PM - 01:20 PM	59.4	47.3	04:05 PM - 04:10 PM	54.1	47.2
10:40 AM - 10:45 AM	56.9	50.7	01:20 PM - 01:25 PM	57.8	49.5	04:10 PM - 04:15 PM	53.8	48.6
10:45 AM - 10:50 AM	61.1	54.6	01:25 PM - 01:30 PM	56.3	48.1	04:15 PM - 04:20 PM	56.0	50.4
10:50 AM - 10:55 AM	55.5	50.1	01:30 PM - 01:35 PM	57.8	48.0	04:20 PM - 04:25 PM	58.3	52.0
10:55 AM - 11:00 AM	63.4	52.6	01:35 PM - 01:40 PM	58.2	50.0	04:25 PM - 04:30 PM	58.9	48.6
11:00 AM - 11:05 AM	57.5	50.3	01:40 PM - 01:45 PM	58.1	48.8	04:30 PM - 04:35 PM	57.2	48.2
11:05 AM - 11:10 AM	56.7	49.7	01:45 PM - 01:50 PM	55.0	47.8	04:35 PM - 04:40 PM	54.3	47.7
11:10 AM - 11:15 AM	59.0	49.8	01:50 PM - 01:55 PM	55.0	48.0	04:40 PM - 04:45 PM	56.4	48.9
11:15 AM - 11:20 AM	54.5	49.6	01:55 PM - 02:00 PM	59.0	54.2	04:45 PM - 04:50 PM	51.0	47.9
11:20 AM - 11:25 AM	57.0	50.5	02:00 PM - 02:05 PM	59.6	49.3	04:50 PM - 04:55 PM	55.1	48.2
11:25 AM - 11:30 AM	58.0	50.6	02:05 PM - 02:10 PM	59.0	49.1	04:55 PM - 05:00 PM	53.7	47.6
11:30 AM - 11:35 AM	55.5	49.7	02:10 PM - 02:15 PM	56.4	47.3	05:00 PM - 05:05 PM	58.1	47.4
11:35 AM - 11:40 AM	71.0	52.5	02:15 PM - 02:20 PM	58.2	49.8	05:05 PM - 05:10 PM	58.5	47.3

Approved by

Saranyut Jitranont
Assistant General Manager

4999999 104 Phatthanakan 40 Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 2 2760 3000 | FAX: +66 2 2760 3197

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RIGHT SOLUTIONS RIGHT PEOPLE



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Ploet (Sloim 3) Asia Sermik Tower, 7th Floor, Sloim Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270010-1

Page 3 of 3

Sample Number : 2211209-10
Parameter : Noise Level (Leq 5 min)
Location : N2 (ห้วยหมื่น/ห้วยหมื่น) (GPS 47P 0726181,1406270)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
01:00 AM - 01:05 AM	51.3	48.5	03:40 AM - 03:45 AM	53.1	48.6	06:20 AM - 06:25 AM	49.5	48.6
01:05 AM - 01:10 AM	58.2	48.6	03:45 AM - 03:50 AM	49.0	47.5	06:25 AM - 06:30 AM	53.0	50.0
01:10 AM - 01:15 AM	64.3	62.6	03:50 AM - 03:55 AM	53.9	49.0	06:30 AM - 06:35 AM	50.3	49.5
01:15 AM - 01:20 AM	69.7	62.5	03:55 AM - 04:00 AM	52.8	48.2	06:35 AM - 06:40 AM	48.7	46.8
01:20 AM - 01:25 AM	64.4	62.5	04:00 AM - 04:05 AM	51.2	48.4	06:40 AM - 06:45 AM	53.1	48.8
01:25 AM - 01:30 AM	63.9	62.8	04:05 AM - 04:10 AM	48.8	48.3	06:45 AM - 06:50 AM	49.4	48.5
01:30 AM - 01:35 AM	56.2	48.5	04:10 AM - 04:15 AM	52.3	48.3	06:50 AM - 06:55 AM	55.0	49.2
01:35 AM - 01:40 AM	57.1	48.9	04:15 AM - 04:20 AM	51.8	48.5	06:55 AM - 07:00 AM	53.8	49.2
01:40 AM - 01:45 AM	56.7	48.7	04:20 AM - 04:25 AM	54.6	47.1	07:00 AM - 07:05 AM	49.9	49.1
01:45 AM - 01:50 AM	57.5	48.6	04:25 AM - 04:30 AM	51.8	48.6	07:05 AM - 07:10 AM	51.2	48.6
01:50 AM - 01:55 AM	57.4	48.8	04:30 AM - 04:35 AM	54.3	49.6	07:10 AM - 07:15 AM	56.4	49.2
01:55 AM - 02:00 AM	48.9	48.5	04:35 AM - 04:40 AM	50.5	47.9	07:15 AM - 07:20 AM	49.5	48.7
02:00 AM - 02:05 AM	52.5	48.6	04:40 AM - 04:45 AM	55.2	49.5	07:20 AM - 07:25 AM	49.5	48.9
02:05 AM - 02:10 AM	56.2	48.1	04:45 AM - 04:50 AM	55.2	49.5	07:25 AM - 07:30 AM	54.6	48.2
02:10 AM - 02:15 AM	56.6	47.5	04:50 AM - 04:55 AM	58.7	48.9	07:30 AM - 07:35 AM	53.0	47.9
02:15 AM - 02:20 AM	47.3	47.0	04:55 AM - 05:00 AM	55.5	49.5	07:35 AM - 07:40 AM	53.0	49.6
02:20 AM - 02:25 AM	49.2	47.7	05:00 AM - 05:05 AM	53.2	49.1	07:40 AM - 07:45 AM	52.4	50.1
02:25 AM - 02:30 AM	49.8	48.2	05:05 AM - 05:10 AM	59.4	49.6	07:45 AM - 07:50 AM	50.6	49.7
02:30 AM - 02:35 AM	54.4	49.4	05:10 AM - 05:15 AM	56.2	49.2	07:50 AM - 07:55 AM	55.9	50.1
02:35 AM - 02:40 AM	51.9	48.7	05:15 AM - 05:20 AM	49.8	48.7	07:55 AM - 08:00 AM	50.5	49.1
02:40 AM - 02:45 AM	51.4	48.2	05:20 AM - 05:25 AM	50.7	49.5	08:00 AM - 08:05 AM	52.5	50.3
02:45 AM - 02:50 AM	50.8	47.7	05:25 AM - 05:30 AM	50.7	49.1	08:05 AM - 08:10 AM	54.0	50.6
02:50 AM - 02:55 AM	51.0	48.8	05:30 AM - 05:35 AM	54.5	50.3	08:10 AM - 08:15 AM	54.0	49.9
02:55 AM - 03:00 AM	54.3	48.6	05:35 AM - 05:40 AM	57.5	50.0	08:15 AM - 08:20 AM	52.3	50.0
03:00 AM - 03:05 AM	50.1	48.6	05:40 AM - 05:45 AM	50.9	48.9	08:20 AM - 08:25 AM	51.2	50.4
03:05 AM - 03:10 AM	53.1	48.3	05:45 AM - 05:50 AM	51.1	50.1	08:25 AM - 08:30 AM	52.3	50.6
03:10 AM - 03:15 AM	52.3	48.1	05:50 AM - 05:55 AM	54.1	49.9	08:30 AM - 08:35 AM	54.0	49.9
03:15 AM - 03:20 AM	52.7	48.2	05:55 AM - 06:00 AM	49.9	48.9	08:35 AM - 08:40 AM	51.5	50.7
03:20 AM - 03:25 AM	53.6	48.0	06:00 AM - 06:05 AM	52.8	48.6	08:40 AM - 08:45 AM	54.0	50.4
03:25 AM - 03:30 AM	52.1	49.1	06:05 AM - 06:10 AM	53.0	49.2	08:45 AM - 08:50 AM	56.4	50.0
03:30 AM - 03:35 AM	54.6	48.7	06:10 AM - 06:15 AM	51.0	48.6	08:50 AM - 08:55 AM	49.8	48.4
03:35 AM - 03:40 AM	49.0	48.4	06:15 AM - 06:20 AM	54.1	48.9	08:55 AM - 09:00 AM	53.6	49.0

Approved by

Saranyut Jitranont
Assistant General Manager

4999999 104 Phatthanakan 40 Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 2 2760 3000 | FAX: +66 2 2760 3197

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RIGHT SOLUTIONS RIGHT PEOPLE



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Ploet (Sloim 3) Asia Sermik Tower, 7th Floor, Sloim Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270010-1

Page 2 of 3

Sample Number : 2211209-10
Parameter : Noise Level (Leq 5 min)
Location : N2 (ห้วยหมื่น/ห้วยหมื่น) (GPS 47P 0726181,1406270)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17 - Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
05:00 PM - 05:05 PM	59.1	47.9	07:40 PM - 07:45 PM	56.1	48.5	10:20 PM - 10:25 PM	62.0	50.5
05:05 PM - 05:10 PM	56.1	47.7	07:45 PM - 07:50 PM	56.2	49.3	10:25 PM - 10:30 PM	53.6	48.9
05:10 PM - 05:15 PM	57.1	47.8	07:50 PM - 07:55 PM	49.3	47.3	10:30 PM - 10:35 PM	55.8	48.9
05:15 PM - 05:20 PM	69.9	50.3	07:55 PM - 08:00 PM	68.4	47.4	10:35 PM - 10:40 PM	56.3	48.7
05:20 PM - 05:25 PM	57.6	47.0	08:00 PM - 08:05 PM	56.1	48.9	10:40 PM - 10:45 PM	55.1	48.1
05:25 PM - 05:30 PM	54.1	47.7	08:05 PM - 08:10 PM	52.2	48.6	10:45 PM - 10:50 PM	51.0	47.7
05:30 PM - 05:35 PM	57.2	48.7	08:10 PM - 08:15 PM	55.3	49.2	10:50 PM - 10:55 PM	53.1	48.3
05:35 PM - 05:40 PM	56.7	49.2	08:15 PM - 08:20 PM	61.3	54.4	10:55 PM - 11:00 PM	53.6	48.2
05:40 PM - 05:45 PM	56.3	48.0	08:20 PM - 08:25 PM	57.1	49.3	11:00 PM - 11:05 PM	55.8	47.9
05:45 PM - 05:50 PM	56.3	48.0	08:25 PM - 08:30 PM	51.9	48.4	11:05 PM - 11:10 PM	52.3	48.4
05:50 PM - 05:55 PM	59.2	47.7	08:30 PM - 08:35 PM	52.4	49.2	11:10 PM - 11:15 PM	57.3	51.5
05:55 PM - 06:00 PM	51.4	47.8	08:35 PM - 08:40 PM	54.6	47.7	11:15 PM - 11:20 PM	54.7	48.3
06:00 PM - 06:05 PM	53.1	48.2	08:40 PM - 08:45 PM	51.7	48.3	11:20 PM - 11:25 PM	53.3	48.6
06:05 PM - 06:10 PM	57.6	48.5	08:45 PM - 08:50 PM	57.2	50.1	11:25 PM - 11:30 PM	56.5	49.9
06:10 PM - 06:15 PM	56.4	47.7	08:50 PM - 08:55 PM	53.1	48.5	11:30 PM - 11:35 PM	52.8	48.1
06:15 PM - 06:20 PM	55.5	48.6	08:55 PM - 09:00 PM	58.3	48.7	11:35 PM - 11:40 PM	54.1	48.1
06:20 PM - 06:25 PM	56.3	48.8	09:00 PM - 09:05 PM	51.6	48.3	11:40 PM - 11:45 PM	55.3	48.5
06:25 PM - 06:30 PM	57.5	48.8	09:05 PM - 09:10 PM	57.9	50.3	11:45 PM - 11:50 PM	56.4	49.4
06:30 PM - 06:35 PM	54.0	47.6	09:10 PM - 09:15 PM	56.2	50.5	11:50 PM - 11:55 PM	52.0	48.3
06:35 PM - 06:40 PM	56.2	46.9	09:15 PM - 09:20 PM	50.9	48.1	11:55 PM - 12:00 AM	48.6	47.8
06:40 PM - 06:45 PM	55.1	47.9	09:20 PM - 09:25 PM	53.9	48.2	12:00 AM - 12:05 AM	48.9	48.9
06:45 PM - 06:50 PM	56.2	47.5	09:25 PM - 09:30 PM	54.8	47.8	12:05 AM - 12:10 AM	52.8	48.7
06:50 PM - 06:55 PM	54.1	47.9	09:30 PM - 09:35 PM	54.5	49.0	12:10 AM - 12:15 AM	51.8	48.1
06:55 PM - 07:00 PM	57.1	48.0	09:35 PM - 09:40 PM	51.6	48.0	12:15 AM - 12:20 AM	54.2	49.1
07:00 PM - 07:05 PM	56.2	48.3	09:40 PM - 09:45 PM	54.4	48.1	12:20 AM - 12:25 AM	49.4	48.6
07:05 PM - 07:10 PM	57.7	48.2	09:45 PM - 09:50 PM	52.8	49.5	12:25 AM - 12:30 AM	49.3	48.1
07:10 PM - 07:15 PM	48.0	47.8	09:50 PM - 09:55 PM	58.1	49.2	12:30 AM - 12:35 AM	52.8	48.3
07:15 PM - 07:20 PM	55.6	47.6	09:55 PM - 10:00 PM	55.7	48.9	12:35 AM - 12:40 AM	51.6	48.1
07:20 PM - 07:25 PM	65.6	47.1	10:00 PM - 10:05 PM	52.8	48.8	12:40 AM - 12:45 AM	63.7	48.3
07:25 PM - 07:30 PM	62.3	47.7	10:05 PM - 10:10 PM	53.6	49.0	12:45 AM - 12:50 AM	62.7	48.8
07:30 PM - 07:35 PM	56.1	47.6	10:10 PM - 10:15 PM	64.9	49.2	12:50 AM - 12:55 AM	53.8	48.8
07:35 PM - 07:40 PM	56.5	48.1	10:15 PM - 10:20 PM	50.7	48.7	12:55 AM - 01:00 AM	55.4	49.4



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-9
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227009-1

P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Nontchai Uphattamp

Sample Number : 2211209-9
Parameter : Noise Level (Leq 5 min)
Location : N2 (วัดจุดรับสัญญาณ) (GPS 47P 0726181,1406270)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontchai Uphattamp
Sound Level meter : Serial No. 01222722

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90	Mar 16 - Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
05:00 PM - 05:05 PM	60.2	49.2	07:40 PM - 07:45 PM	58.8	47.5	10:20 PM - 10:25 PM	61.1	57.6
05:05 PM - 05:10 PM	61.6	55.8	07:45 PM - 07:50 PM	57.9	51.3	10:25 PM - 10:30 PM	62.0	58.0
05:10 PM - 05:15 PM	56.7	50.0	07:50 PM - 07:55 PM	62.6	55.0	10:30 PM - 10:35 PM	60.5	54.7
05:15 PM - 05:20 PM	62.5	49.1	07:55 PM - 08:00 PM	60.1	54.0	10:35 PM - 10:40 PM	61.2	52.0
05:20 PM - 05:25 PM	59.6	54.4	08:00 PM - 08:05 PM	59.3	51.4	10:40 PM - 10:45 PM	60.7	52.3
05:25 PM - 05:30 PM	58.3	46.4	08:05 PM - 08:10 PM	58.1	50.4	10:45 PM - 10:50 PM	61.1	57.4
05:30 PM - 05:35 PM	61.1	51.5	08:10 PM - 08:15 PM	61.6	51.1	10:50 PM - 10:55 PM	59.5	53.1
05:35 PM - 05:40 PM	61.8	56.7	08:15 PM - 08:20 PM	64.5	52.9	10:55 PM - 11:00 PM	60.3	54.2
05:40 PM - 05:45 PM	56.2	50.9	08:20 PM - 08:25 PM	62.2	56.0	11:00 PM - 11:05 PM	60.0	56.5
05:45 PM - 05:50 PM	58.1	47.4	08:25 PM - 08:30 PM	60.1	56.2	11:05 PM - 11:10 PM	62.1	52.6
05:50 PM - 05:55 PM	59.5	52.4	08:30 PM - 08:35 PM	60.5	50.5	11:10 PM - 11:15 PM	60.5	55.2
05:55 PM - 06:00 PM	58.9	51.8	08:35 PM - 08:40 PM	59.6	53.9	11:15 PM - 11:20 PM	63.8	57.0
06:00 PM - 06:05 PM	59.3	55.5	08:40 PM - 08:45 PM	63.2	56.0	11:20 PM - 11:25 PM	61.1	55.7
06:05 PM - 06:10 PM	56.0	46.1	08:45 PM - 08:50 PM	60.8	51.3	11:25 PM - 11:30 PM	59.5	53.6
06:10 PM - 06:15 PM	60.7	53.1	08:50 PM - 08:55 PM	62.1	55.5	11:30 PM - 11:35 PM	58.1	51.1
06:15 PM - 06:20 PM	60.6	54.4	08:55 PM - 09:00 PM	62.7	54.1	11:35 PM - 11:40 PM	64.8	57.1
06:20 PM - 06:25 PM	68.3	47.9	09:00 PM - 09:05 PM	60.5	51.2	11:40 PM - 11:45 PM	63.6	56.6
06:25 PM - 06:30 PM	60.6	51.2	09:05 PM - 09:10 PM	62.9	58.1	11:45 PM - 11:50 PM	59.5	50.0
06:30 PM - 06:35 PM	58.2	52.1	09:10 PM - 09:15 PM	60.8	57.9	11:50 PM - 11:55 PM	58.7	52.9
06:35 PM - 06:40 PM	61.6	50.3	09:15 PM - 09:20 PM	61.5	55.3	11:55 PM - 12:00 AM	62.0	56.4
06:40 PM - 06:45 PM	59.9	53.3	09:20 PM - 09:25 PM	60.4	54.8	12:00 AM - 12:05 AM	61.0	51.1
06:45 PM - 06:50 PM	65.0	53.3	09:25 PM - 09:30 PM	61.1	52.9	12:05 AM - 12:10 AM	61.5	55.7
06:50 PM - 06:55 PM	58.9	51.1	09:30 PM - 09:35 PM	77.3	49.3	12:10 AM - 12:15 AM	61.8	53.1
06:55 PM - 07:00 PM	61.0	57.3	09:35 PM - 09:40 PM	62.3	54.2	12:15 AM - 12:20 AM	59.1	52.4
07:00 PM - 07:05 PM	58.4	49.5	09:40 PM - 09:45 PM	60.9	56.5	12:20 AM - 12:25 AM	60.0	53.1
07:05 PM - 07:10 PM	60.1	52.3	09:45 PM - 09:50 PM	61.2	58.5	12:25 AM - 12:30 AM	59.6	54.3
07:10 PM - 07:15 PM	61.1	49.9	09:50 PM - 09:55 PM	59.3	50.9	12:30 AM - 12:35 AM	61.2	57.1
07:15 PM - 07:20 PM	56.2	47.6	09:55 PM - 10:00 PM	61.0	49.3	12:35 AM - 12:40 AM	59.3	51.3
07:20 PM - 07:25 PM	58.6	47.5	10:00 PM - 10:05 PM	60.9	53.2	12:40 AM - 12:45 AM	59.7	52.7
07:25 PM - 07:30 PM	62.4	53.8	10:05 PM - 10:10 PM	60.5	55.7	12:45 AM - 12:50 AM	59.4	53.0
07:30 PM - 07:35 PM	57.3	49.6	10:10 PM - 10:15 PM	60.5	51.5	12:50 AM - 12:55 AM	59.8	55.5
07:35 PM - 07:40 PM	59.5	52.0	10:15 PM - 10:20 PM	60.8	51.5	12:55 AM - 01:00 AM	58.4	52.7

Approved by

Sarayu Jitranont
Assistant General Manager

49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok 10500 Thailand | Phone: +66 0 2760 3000 | Fax: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-9
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227009-1-1

P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Nontchai Uphattamp

Sample Number : 2211209-11
Parameter : Noise Level (Leq 5 min)
Location : N2 (วัดจุดรับสัญญาณ) (GPS 47P 0726181,1406270)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontchai Uphattamp
Sound Level meter : Serial No. 01222722

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 AM - 09:05 AM	56.1	49.6	11:40 AM - 11:45 AM	49.5	47.8	02:20 PM - 02:25 PM	47.3	46.6
09:05 AM - 09:10 AM	49.6	47.6	11:45 AM - 11:50 AM	50.8	47.9	02:25 PM - 02:30 PM	53.1	46.6
09:10 AM - 09:15 AM	47.7	47.4	11:50 AM - 11:55 AM	49.0	47.8	02:30 PM - 02:35 PM	47.5	46.8
09:15 AM - 09:20 AM	50.4	47.5	11:55 AM - 12:00 PM	53.9	47.5	02:35 PM - 02:40 PM	48.5	47.0
09:20 AM - 09:25 AM	54.5	47.9	12:00 PM - 12:05 PM	47.8	47.3	02:40 PM - 02:45 PM	47.8	47.0
09:25 AM - 09:30 AM	50.6	49.8	12:05 PM - 12:10 PM	52.9	47.6	02:45 PM - 02:50 PM	47.4	46.8
09:30 AM - 09:35 AM	53.3	49.5	12:10 PM - 12:15 PM	48.5	47.6	02:50 PM - 02:55 PM	47.9	47.2
09:35 AM - 09:40 AM	50.8	50.1	12:15 PM - 12:20 PM	55.4	47.9	02:55 PM - 03:00 PM	49.4	46.6
09:40 AM - 09:45 AM	53.1	49.9	12:20 PM - 12:25 PM	48.0	47.5	03:00 PM - 03:05 PM	46.8	46.0
09:45 AM - 09:50 AM	52.2	49.9	12:25 PM - 12:30 PM	58.1	47.6	03:05 PM - 03:10 PM	47.1	46.2
09:50 AM - 09:55 AM	50.7	49.8	12:30 PM - 12:35 PM	47.7	47.0	03:10 PM - 03:15 PM	47.8	46.8
09:55 AM - 10:00 AM	50.4	49.5	12:35 PM - 12:40 PM	51.8	47.6	03:15 PM - 03:20 PM	47.1	46.2
10:00 AM - 10:05 AM	50.4	49.7	12:40 PM - 12:45 PM	48.9	48.0	03:20 PM - 03:25 PM	47.8	47.0
10:05 AM - 10:10 AM	51.1	48.7	12:45 PM - 12:50 PM	48.3	47.8	03:25 PM - 03:30 PM	55.0	46.9
10:10 AM - 10:15 AM	54.1	49.3	12:50 PM - 12:55 PM	56.9	47.7	03:30 PM - 03:35 PM	48.0	46.9
10:15 AM - 10:20 AM	50.4	49.3	12:55 PM - 1:00 PM	48.0	47.5	03:35 PM - 03:40 PM	47.7	46.7
10:20 AM - 10:25 AM	50.0	49.1	01:00 PM - 01:05 PM	49.0	47.0	03:40 PM - 03:45 PM	47.2	46.6
10:25 AM - 10:30 AM	53.1	49.6	01:05 PM - 01:10 PM	48.7	47.3	03:45 PM - 03:50 PM	53.4	47.0
10:30 AM - 10:35 AM	50.2	49.5	01:10 PM - 01:15 PM	57.9	47.7	03:50 PM - 03:55 PM	54.8	48.2
10:35 AM - 10:40 AM	53.9	49.5	01:15 PM - 01:20 PM	55.6	47.1	03:55 PM - 04:00 PM	53.8	47.2
10:40 AM - 10:45 AM	50.2	49.3	01:20 PM - 01:25 PM	63.0	47.1	04:00 PM - 04:05 PM	51.6	46.7
10:45 AM - 10:50 AM	49.5	47.9	01:25 PM - 01:30 PM	54.3	46.5	04:05 PM - 04:10 PM	57.5	46.3
10:50 AM - 10:55 AM	55.6	47.7	01:30 PM - 01:35 PM	46.3	45.7	04:10 PM - 04:15 PM	46.9	46.1
10:55 AM - 11:00 AM	48.3	47.7	01:35 PM - 01:40 PM	47.5	46.3	04:15 PM - 04:20 PM	55.9	46.7
11:00 AM - 11:05 AM	48.3	47.9	01:40 PM - 01:45 PM	46.8	46.2	04:20 PM - 04:25 PM	47.3	46.6
11:05 AM - 11:10 AM	54.1	48.0	01:45 PM - 01:50 PM	46.7	46.2	04:25 PM - 04:30 PM	57.9	47.7
11:10 AM - 11:15 AM	49.9	48.1	01:50 PM - 01:55 PM	46.8	46.3	04:30 PM - 04:35 PM	49.7	46.4
11:15 AM - 11:20 AM	52.8	48.0	01:55 PM - 02:00 PM	47.0	46.1	04:35 PM - 04:40 PM	49.1	47.4
11:20 AM - 11:25 AM	48.5	48.1	02:00 PM - 02:05 PM	47.4	46.7	04:40 PM - 04:45 PM	48.8	46.8
11:25 AM - 11:30 AM	48.0	48.0	02:05 PM - 02:10 PM	47.1	46.4	04:45 PM - 04:50 PM	49.0	46.8
11:30 AM - 11:35 AM	48.2	47.6	02:10 PM - 02:15 PM	47.3	46.7	04:50 PM - 04:55 PM	47.1	46.5
11:35 AM - 11:40 AM	48.1	47.7	02:15 PM - 02:20 PM	52.8	46.7	04:55 PM - 05:00 PM	47.0	46.3

Approved by

Sarayu Jitranont
Assistant General Manager

49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok 10500 Thailand | Phone: +66 0 2760 3000 | Fax: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-9
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 227009-1

P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Nontchai Uphattamp

Sample Number : 2211209-9
Parameter : Noise Level (Leq 5 min)
Location : N2 (วัดจุดรับสัญญาณ) (GPS 47P 0726181,1406270)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontchai Uphattamp
Sound Level meter : Serial No. 01222722

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
01:00 AM - 01:05 AM	60.5	52.5	03:40 AM - 03:45 AM	62.8	52.6	06:20 AM - 06:25 AM	62.2	55.4
01:05 AM - 01:10 AM	62.2	51.1	03:45 AM - 03:50 AM	63.9	61.4	06:25 AM - 06:30 AM	60.0	56.1
01:10 AM - 01:15 AM	58.5	51.6	03:50 AM - 03:55 AM	64.5	55.6	06:30 AM - 06:35 AM	56.8	53.6
01:15 AM - 01:20 AM	59.1	54.1	03:55 AM - 04:00 AM	60.3	54.2	06:35 AM - 06:40 AM	59.7	54.4
01:20 AM - 01:25 AM	61.2	56.9	04:00 AM - 04:05 AM	68.0	54.4	06:40 AM - 06:45 AM	67.5	55.4
01:25 AM - 01:30 AM	61.3	51.9	04:05 AM - 04:10 AM	64.1	62.3	06:45 AM - 06:50 AM	62.2	50.8
01:30 AM - 01:35 AM	60.8	55.7	04:10 AM - 04:15 AM	65.2	55.3	06:50 AM - 06:55 AM	59.6	54.8
01:35 AM - 01:40 AM	60.9	55.4	04:15 AM - 04:20 AM	59.2	55.2	06:55 AM - 07:00 AM	58.3	53.5
01:40 AM - 01:45 AM	60.5	51.2	04:20 AM - 04:25 AM	60.8	52.3	07:00 AM - 07:05 AM	58.5	53.1
01:45 AM - 01:50 AM	62.0	54.7	04:25 AM - 04:30 AM	60.0	55.9	07:05 AM - 07:10 AM	61.1	56.6
01:50 AM - 01:55 AM	60.9	53.8	04:30 AM - 04:35 AM	60.7	49.6	07:10 AM - 07:15 AM	60.4	57.4
01:55 AM - 02:00 AM	61.3	55.6	04:35 AM - 04:40 AM	62.2	55.9	07:15 AM - 07:20 AM	58.5	55.1
02:00 AM - 02:05 AM	61.6	55.8	04:40 AM - 04:45 AM	60.4	52.9	07:20 AM - 07:25 AM	57.9	52.8
02:05 AM - 02:10 AM	60.4	51.8	04:45 AM - 04:50 AM	61.0	56.2	07:25 AM - 07:30 AM	56.9	52.8
02:10 AM - 02:15 AM	60.7	52.5	04:50 AM - 04:55 AM	58.7	51.1	07:30 AM - 07:35 AM	61.2	54.5
02:15 AM - 02:20 AM	60.1	49.8	04:55 AM - 05:00 AM	60.8	55.8	07:35 AM - 07:40 AM	61.4	52.6
02:20 AM - 02:25 AM	62.2	55.1	05:00 AM - 05:05 AM	60.6	52.2	07:40 AM - 07:45 AM	59.8	54.6
02:25 AM - 02:30 AM	59.7	53.4	05:05 AM - 05:10 AM	70.3	53.1	07:45 AM - 07:50 AM	57.7	50.4
02:30 AM - 02:35 AM	60.2	50.8	05:10 AM - 05:15 AM	62.7	51.4	07:50 AM - 07:55 AM	56.8	49.4
02:35 AM - 02:40 AM	65.3	56.8	05:15 AM - 05:20 AM	59.6	52.1	07:55 AM - 08:00 AM	58.9	50.1
02:40 AM - 02:45 AM	62.9	51.4	05:20 AM - 05:25 AM	63.2	55.1	08:00 AM - 08:05 AM	57.3	50.8
02:45 AM - 02:50 AM	65.5	49.6	05:25 AM - 05:30 AM	56.3	52.6	08:05 AM - 08:10 AM	59.1	49.6
02:50 AM - 02:55 AM	63.2	54.8	05:30 AM - 05:35 AM	57.7	52.0	08:10 AM - 08:15 AM	57.0	50.5
02:55 AM - 03:00 AM	63.7	48.7	05:35 AM - 05:40 AM	56.5	52.3	08:15 AM - 08:20 AM	59.6	53.1
03:00 AM - 03:05 AM	59.6	54.4	05:40 AM - 05:45 AM	60.3	53.1	08:20 AM - 08:25 AM	55.9	51.9
03:05 AM - 03:10 AM	62.9	51.3	05:45 AM - 05:50 AM	60.9	53.7	08:25 AM - 08:30 AM	59.0	51.4
03:10 AM - 03:15 AM	62.5	52.8	05:50 AM - 05:55 AM	58.7	51.8	08:30 AM - 08:35 AM	57.2	50.4
03:15 AM - 03:20 AM	63.6	53.8	05:55 AM - 06:00 AM	60.9	51.4	08:35 AM - 08:40 AM	60.7	52.3
03:20 AM - 03:25 AM	58.4	50.8	06:00 AM - 06:05 AM	62.8	52.8	08:40 AM - 08:45 AM	57.9	51.2
03:25 AM - 03:30 AM	58.9	51.4	06:05 AM - 06:10 AM	59.7	55.0	08:45 AM - 08:50 AM	56.3	49.3
03:30 AM - 03:35 AM	59.6	47.8	06:10 AM - 06:15 AM	57.4	53.6	08:50 AM - 08:55 AM	57.9	49.4
03:35 AM - 03:40 AM	60.2	50.2	06:15 AM - 06:20 AM	59.7	56.0	08:55 AM - 09:00 AM	57.5	49.5



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270012-1

P/O : 49/25/25
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2211209-11
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าบ้าน/หน้าอาคาร) (GPS 47P 0726181,1406270)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
01:00 AM - 01:05 AM	47.4	47.0	03:40 AM - 03:45 AM	47.5	44.9	06:20 AM - 06:25 AM	46.8	46.3
01:05 AM - 01:10 AM	46.3	45.7	03:45 AM - 03:50 AM	45.2	44.3	06:25 AM - 06:30 AM	51.0	47.0
01:10 AM - 01:15 AM	55.1	45.2	03:50 AM - 03:55 AM	47.0	45.8	06:30 AM - 06:35 AM	54.8	47.1
01:15 AM - 01:20 AM	47.0	46.1	03:55 AM - 04:00 AM	46.3	45.8	06:35 AM - 06:40 AM	49.8	46.5
01:20 AM - 01:25 AM	46.5	45.6	04:00 AM - 04:05 AM	46.3	45.9	06:40 AM - 06:45 AM	57.1	46.3
01:25 AM - 01:30 AM	46.9	46.1	04:05 AM - 04:10 AM	46.3	45.8	06:45 AM - 06:50 AM	47.2	46.4
01:30 AM - 01:35 AM	50.9	46.7	04:10 AM - 04:15 AM	46.2	45.7	06:50 AM - 06:55 AM	46.8	46.3
01:35 AM - 01:40 AM	52.2	46.9	04:15 AM - 04:20 AM	45.8	45.3	06:55 AM - 07:00 AM	50.1	47.0
01:40 AM - 01:45 AM	46.5	45.7	04:20 AM - 04:25 AM	45.4	44.9	07:00 AM - 07:05 AM	47.4	46.9
01:45 AM - 01:50 AM	47.7	46.2	04:25 AM - 04:30 AM	45.5	45.0	07:05 AM - 07:10 AM	47.2	46.8
01:50 AM - 01:55 AM	46.2	45.5	04:30 AM - 04:35 AM	45.4	44.8	07:10 AM - 07:15 AM	47.2	46.8
01:55 AM - 02:00 AM	46.4	45.9	04:35 AM - 04:40 AM	45.5	45.0	07:15 AM - 07:20 AM	47.0	46.4
02:00 AM - 02:05 AM	46.4	45.7	04:40 AM - 04:45 AM	45.8	45.3	07:20 AM - 07:25 AM	58.1	46.7
02:05 AM - 02:10 AM	47.0	45.3	04:45 AM - 04:50 AM	49.9	45.5	07:25 AM - 07:30 AM	53.5	46.3
02:10 AM - 02:15 AM	45.9	45.3	04:50 AM - 04:55 AM	46.1	45.6	07:30 AM - 07:35 AM	46.2	45.7
02:15 AM - 02:20 AM	46.1	45.5	04:55 AM - 05:00 AM	46.3	45.7	07:35 AM - 07:40 AM	55.9	45.9
02:20 AM - 02:25 AM	45.9	45.2	05:00 AM - 05:05 AM	49.8	46.2	07:40 AM - 07:45 AM	53.3	46.1
02:25 AM - 02:30 AM	45.6	45.0	05:05 AM - 05:10 AM	47.3	47.0	07:45 AM - 07:50 AM	46.4	45.8
02:30 AM - 02:35 AM	46.1	45.1	05:10 AM - 05:15 AM	53.0	46.1	07:50 AM - 07:55 AM	51.9	46.1
02:35 AM - 02:40 AM	46.5	45.5	05:15 AM - 05:20 AM	47.0	46.3	07:55 AM - 08:00 AM	53.1	45.6
02:40 AM - 02:45 AM	46.3	45.7	05:20 AM - 05:25 AM	47.5	47.1	08:00 AM - 08:05 AM	46.0	45.6
02:45 AM - 02:50 AM	46.2	45.7	05:25 AM - 05:30 AM	48.1	47.6	08:05 AM - 08:10 AM	48.2	45.5
02:50 AM - 02:55 AM	46.1	45.6	05:30 AM - 05:35 AM	54.5	47.1	08:10 AM - 08:15 AM	45.7	45.4
02:55 AM - 03:00 AM	45.8	45.3	05:35 AM - 05:40 AM	47.3	46.9	08:15 AM - 08:20 AM	45.2	45.6
03:00 AM - 03:05 AM	46.4	45.8	05:40 AM - 05:45 AM	52.4	46.9	08:20 AM - 08:25 AM	45.3	44.4
03:05 AM - 03:10 AM	52.7	46.0	05:45 AM - 05:50 AM	51.1	46.2	08:25 AM - 08:30 AM	54.4	44.6
03:10 AM - 03:15 AM	46.4	45.8	05:50 AM - 05:55 AM	47.8	47.1	08:30 AM - 08:35 AM	52.3	44.6
03:15 AM - 03:20 AM	46.6	46.0	05:55 AM - 06:00 AM	47.2	46.1	08:35 AM - 08:40 AM	49.3	44.6
03:20 AM - 03:25 AM	46.2	45.9	06:00 AM - 06:05 AM	54.4	47.2	08:40 AM - 08:45 AM	49.3	45.0
03:25 AM - 03:30 AM	47.2	46.2	06:05 AM - 06:10 AM	47.7	46.9	08:45 AM - 08:50 AM	55.9	45.9
03:30 AM - 03:35 AM	47.4	45.4	06:10 AM - 06:15 AM	48.1	47.5	08:50 AM - 08:55 AM	48.2	45.8
03:35 AM - 03:40 AM	51.4	45.0	06:15 AM - 06:20 AM	46.3	45.8	08:55 AM - 09:00 AM	52.6	46.1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270012-1

P/O : 49/25/25
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2211209-12
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าบ้าน/หน้าอาคาร) (GPS 47P 0726181,1406270)
Measurement Date : Mar 19 - Mar 20, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 AM - 09:05 AM	49.2	45.6	11:40 AM - 11:45 AM	52.7	48.2	02:20 PM - 02:25 PM	59.6	51.2
09:05 AM - 09:10 AM	52.3	45.5	11:45 AM - 11:50 AM	59.7	50.9	02:25 PM - 02:30 PM	57.0	50.6
09:10 AM - 09:15 AM	46.8	45.1	11:50 AM - 11:55 AM	50.6	48.6	02:30 PM - 02:35 PM	59.8	51.1
09:15 AM - 09:20 AM	57.8	45.1	11:55 AM - 12:00 PM	55.6	48.6	02:35 PM - 02:40 PM	57.0	50.8
09:20 AM - 09:25 AM	52.3	45.2	12:00 PM - 12:05 PM	55.5	49.9	02:40 PM - 02:45 PM	59.4	53.8
09:25 AM - 09:30 AM	46.2	45.1	12:05 PM - 12:10 PM	55.8	48.1	02:45 PM - 02:50 PM	58.1	51.8
09:30 AM - 09:35 AM	52.2	45.1	12:10 PM - 12:15 PM	54.7	47.4	02:50 PM - 02:55 PM	61.2	45.2
09:35 AM - 09:40 AM	53.0	45.1	12:15 PM - 12:20 PM	54.7	47.8	02:55 PM - 03:00 PM	59.2	52.4
09:40 AM - 09:45 AM	44.7	44.3	12:20 PM - 12:25 PM	54.0	48.8	03:00 PM - 03:05 PM	63.0	53.2
09:45 AM - 09:50 AM	52.6	44.6	12:25 PM - 12:30 PM	53.1	48.6	03:05 PM - 03:10 PM	60.3	55.4
09:50 AM - 09:55 AM	57.8	45.1	12:30 PM - 12:35 PM	56.7	50.3	03:10 PM - 03:15 PM	56.5	50.1
09:55 AM - 10:00 AM	44.8	44.4	12:35 PM - 12:40 PM	60.6	56.8	03:15 PM - 03:20 PM	63.0	55.5
10:00 AM - 10:05 AM	52.1	44.5	12:40 PM - 12:45 PM	57.5	50.9	03:20 PM - 03:25 PM	57.2	49.6
10:05 AM - 10:10 AM	50.1	44.1	12:45 PM - 12:50 PM	53.8	49.6	03:25 PM - 03:30 PM	60.6	51.7
10:10 AM - 10:15 AM	55.3	44.5	12:50 PM - 12:55 PM	55.7	49.0	03:30 PM - 03:35 PM	54.8	45.3
10:15 AM - 10:20 AM	55.1	44.3	12:55 PM - 01:00 PM	56.9	51.8	03:35 PM - 03:40 PM	62.1	45.3
10:20 AM - 10:25 AM	53.2	44.8	01:00 PM - 01:05 PM	56.8	50.2	03:40 PM - 03:45 PM	58.0	48.9
10:25 AM - 10:30 AM	53.3	45.1	01:05 PM - 01:10 PM	56.7	50.3	03:45 PM - 03:50 PM	61.3	54.8
10:30 AM - 10:35 AM	57.6	45.5	01:10 PM - 01:15 PM	53.7	49.7	03:50 PM - 03:55 PM	60.1	55.5
10:35 AM - 10:40 AM	49.8	44.7	01:15 PM - 01:20 PM	65.7	55.8	03:55 PM - 04:00 PM	59.6	52.8
10:40 AM - 10:45 AM	48.7	44.7	01:20 PM - 01:25 PM	65.8	49.4	04:00 PM - 04:05 PM	61.3	51.1
10:45 AM - 10:50 AM	50.6	45.5	01:25 PM - 01:30 PM	56.7	47.4	04:05 PM - 04:10 PM	58.0	48.1
10:50 AM - 10:55 AM	54.9	45.5	01:30 PM - 01:35 PM	56.4	48.5	04:10 PM - 04:15 PM	56.2	48.7
10:55 AM - 11:00 AM	54.6	46.3	01:35 PM - 01:40 PM	59.7	52.9	04:15 PM - 04:20 PM	61.3	52.4
11:00 AM - 11:05 AM	46.5	45.3	01:40 PM - 01:45 PM	57.3	47.7	04:20 PM - 04:25 PM	55.4	43.3
11:05 AM - 11:10 AM	56.7	46.2	01:45 PM - 01:50 PM	59.3	51.1	04:25 PM - 04:30 PM	58.6	50.4
11:10 AM - 11:15 AM	56.7	46.0	01:50 PM - 01:55 PM	60.9	53.5	04:30 PM - 04:35 PM	59.7	51.5
11:15 AM - 11:20 AM	57.1	46.6	01:55 PM - 02:00 PM	56.3	49.2	04:35 PM - 04:40 PM	60.0	53.3
11:20 AM - 11:25 AM	55.3	47.6	02:00 PM - 02:05 PM	59.1	52.1	04:40 PM - 04:45 PM	60.3	46.1
11:25 AM - 11:30 AM	60.5	47.6	02:05 PM - 02:10 PM	57.9	50.3	04:45 PM - 04:50 PM	57.2	48.1
11:30 AM - 11:35 AM	54.6	47.1	02:10 PM - 02:15 PM	63.8	52.7	04:50 PM - 04:55 PM	61.1	49.6
11:35 AM - 11:40 AM	51.1	47.3	02:15 PM - 02:20 PM	62.6	51.4	04:55 PM - 05:00 PM	61.5	55.5

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Approved by

Saranyut Jitranont
Assistant General Manager

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 0 2760 3000 | FAX: +66 0 2760 5187
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Saranyut Jitranont
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104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 0 2760 3000 | FAX: +66 0 2760 5187
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270012-1

P/O : 49/25/25
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2211209-12
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าบ้าน/หน้าอาคาร) (GPS 47P 0726181,1406270)
Measurement Date : Mar 19 - Mar 20, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19 - Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
05:00 PM - 05:05 PM	56.0	50.0	07:40 PM - 07:45 PM	62.4	54.1	10:20 PM - 10:25 PM	58.8	49.6
05:05 PM - 05:10 PM	60.3	50.8	07:45 PM - 07:50 PM	61.0	55.7	10:25 PM - 10:30 PM	63.6	55.2
05:10 PM - 05:15 PM	61.5	50.4	07:50 PM - 07:55 PM	59.6	51.2	10:30 PM - 10:35 PM	61.9	51.8
05:15 PM - 05:20 PM	64.4	49.4	07:55 PM - 08:00 PM	63.1	48.7	10:35 PM - 10:40 PM	63.1	51.0
05:20 PM - 05:25 PM	60.4	53.1	08:00 PM - 08:05 PM	60.6	54.1	10:40 PM - 10:45 PM	60.1	52.6
05:25 PM - 05:30 PM	59.0	50.1	08:05 PM - 08:10 PM	60.7	54.1	10:45 PM - 10:50 PM	58.5	49.5
05:30 PM - 05:35 PM	61.0	48.2	08:10 PM - 08:15 PM	59.5	53.8	10:50 PM - 10:55 PM	63.1	54.0
05:35 PM - 05:40 PM	57.4	51.5	08:15 PM - 08:20 PM	63.1	56.7	10:55 PM - 11:00 PM	69.5	48.6
05:40 PM - 05:45 PM	59.4	48.1	08:20 PM - 08:25 PM	60.5	56.8	11:00 PM - 11:05 PM	59.4	49.2
05:45 PM - 05:50 PM	61.8	56.2	08:25 PM - 08:30 PM	60.6	53.4	11:05 PM - 11:10 PM	67.1	43.8
05:50 PM - 05:55 PM	59.4	50.9	08:30 PM - 08:35 PM	62.2	47.9	11:10 PM - 11:15 PM	62.3	50.8
05:55 PM - 06:00 PM	59.6	50.9	08:35 PM - 08:40 PM	61.9	55.0	11:15 PM - 11:20 PM	60.6	51.7
06:00 PM - 06:05 PM	61.9	54.5	08:40 PM - 08:45 PM	60.1	55.5	11:20 PM - 11:25 PM	59.6	46.9
06:05 PM - 06:10 PM	59.9	55.2	08:45 PM - 08:50 PM	59.6	56.6	11:25 PM - 11:30 PM	57.5	48.8
06:10 PM - 06:15 PM	58.2	53.8	08:50 PM - 08:55 PM	59.3	47.1	11:30 PM - 11:35 PM	57.4	48.8
06:15 PM - 06:20 PM	63.5	58.8	08:55 PM - 09:00 PM	64.5	57.3	11:35 PM - 11:40 PM	63.7	52.0
06:20 PM - 06:25 PM	61.7	55.4	09:00 PM - 09:05 PM	61.3	45.5	11:40 PM - 11:45 PM	62.8	45.2
06:25 PM - 06:30 PM	58.8	46.3	09:05 PM - 09:10 PM	59.8	49.8	11:45 PM - 11:50 PM	60.7	57.9
06:30 PM - 06:35 PM	67.8	49.8	09:10 PM - 09:15 PM	66.5	55.4	11:50 PM - 11:55 PM	60.5	46.8
06:35 PM - 06:40 PM	62.2	46.7	09:15 PM - 09:20 PM	59.6	47.9	11:55 PM - 12:00 AM	59.3	47.2
06:40 PM - 06:45 PM	59.5	53.5	09:20 PM - 09:25 PM	61.3	53.1	12:00 AM - 12:05 AM	56.8	46.5
06:45 PM - 06:50 PM	64.3	53.5	09:25 PM - 09:30 PM	60.4	50.1	12:05 AM - 12:10 AM	60.4	51.3
06:50 PM - 06:55 PM	61.4	53.3	09:30 PM - 09:35 PM	60.3	50.2	12:10 AM - 12:15 AM	56.5	51.3
06:55 PM - 07:00 PM	61.9	54.5	09:35 PM - 09:40 PM	59.6	52.7	12:15 AM - 12:20 AM	57.7	51.9
07:00 PM - 07:05 PM	60.2	55.2	09:40 PM - 09:45 PM	61.3	53.9	12:20 AM - 12:25 AM	60.3	50.9
07:05 PM - 07:10 PM	63.5	52.5	09:45 PM - 09:50 PM	56.6	46.0	12:25 AM - 12:30 AM	63.6	49.4
07:10 PM - 07:15 PM	63.0	56.4	09:50 PM - 09:55 PM	59.7	50.7	12:30 AM - 12:35 AM	57.9	51.2
07:15 PM - 07:20 PM	61.8	49.6	09:55 PM - 10:00 PM	62.5	55.7	12:35 AM - 12:40 AM	63.8	48.9
07:20 PM - 07:25 PM	60.1	50.0	10:00 PM - 10:05 PM	62.4	55.5	12:40 AM - 12:45 AM	60.3	47.5
07:25 PM - 07:30 PM	64.2	57.4	10:05 PM - 10:10 PM	61.0	54.0	12:45 AM - 12:50 AM	61.2	48.2
07:30 PM - 07:35 PM	60.1	51.4	10:10 PM - 10:15 PM	58.1	48.3	12:50 AM - 12:55 AM	55.8	47.4
07:35 PM - 07:40 PM	59.6	53.0	10:15 PM - 10:20 PM	59.3	48.8	12:55 AM - 01:00 AM	59.0	48.8



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270013-1

Page 1 of 3

Sample Number : 2211209-13
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าห้องประชุม) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 AM - 09:05 AM	57.2	49.9	11:40 AM - 11:45 AM	57.8	48.0	02:20 PM - 02:25 PM	59.3	46.6
09:05 AM - 09:10 AM	59.9	47.3	11:45 AM - 11:50 AM	56.2	48.6	02:25 PM - 02:30 PM	59.1	45.7
09:10 AM - 09:15 AM	64.9	52.5	11:50 AM - 11:55 AM	61.4	47.2	02:30 PM - 02:35 PM	60.4	53.6
09:15 AM - 09:20 AM	60.8	51.0	11:55 AM - 12:00 PM	61.9	46.1	02:35 PM - 02:40 PM	59.5	53.7
09:20 AM - 09:25 AM	59.5	46.6	12:00 PM - 12:05 PM	61.3	47.7	02:40 PM - 02:45 PM	57.5	45.7
09:25 AM - 09:30 AM	58.0	46.1	12:05 PM - 12:10 PM	57.9	53.9	02:45 PM - 02:50 PM	58.4	48.7
09:30 AM - 09:35 AM	58.0	45.2	12:10 PM - 12:15 PM	59.4	51.9	02:50 PM - 02:55 PM	62.5	47.6
09:35 AM - 09:40 AM	58.3	49.2	12:15 PM - 12:20 PM	54.9	48.1	02:55 PM - 03:00 PM	67.4	51.2
09:40 AM - 09:45 AM	56.4	45.6	12:20 PM - 12:25 PM	58.2	48.2	03:00 PM - 03:05 PM	58.5	51.7
09:45 AM - 09:50 AM	61.7	46.0	12:25 PM - 12:30 PM	62.2	43.9	03:05 PM - 03:10 PM	54.8	45.3
09:50 AM - 09:55 AM	57.5	45.3	12:30 PM - 12:35 PM	63.1	46.0	03:10 PM - 03:15 PM	57.1	46.5
09:55 AM - 10:00 AM	55.7	44.9	12:35 PM - 12:40 PM	62.6	49.4	03:15 PM - 03:20 PM	60.8	47.4
10:00 AM - 10:05 AM	60.3	49.2	12:40 PM - 12:45 PM	57.0	45.7	03:20 PM - 03:25 PM	59.1	49.2
10:05 AM - 10:10 AM	55.4	47.2	12:45 PM - 12:50 PM	59.8	51.7	03:25 PM - 03:30 PM	58.2	51.5
10:10 AM - 10:15 AM	55.3	43.0	12:50 PM - 12:55 PM	58.2	46.6	03:30 PM - 03:35 PM	60.1	53.3
10:15 AM - 10:20 AM	56.9	43.3	12:55 PM - 01:00 PM	58.1	47.6	03:35 PM - 03:40 PM	61.2	51.2
10:20 AM - 10:25 AM	64.6	51.3	01:00 PM - 01:05 PM	61.4	45.2	03:40 PM - 03:45 PM	60.1	51.1
10:25 AM - 10:30 AM	58.2	47.5	01:05 PM - 01:10 PM	55.5	44.6	03:45 PM - 03:50 PM	57.9	50.3
10:30 AM - 10:35 AM	58.2	52.3	01:10 PM - 01:15 PM	59.5	50.8	03:50 PM - 03:55 PM	57.6	46.7
10:35 AM - 10:40 AM	57.8	49.8	01:15 PM - 01:20 PM	57.6	49.6	03:55 PM - 04:00 PM	55.8	45.0
10:40 AM - 10:45 AM	65.0	47.7	01:20 PM - 01:25 PM	58.5	46.2	04:00 PM - 04:05 PM	56.8	44.7
10:45 AM - 10:50 AM	56.0	44.8	01:25 PM - 01:30 PM	53.7	43.8	04:05 PM - 04:10 PM	58.8	44.6
10:50 AM - 10:55 AM	57.4	45.4	01:30 PM - 01:35 PM	62.3	52.7	04:10 PM - 04:15 PM	63.7	50.1
10:55 AM - 11:00 AM	54.3	48.9	01:35 PM - 01:40 PM	60.1	48.6	04:15 PM - 04:20 PM	66.4	44.5
11:00 AM - 11:05 AM	56.2	45.1	01:40 PM - 01:45 PM	54.9	44.7	04:20 PM - 04:25 PM	59.1	51.5
11:05 AM - 11:10 AM	54.6	43.2	01:45 PM - 01:50 PM	56.4	39.4	04:25 PM - 04:30 PM	63.4	49.6
11:10 AM - 11:15 AM	58.3	49.9	01:50 PM - 01:55 PM	56.7	51.2	04:30 PM - 04:35 PM	55.4	47.5
11:15 AM - 11:20 AM	57.7	46.6	01:55 PM - 02:00 PM	60.2	53.3	04:35 PM - 04:40 PM	62.3	45.5
11:20 AM - 11:25 AM	57.2	48.4	02:00 PM - 02:05 PM	56.5	46.4	04:40 PM - 04:45 PM	60.4	49.1
11:25 AM - 11:30 AM	55.2	45.3	02:05 PM - 02:10 PM	57.4	45.2	04:45 PM - 04:50 PM	57.6	44.2
11:30 AM - 11:35 AM	58.5	50.3	02:10 PM - 02:15 PM	55.5	47.6	04:50 PM - 04:55 PM	61.8	46.5
11:35 AM - 11:40 AM	53.8	47.0	02:15 PM - 02:20 PM	57.8	47.1	04:55 PM - 05:00 PM	58.9	47.3

Approved by

Saranyut Jitrantont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270013-1

Page 2 of 3

Sample Number : 2211209-13
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าห้องประชุม) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20 - Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
09:00 PM - 09:05 PM	56.0	44.8	07:40 PM - 07:45 PM	59.7	51.1	10:20 PM - 10:25 PM	61.7	48.3
09:05 PM - 09:10 PM	61.7	49.1	07:45 PM - 07:50 PM	60.0	51.0	10:25 PM - 10:30 PM	57.5	47.0
09:10 PM - 09:15 PM	56.8	50.9	07:50 PM - 07:55 PM	58.1	46.4	10:30 PM - 10:35 PM	62.9	50.8
09:15 PM - 09:20 PM	59.9	50.9	07:55 PM - 08:00 PM	64.5	48.6	10:35 PM - 10:40 PM	58.2	50.6
09:20 PM - 09:25 PM	60.9	53.0	08:00 PM - 08:05 PM	59.8	46.3	10:40 PM - 10:45 PM	59.2	51.5
09:25 PM - 09:30 PM	57.4	45.8	08:05 PM - 08:10 PM	58.5	48.0	10:45 PM - 10:50 PM	56.5	45.3
09:30 PM - 09:35 PM	60.8	52.2	08:10 PM - 08:15 PM	56.6	44.2	10:50 PM - 10:55 PM	59.0	44.0
09:35 PM - 09:40 PM	61.3	51.7	08:15 PM - 08:20 PM	57.3	48.6	10:55 PM - 11:00 PM	60.3	52.3
09:40 PM - 09:45 PM	61.6	46.4	08:20 PM - 08:25 PM	58.3	46.2	11:00 PM - 11:05 PM	54.2	46.5
09:45 PM - 09:50 PM	62.1	51.0	08:25 PM - 08:30 PM	58.4	50.9	11:05 PM - 11:10 PM	59.9	44.2
09:50 PM - 09:55 PM	60.7	49.9	08:30 PM - 08:35 PM	63.9	54.7	11:10 PM - 11:15 PM	59.0	50.2
09:55 PM - 10:00 PM	61.5	53.6	08:35 PM - 08:40 PM	58.3	48.8	11:15 PM - 11:20 PM	53.6	42.7
10:00 PM - 10:05 PM	61.3	52.7	08:40 PM - 08:45 PM	57.9	51.9	11:20 PM - 11:25 PM	58.5	44.2
10:05 PM - 10:10 PM	55.9	45.2	08:45 PM - 08:50 PM	57.0	48.8	11:25 PM - 11:30 PM	59.5	53.3
10:10 PM - 10:15 PM	60.3	44.4	08:50 PM - 08:55 PM	58.6	50.5	11:30 PM - 11:35 PM	59.9	50.2
10:15 PM - 10:20 PM	63.0	47.3	08:55 PM - 09:00 PM	57.6	48.8	11:35 PM - 11:40 PM	58.4	53.0
10:20 PM - 10:25 PM	57.2	46.6	09:00 PM - 09:05 PM	56.5	48.8	11:40 PM - 11:45 PM	61.9	53.7
10:25 PM - 10:30 PM	56.6	45.7	09:05 PM - 09:10 PM	62.5	47.9	11:45 PM - 11:50 PM	57.3	49.3
10:30 PM - 10:35 PM	57.7	47.7	09:10 PM - 09:15 PM	63.6	46.0	11:50 PM - 11:55 PM	54.6	45.3
10:35 PM - 10:40 PM	57.8	44.0	09:15 PM - 09:20 PM	55.5	45.6	11:55 PM - 12:00 AM	58.3	52.0
10:40 PM - 10:45 PM	56.5	47.8	09:20 PM - 09:25 PM	57.3	49.9	12:00 AM - 12:05 AM	58.3	50.1
10:45 PM - 10:50 PM	60.9	45.7	09:25 PM - 09:30 PM	57.9	49.8	12:05 AM - 12:10 AM	56.3	46.1
10:50 PM - 10:55 PM	59.6	52.5	09:30 PM - 09:35 PM	55.4	42.2	12:10 AM - 12:15 AM	58.1	47.2
10:55 PM - 10:59 PM	58.2	48.9	09:35 PM - 09:40 PM	62.2	45.6	12:15 AM - 12:20 AM	59.8	45.4
07:00 PM - 07:05 PM	61.2	52.5	09:40 PM - 09:45 PM	58.4	44.8	12:20 AM - 12:25 AM	61.1	47.9
07:05 PM - 07:10 PM	56.7	46.9	09:45 PM - 09:50 PM	56.3	43.5	12:25 AM - 12:30 AM	54.6	46.2
07:10 PM - 07:15 PM	60.0	50.7	09:50 PM - 09:55 PM	56.3	44.8	12:30 AM - 12:35 AM	59.1	50.6
07:15 PM - 07:20 PM	66.5	49.7	09:55 PM - 10:00 PM	55.9	47.5	12:35 AM - 12:40 AM	59.5	47.4
07:20 PM - 07:25 PM	59.6	45.8	10:00 PM - 10:05 PM	59.1	48.7	12:40 AM - 12:45 AM	60.6	49.7
07:25 PM - 07:30 PM	58.6	53.4	10:05 PM - 10:10 PM	59.9	52.7	12:45 AM - 12:50 AM	59.1	44.8
07:30 PM - 07:35 PM	60.0	43.2	10:10 PM - 10:15 PM	58.3	49.9	12:50 AM - 12:55 AM	59.0	46.9
07:35 PM - 07:40 PM	55.4	48.2	10:15 PM - 10:20 PM	60.3	51.5	12:55 AM - 01:00 AM	62.2	50.1

Approved by

Saranyut Jitrantont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งฤทัย
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270013-1

Page 3 of 3

Sample Number : 2211209-13
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าห้องประชุม) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
01:00 AM - 01:05 AM	56.0	45.4	03:40 AM - 03:45 AM	58.7	52.9	06:20 AM - 06:25 AM	58.2	47.8
01:05 AM - 01:10 AM	60.0	49.9	03:45 AM - 03:50 AM	55.8	48.1	06:25 AM - 06:30 AM	61.8	48.1
01:10 AM - 01:15 AM	59.3	49.0	03:50 AM - 03:55 AM	58.1	48.6	06:30 AM - 06:35 AM	59.5	47.6
01:15 AM - 01:20 AM	58.1	49.8	03:55 AM - 04:00 AM	60.4	48.0	06:35 AM - 06:40 AM	56.5	45.9
01:20 AM - 01:25 AM	60.7	52.1	04:00 AM - 04:05 AM	54.3	47.4	06:40 AM - 06:45 AM	58.0	46.2
01:25 AM - 01:30 AM	61.7	50.6	04:05 AM - 04:10 AM	56.7	48.1	06:45 AM - 06:50 AM	55.1	49.9
01:30 AM - 01:35 AM	55.8	48.8	04:10 AM - 04:15 AM	59.6	52.5	06:50 AM - 06:55 AM	64.0	47.0
01:35 AM - 01:40 AM	57.1	48.6	04:15 AM - 04:20 AM	57.7	49.5	06:55 AM - 07:00 AM	61.6	45.5
01:40 AM - 01:45 AM	60.7	50.3	04:20 AM - 04:25 AM	58.2	50.3	07:00 AM - 07:05 AM	56.7	46.9
01:45 AM - 01:50 AM	58.8	49.5	04:25 AM - 04:30 AM	58.2	47.2	07:05 AM - 07:10 AM	57.3	46.7
01:50 AM - 01:55 AM	58.6	52.1	04:30 AM - 04:35 AM	58.8	50.4	07:10 AM - 07:15 AM	60.9	46.1
01:55 AM - 02:00 AM	57.3	52.3	04:35 AM - 04:40 AM	55.8	47.3	07:15 AM - 07:20 AM	65.0	43.3
02:00 AM - 02:05 AM	59.2	54.4	04:40 AM - 04:45 AM	54.2	46.1	07:20 AM - 07:25 AM	62.2	45.4
02:05 AM - 02:10 AM	59.4	55.0	04:45 AM - 04:50 AM	65.0	47.9	07:25 AM - 07:30 AM	59.3	46.2
02:10 AM - 02:15 AM	58.8	52.8	04:50 AM - 04:55 AM	58.7	50.5	07:30 AM - 07:35 AM	51.6	43.8
02:15 AM - 02:20 AM	65.5	57.4	04:55 AM - 05:00 AM	57.0	47.3	07:35 AM - 07:40 AM	61.3	50.7
02:20 AM - 02:25 AM	59.7	53.4	05:00 AM - 05:05 AM	57.7	50.5	07:40 AM - 07:45 AM	54.2	46.2
02:25 AM - 02:30 AM	58.9	51.8	05:05 AM - 05:10 AM	57.0	47.4	07:45 AM - 07:50 AM	51.4	44.8
02:30 AM - 02:35 AM	58.7	52.2	05:10 AM - 05:15 AM	58.6	51.0	07:50 AM - 07:55 AM	57.1	46.7
02:35 AM - 02:40 AM	61.1	50.5	05:15 AM - 05:20 AM	59.1	48.3	07:55 AM - 08:00 AM	57.5	45.7
02:40 AM - 02:45 AM	58.7	49.1	05:20 AM - 05:25 AM	56.4	47.3	08:00 AM - 08:05 AM	59.7	54.2
02:45 AM - 02:50 AM	60.7	48.6	05:25 AM - 05:30 AM	56.0	46.7	08:05 AM - 08:10 AM	55.8	45.7
02:50 AM - 02:55 AM	54.2	46.8	05:30 AM - 05:35 AM	64.8	51.0	08:10 AM - 08:15 AM	54.6	43.4



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermak Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499/2554

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270014-1

Page 2 of 3

Sample Number : 2211209-14
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าบ้านอาคาร) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21 - Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
05:00 PM - 05:05 PM	61.8	50.8	07:40 PM - 07:45 PM	59.1	46.8	10:20 PM - 10:25 PM	61.8	54.2
05:05 PM - 05:10 PM	56.2	51.4	07:45 PM - 07:50 PM	60.8	52.7	10:25 PM - 10:30 PM	62.4	57.2
05:10 PM - 05:15 PM	55.7	47.6	07:50 PM - 07:55 PM	59.9	47.8	10:30 PM - 10:35 PM	59.2	51.5
05:15 PM - 05:20 PM	55.6	46.7	07:55 PM - 08:00 PM	56.3	48.5	10:35 PM - 10:40 PM	58.4	51.0
05:20 PM - 05:25 PM	61.2	53.8	08:00 PM - 08:05 PM	59.9	48.7	10:40 PM - 10:45 PM	63.5	52.9
05:25 PM - 05:30 PM	59.8	54.6	08:05 PM - 08:10 PM	60.5	55.4	10:45 PM - 10:50 PM	63.5	52.9
05:30 PM - 05:35 PM	61.8	48.5	08:10 PM - 08:15 PM	59.9	51.2	10:50 PM - 10:55 PM	57.4	47.6
05:35 PM - 05:40 PM	57.8	48.8	08:15 PM - 08:20 PM	62.8	54.8	10:55 PM - 11:00 PM	56.4	47.7
05:40 PM - 05:45 PM	57.0	49.0	08:20 PM - 08:25 PM	59.0	54.1	11:00 PM - 11:05 PM	60.1	53.3
05:45 PM - 05:50 PM	60.8	53.7	08:25 PM - 08:30 PM	59.6	49.9	11:05 PM - 11:10 PM	60.1	55.6
05:50 PM - 05:55 PM	59.3	50.1	08:30 PM - 08:35 PM	58.6	52.0	11:10 PM - 11:15 PM	59.4	52.1
05:55 PM - 06:00 PM	57.1	46.8	08:35 PM - 08:40 PM	58.7	50.6	11:15 PM - 11:20 PM	59.6	49.4
06:00 PM - 06:05 PM	60.2	52.8	08:40 PM - 08:45 PM	58.6	54.4	11:20 PM - 11:25 PM	61.1	54.6
06:05 PM - 06:10 PM	54.9	44.7	08:45 PM - 08:50 PM	61.6	56.1	11:25 PM - 11:30 PM	60.5	53.2
06:10 PM - 06:15 PM	58.5	52.1	08:50 PM - 08:55 PM	59.6	52.5	11:30 PM - 11:35 PM	60.7	47.6
06:15 PM - 06:20 PM	58.1	50.2	08:55 PM - 09:00 PM	71.8	53.0	11:35 PM - 11:40 PM	59.8	45.3
06:20 PM - 06:25 PM	60.8	54.1	09:00 PM - 09:05 PM	64.2	56.0	11:40 PM - 11:45 PM	56.7	45.3
06:25 PM - 06:30 PM	58.5	44.6	09:05 PM - 09:10 PM	61.7	49.2	11:45 PM - 11:50 PM	58.6	51.7
06:30 PM - 06:35 PM	57.3	45.7	09:10 PM - 09:15 PM	62.6	57.2	11:50 PM - 11:55 PM	59.3	55.1
06:35 PM - 06:40 PM	57.5	47.9	09:15 PM - 09:20 PM	59.7	51.9	11:55 PM - 12:00 AM	60.9	56.2
06:40 PM - 06:45 PM	56.0	49.5	09:20 PM - 09:25 PM	60.3	52.1	12:00 AM - 12:05 AM	59.3	52.7
06:45 PM - 06:50 PM	60.9	52.8	09:25 PM - 09:30 PM	59.7	54.6	12:05 AM - 12:10 AM	59.5	51.1
06:50 PM - 06:55 PM	58.5	52.6	09:30 PM - 09:35 PM	60.9	52.7	12:10 AM - 12:15 AM	62.3	47.6
06:55 PM - 07:00 PM	60.6	53.7	09:35 PM - 09:40 PM	60.3	49.9	12:15 AM - 12:20 AM	62.3	49.3
07:00 PM - 07:05 PM	61.4	47.8	09:40 PM - 09:45 PM	60.3	49.9	12:20 AM - 12:25 AM	59.9	47.7
07:05 PM - 07:10 PM	59.0	47.7	09:45 PM - 09:50 PM	60.3	53.4	12:25 AM - 12:30 AM	60.2	54.3
07:10 PM - 07:15 PM	57.4	48.8	09:50 PM - 09:55 PM	61.3	50.6	12:30 AM - 12:35 AM	57.5	51.1
07:15 PM - 07:20 PM	57.4	51.7	09:55 PM - 10:00 PM	60.7	54.0	12:35 AM - 12:40 AM	57.9	52.8
07:20 PM - 07:25 PM	60.8	50.6	10:00 PM - 10:05 PM	65.0	51.9	12:40 AM - 12:45 AM	58.0	53.7
07:25 PM - 07:30 PM	59.3	52.1	10:05 PM - 10:10 PM	60.4	53.8	12:45 AM - 12:50 AM	62.5	56.0
07:30 PM - 07:35 PM	57.8	50.8	10:10 PM - 10:15 PM	59.4	49.8	12:50 AM - 12:55 AM	65.2	53.6
07:35 PM - 07:40 PM	66.9	49.7	10:15 PM - 10:20 PM	60.5	47.6	12:55 AM - 01:00 AM	57.0	48.4

Approved by

Saranyut Jitranont
Assistant General Manager

49/111 104 Phathanakan 40, Phathanakan Rd., Khwaeng Phathanakan, Khet Suan Luang, Bangkok 10250 Thailand | Phone: +66 8 2760 3000 | Fax: +66 8 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermak Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499/2554

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270014-1

Page 3 of 3

Sample Number : 2211209-14
Parameter : Noise Level (Leq 5 min)
Location : N2 (หน้าบ้านอาคาร) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222722

Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
01:00 AM - 01:05 AM	59.5	53.2	03:40 AM - 03:45 AM	57.6	51.9	06:20 AM - 06:25 AM	60.5	54.6
01:05 AM - 01:10 AM	61.6	55.5	03:45 AM - 03:50 AM	59.8	56.3	06:25 AM - 06:30 AM	59.9	54.2
01:10 AM - 01:15 AM	57.7	52.4	03:50 AM - 03:55 AM	58.5	53.0	06:30 AM - 06:35 AM	59.6	53.2
01:15 AM - 01:20 AM	59.0	45.7	03:55 AM - 04:00 AM	62.1	51.8	06:35 AM - 06:40 AM	60.2	52.6
01:20 AM - 01:25 AM	61.4	54.8	04:00 AM - 04:05 AM	61.9	53.5	06:40 AM - 06:45 AM	61.8	54.1
01:25 AM - 01:30 AM	69.6	52.0	04:05 AM - 04:10 AM	59.1	53.9	06:45 AM - 06:50 AM	65.1	54.4
01:30 AM - 01:35 AM	63.7	53.0	04:10 AM - 04:15 AM	60.2	52.9	06:50 AM - 06:55 AM	59.7	53.2
01:35 AM - 01:40 AM	62.3	55.0	04:15 AM - 04:20 AM	59.6	52.9	06:55 AM - 07:00 AM	58.5	54.5
01:40 AM - 01:45 AM	60.9	49.5	04:20 AM - 04:25 AM	60.6	52.8	07:00 AM - 07:05 AM	61.6	55.6
01:45 AM - 01:50 AM	62.0	53.0	04:25 AM - 04:30 AM	62.5	55.1	07:05 AM - 07:10 AM	59.2	54.8
01:50 AM - 01:55 AM	67.2	51.7	04:30 AM - 04:35 AM	62.3	53.7	07:10 AM - 07:15 AM	62.2	56.8
01:55 AM - 02:00 AM	58.0	52.7	04:35 AM - 04:40 AM	63.6	56.9	07:15 AM - 07:20 AM	59.1	52.9
02:00 AM - 02:05 AM	57.6	50.2	04:40 AM - 04:45 AM	60.7	57.3	07:20 AM - 07:25 AM	59.8	54.1
02:05 AM - 02:10 AM	62.2	53.0	04:45 AM - 04:50 AM	61.7	57.1	07:25 AM - 07:30 AM	63.5	57.2
02:10 AM - 02:15 AM	60.7	52.9	04:50 AM - 04:55 AM	58.7	55.1	07:30 AM - 07:35 AM	60.3	52.7
02:15 AM - 02:20 AM	62.5	56.6	04:55 AM - 05:00 AM	61.4	55.1	07:35 AM - 07:40 AM	59.3	53.5
02:20 AM - 02:25 AM	59.6	49.8	05:00 AM - 05:05 AM	57.5	52.0	07:40 AM - 07:45 AM	59.6	52.6
02:25 AM - 02:30 AM	61.6	53.5	05:05 AM - 05:10 AM	59.9	52.9	07:45 AM - 07:50 AM	56.1	51.1
02:30 AM - 02:35 AM	59.2	53.0	05:10 AM - 05:15 AM	59.6	51.3	07:50 AM - 07:55 AM	60.7	55.9
02:35 AM - 02:40 AM	60.1	53.8	05:15 AM - 05:20 AM	62.5	54.7	07:55 AM - 08:00 AM	56.6	52.9
02:40 AM - 02:45 AM	62.4	57.2	05:20 AM - 05:25 AM	61.8	53.9	08:00 AM - 08:05 AM	62.1	52.1
02:45 AM - 02:50 AM	59.1	50.6	05:25 AM - 05:30 AM	56.8	52.4	08:05 AM - 08:10 AM	60.0	53.6
02:50 AM - 02:55 AM	58.1	52.3	05:30 AM - 05:35 AM	61.0	56.1	08:10 AM - 08:15 AM	58.4	52.2
02:55 AM - 03:00 AM	60.7	52.9	05:35 AM - 05:40 AM	62.4	55.1	08:15 AM - 08:20 AM	59.9	56.5
03:00 AM - 03:05 AM	58.0	51.8	05:40 AM - 05:45 AM	61.8	54.3	08:20 AM - 08:25 AM	59.8	53.0
03:05 AM - 03:10 AM	64.3	52.9	05:45 AM - 05:50 AM	59.7	52.0	08:25 AM - 08:30 AM	57.0	52.3
03:10 AM - 03:15 AM	61.3	56.4	05:50 AM - 05:55 AM	59.4	52.3	08:30 AM - 08:35 AM	59.8	55.9
03:15 AM - 03:20 AM	59.0	50.3	05:55 AM - 06:00 AM	59.6	56.0	08:35 AM - 08:40 AM	58.7	53.8
03:20 AM - 03:25 AM	62.8	52.9	06:00 AM - 06:05 AM	62.0	53.7	08:40 AM - 08:45 AM	59.0	51.8
03:25 AM - 03:30 AM	56.9	47.3	06:05 AM - 06:10 AM	65.7	54.5	08:45 AM - 08:50 AM	58.8	51.4
03:30 AM - 03:35 AM	64.9	50.3	06:10 AM - 06:15 AM	59.7	53.9	08:50 AM - 08:55 AM	56.1	52.0
03:35 AM - 03:40 AM	61.0	53.1	06:15 AM - 06:20 AM	57.0	53.3	08:55 AM - 09:00 AM	63.1	52.8

Approved by

Saranyut Jitranont
Assistant General Manager

49/111 104 Phathanakan 40, Phathanakan Rd., Khwaeng Phathanakan, Khet Suan Luang, Bangkok 10250 Thailand | Phone: +66 8 2760 3000 | Fax: +66 8 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermak Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499/2554

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270015-1

Page 1 of 3

Sample Number : 2211209-15
Parameter : Noise Level (Leq 5 min)
Location : N3 (สวนสาธารณะ) (GPS 47P 0730757, 1407391)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
06:00 AM - 06:05 AM	57.3	45.5	10:40 AM - 10:45 AM	51.1	44.5	01:20 PM - 01:25 PM	49.8	45.6
06:05 AM - 06:10 AM	52.3	44.6	10:45 AM - 10:50 AM	51.4	44.9	01:25 PM - 01:30 PM	51.3	48.4
06:10 AM - 06:15 AM	45.7	44.3	10:50 AM - 10:55 AM	50.7	47.0	01:30 PM - 01:35 PM	50.8	48.5
06:15 AM - 06:20 AM	47.8	44.9	10:55 AM - 11:00 AM	55.3	45.3	01:35 PM - 01:40 PM	51.0	48.0
06:20 AM - 06:25 AM	47.6	43.7	11:00 AM - 11:05 AM	49.1	45.3	01:40 PM - 01:45 PM	57.1	47.7
06:25 AM - 06:30 AM	47.5	44.2	11:05 AM - 11:10 AM	50.6	46.4	01:45 PM - 01:50 PM	57.8	46.4
06:30 AM - 06:35 AM	48.3	45.1	11:10 AM - 11:15 AM	58.6	46.0	01:50 PM - 01:55 PM	60.9	46.3
06:35 AM - 06:40 AM	50.3	44.1	11:15 AM - 11:20 AM	51.2	47.0	01:55 PM - 02:00 PM	55.3	46.5
06:40 AM - 06:45 AM	48.9	42.7	11:20 AM - 11:25 AM	49.3	44.6	02:00 PM - 02:05 PM	57.8	46.2
06:45 AM - 06:50 AM	54.3	43.9	11:25 AM - 11:30 AM	55.4	45.7	02:05 PM - 02:10 PM	51.7	45.1
06:50 AM - 06:55 AM	49.0	44.0	11:30 AM - 11:35 AM	60.3	47.0	02:10 PM - 02:15 PM	57.2	44.4
06:55 AM - 07:00 AM	51.0	44.0	11:35 AM - 11:40 AM	60.1	44.9	02:15 PM - 02:20 PM	47.9	44.8
07:00 AM - 07:05 AM	47.0	43.2	11:40 AM - 11:45 AM	55.3	46.7	02:20 PM - 02:25 PM	50.7	46.5
07:05 AM - 07:10 AM	48.2	43.2	11:45 AM - 11:50 AM	58.1	46.4	02:25 PM - 02:30 PM	59.1	45.9
07:10 AM - 07:15 AM	51.4	43.0	11:50 AM - 11:55 AM	49.5	46.2	02:30 PM - 02:35 PM	61.1	46.2
07:15 AM - 07:20 AM	47.5	42.9	11:55 AM - 12:00 PM	48.2	45.6	02:35 PM - 02:40 PM	57.2	46.3
07:20 AM - 07:25 AM	47.8	43.7	12:00 PM - 12:05 PM	49.7	46.4	02:40 PM - 02:45 PM	57.1	46.6
07:25 AM - 07:30 AM	48.3	43.4	12:05 PM - 12:10 PM	51.2	48.0	02:45 PM - 02:50 PM	58.6	45.5
07:30 AM - 07:35 AM	49.8	43.1	12:10 PM - 12:15 PM	50.0	46.7	02:50 PM - 02:55 PM	49.9	46.3
07:35 AM - 07:40 AM	51.3	43.1	12:15 PM - 12:20 PM	52.4	46.7	02:55 PM - 03:00 PM	57.0	46.5
07:40 AM - 07:45 AM	45.5	43.0	12:20 PM - 12:25 PM	45.1	45.1	03:00 PM - 03:05 PM	57.3	45.3
07:45 AM - 07:50 AM	36.5	42.5	12:25 PM - 12:30 PM	49.2	44.6	03:05 PM - 03:10 PM	57.4	44.8
07:50 AM - 07:55 AM	32.5	45.9	12:30 PM - 12:35 PM	54.8	46.6	03:10 PM - 03:15 PM	59.1	44.8
07:55 AM - 10:00 AM	60.6	44.4	12:35 PM - 12:40 PM	48.8	46.2	03:15 PM - 03:20 PM	48.9	44.4
10:00 AM - 10:05 AM	61.5	44.3	12:40 PM - 12:45 PM	46.4	45.7	03:20 PM - 03:25 PM	54.0	45.5
10:05 AM - 10:10 AM	54.8	44.4	12:45 PM - 12:50 PM	48.8	45.2	03:25 PM - 03:30 PM	58.2	44.8
10:10 AM - 10:15 AM	55.5	44.2	12:50 PM - 12:55 PM	49.6	45.7	03:30 PM - 03:35 PM	50.9	44.8
10:15 AM - 10:20 AM	56.4	43.8	12:55 PM - 01:00 PM	46.1	46.1	03:35 PM - 03:40 PM	50.4	45.5
10:20 AM - 10:25 AM	46.4	42.4	01:00 PM - 01:05 PM	50.8	46.4	03:40 PM - 03:45 PM	55.2	46.6
10:25 AM - 10:30 AM	36.3	42.8	01:05 PM - 01:10 PM	50.1	46.5	03:45 PM - 03:50 PM	56.5	46.1
10:30 AM - 10:35 AM	47.6	43.5	01:10 PM - 01:15 PM	48.6	45.0	03:50 PM - 03:55 PM	48.1	45.0
10:35 AM - 10:40 AM	47.3	44.4	01:15 PM - 01:20 PM	46.2	46.2	03:55 PM - 04:00 PM	51.2	45.7



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งรัชชิต
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270016-1

Sample Number : 2211209-15
Parameter : Noise Level (Leq 5 min)
Location : N3 (หน้าอาคาร) (GPS 47P 0730757,1407391)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	66.2	57.4	02:40 AM - 02:45 AM	51.8	50.7
12:05 AM - 12:10 AM	62.0	61.3	02:45 AM - 02:50 AM	51.3	49.6
12:10 AM - 12:15 AM	61.1	60.4	02:50 AM - 02:55 AM	53.8	49.3
12:15 AM - 12:20 AM	59.1	57.1	02:55 AM - 03:00 AM	50.7	48.6
12:20 AM - 12:25 AM	57.3	55.8	03:00 AM - 03:05 AM	50.3	48.7
12:25 AM - 12:30 AM	57.2	54.9	03:05 AM - 03:10 AM	51.7	48.8
12:30 AM - 12:35 AM	57.8	56.0	03:10 AM - 03:15 AM	50.0	48.9
12:35 AM - 12:40 AM	58.0	57.0	03:15 AM - 03:20 AM	49.9	48.5
12:40 AM - 12:45 AM	55.7	54.2	03:20 AM - 03:25 AM	50.1	48.4
12:45 AM - 12:50 AM	54.5	53.1	03:25 AM - 03:30 AM	57.3	49.1
12:50 AM - 12:55 AM	53.5	51.6	03:30 AM - 03:35 AM	53.6	49.5
12:55 AM - 01:00 AM	54.5	50.9	03:35 AM - 03:40 AM	54.5	48.7
01:00 AM - 01:05 AM	53.3	50.4	03:40 AM - 03:45 AM	52.6	47.7
01:05 AM - 01:10 AM	51.8	49.9	03:45 AM - 03:50 AM	52.9	47.6
01:10 AM - 01:15 AM	51.6	49.8	03:50 AM - 03:55 AM	52.6	49.4
01:15 AM - 01:20 AM	51.2	49.6	03:55 AM - 04:00 AM	53.6	50.9
01:20 AM - 01:25 AM	50.7	48.8	04:00 AM - 04:05 AM	55.9	53.5
01:25 AM - 01:30 AM	50.3	48.5	04:05 AM - 04:10 AM	58.0	54.1
01:30 AM - 01:35 AM	52.3	49.0	04:10 AM - 04:15 AM	59.4	56.0
01:35 AM - 01:40 AM	52.9	48.8	04:15 AM - 04:20 AM	58.4	55.3
01:40 AM - 01:45 AM	56.3	49.8	04:20 AM - 04:25 AM	55.9	54.4
01:45 AM - 01:50 AM	52.8	49.2	04:25 AM - 04:30 AM	57.4	55.2
01:50 AM - 01:55 AM	51.9	48.6	04:30 AM - 04:35 AM	56.1	55.5
01:55 AM - 02:00 AM	51.6	49.2	04:35 AM - 04:40 AM	56.7	56.0
02:00 AM - 02:05 AM	51.1	49.3	04:40 AM - 04:45 AM	58.1	57.2
02:05 AM - 02:10 AM	50.6	48.9	04:45 AM - 04:50 AM	57.9	56.9
02:10 AM - 02:15 AM	51.5	49.5	04:50 AM - 04:55 AM	58.0	56.7
02:15 AM - 02:20 AM	52.4	50.5	04:55 AM - 05:00 AM	57.4	56.6
02:20 AM - 02:25 AM	53.0	50.1	05:00 AM - 05:05 AM	58.0	56.8
02:25 AM - 02:30 AM	51.0	49.7	05:05 AM - 05:10 AM	59.3	58.5
02:30 AM - 02:35 AM	50.8	49.0	05:10 AM - 05:15 AM	58.6	57.9
02:35 AM - 02:40 AM	50.9	49.2	05:15 AM - 05:20 AM	58.6	57.9

Approved by

Sarayu Jitranont
Assistant General Manager

KED 104 Phatthanakan Rd., Phatthanakan Rd., Khlong Phatthanakan, Khlong Phatthanakan, Bangkok 10250 Thailand | Tel: +66 0 2760 3000 | Fax: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งรัชชิต
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270016-1

Sample Number : 2211209-16
Parameter : Noise Level (Leq 5 min)
Location : N3 (หน้าอาคาร) (GPS 47P 0730757,1407391)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	56.3	54.4	10:40 AM - 10:45 AM	58.9	58.1
08:05 AM - 08:10 AM	56.2	54.8	10:45 AM - 10:50 AM	58.7	57.5
08:10 AM - 08:15 AM	57.1	55.9	10:50 AM - 10:55 AM	57.4	56.3
08:15 AM - 08:20 AM	57.5	55.7	10:55 AM - 11:00 AM	56.6	55.8
08:20 AM - 08:25 AM	57.4	55.8	11:00 AM - 11:05 AM	57.9	57.2
08:25 AM - 08:30 AM	57.1	55.9	11:05 AM - 11:10 AM	57.8	57.1
08:30 AM - 08:35 AM	57.1	55.1	11:10 AM - 11:15 AM	58.0	56.8
08:35 AM - 08:40 AM	56.9	55.1	11:15 AM - 11:20 AM	56.9	55.9
08:40 AM - 08:45 AM	56.7	56.0	11:20 AM - 11:25 AM	56.0	54.8
08:45 AM - 08:50 AM	57.1	56.1	11:25 AM - 11:30 AM	54.9	53.7
08:50 AM - 08:55 AM	57.4	56.3	11:30 AM - 11:35 AM	54.6	53.1
08:55 AM - 09:00 AM	57.2	56.3	11:35 AM - 11:40 AM	53.7	52.8
09:00 AM - 09:05 AM	57.3	56.7	11:40 AM - 11:45 AM	55.1	53.8
09:05 AM - 09:10 AM	57.1	56.3	11:45 AM - 11:50 AM	57.2	56.4
09:10 AM - 09:15 AM	56.2	55.5	11:50 AM - 11:55 AM	57.4	56.7
09:15 AM - 09:20 AM	55.8	54.8	11:55 AM - 12:00 PM	57.4	56.7
09:20 AM - 09:25 AM	55.7	54.2	12:00 PM - 12:05 PM	57.2	56.1
09:25 AM - 09:30 AM	55.5	53.8	12:05 PM - 12:10 PM	55.8	54.8
09:30 AM - 09:35 AM	55.3	53.6	12:10 PM - 12:15 PM	56.0	54.2
09:35 AM - 09:40 AM	55.6	54.0	12:15 PM - 12:20 PM	55.8	54.8
09:40 AM - 09:45 AM	54.9	53.6	12:20 PM - 12:25 PM	55.8	54.6
09:45 AM - 09:50 AM	56.8	55.6	12:25 PM - 12:30 PM	57.0	53.8
09:50 AM - 09:55 AM	57.3	56.6	12:30 PM - 12:35 PM	55.7	53.3
09:55 AM - 10:00 AM	56.9	56.1	12:35 PM - 12:40 PM	53.8	52.1
10:00 AM - 10:05 AM	56.7	56.0	12:40 PM - 12:45 PM	52.6	51.1
10:05 AM - 10:10 AM	57.8	56.5	12:45 PM - 12:50 PM	54.2	50.7
10:10 AM - 10:15 AM	56.9	56.2	12:50 PM - 12:55 PM	52.8	50.1
10:15 AM - 10:20 AM	57.1	56.1	12:55 PM - 01:00 PM	51.2	49.6
10:20 AM - 10:25 AM	57.6	56.8	01:00 PM - 01:05 PM	51.3	49.3
10:25 AM - 10:30 AM	58.4	57.6	01:05 PM - 01:10 PM	50.3	48.7
10:30 AM - 10:35 AM	58.5	57.7	01:10 PM - 01:15 PM	51.0	48.6
10:35 AM - 10:40 AM	58.6	57.7	01:15 PM - 01:20 PM	50.8	48.6

Approved by

Sarayu Jitranont
Assistant General Manager

KED 104 Phatthanakan Rd., Phatthanakan Rd., Khlong Phatthanakan, Khlong Phatthanakan, Bangkok 10250 Thailand | Tel: +66 0 2760 3000 | Fax: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งรัชชิต
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270016-1

Sample Number : 2211209-16
Parameter : Noise Level (Leq 5 min)
Location : N3 (หน้าอาคาร) (GPS 47P 0730757,1407391)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	51.0	47.6	06:40 PM - 06:45 PM	54.4	46.1
04:05 PM - 04:10 PM	50.9	48.8	06:45 PM - 06:50 PM	53.5	46.7
04:10 PM - 04:15 PM	53.4	52.3	06:50 PM - 06:55 PM	53.3	46.6
04:15 PM - 04:20 PM	54.3	52.1	06:55 PM - 07:00 PM	53.6	47.4
04:20 PM - 04:25 PM	51.1	47.8	07:00 PM - 07:05 PM	50.4	46.9
04:25 PM - 04:30 PM	50.8	48.6	07:05 PM - 07:10 PM	52.2	46.5
04:30 PM - 04:35 PM	49.7	47.5	07:10 PM - 07:15 PM	54.1	47.6
04:35 PM - 04:40 PM	48.6	46.5	07:15 PM - 07:20 PM	49.4	47.7
04:40 PM - 04:45 PM	49.8	46.8	07:20 PM - 07:25 PM	50.7	47.5
04:45 PM - 04:50 PM	49.7	46.3	07:25 PM - 07:30 PM	55.1	46.3
04:50 PM - 04:55 PM	47.2	46.0	07:30 PM - 07:35 PM	55.7	46.8
04:55 PM - 05:00 PM	47.6	46.4	07:35 PM - 07:40 PM	58.9	57.3
05:00 PM - 05:05 PM	47.8	46.7	07:40 PM - 07:45 PM	58.3	50.5
05:05 PM - 05:10 PM	47.1	45.7	07:45 PM - 07:50 PM	49.6	47.1
05:10 PM - 05:15 PM	47.9	46.7	07:50 PM - 07:55 PM	55.6	46.3
05:15 PM - 05:20 PM	47.5	46.5	07:55 PM - 08:00 PM	55.1	46.6
05:20 PM - 05:25 PM	48.3	46.5	08:00 PM - 08:05 PM	47.0	45.2
05:25 PM - 05:30 PM	47.5	46.3	08:05 PM - 08:10 PM	50.9	46.5
05:30 PM - 05:35 PM	47.5	46.0	08:10 PM - 08:15 PM	49.4	46.3
05:35 PM - 05:40 PM	49.1	46.6	08:15 PM - 08:20 PM	50.1	45.2
05:40 PM - 05:45 PM	47.2	46.0	08:20 PM - 08:25 PM	53.4	46.0
05:45 PM - 05:50 PM	47.5	46.1	08:25 PM - 08:30 PM	54.5	46.7
05:50 PM - 05:55 PM	47.5	46.3	08:30 PM - 08:35 PM	56.9	46.7
05:55 PM - 06:00 PM	47.5	45.9	08:35 PM - 08:40 PM	52.6	45.9
06:00 PM - 06:05 PM	48.4	45.9	08:40 PM - 08:45 PM	57.5	48.3
06:05 PM - 06:10 PM	48.2	45.6	08:45 PM - 08:50 PM	56.6	49.5
06:10 PM - 06:15 PM	49.4	46.5	08:50 PM - 08:55 PM	50.1	48.2
06:15 PM - 06:20 PM	50.0	47.0	08:55 PM - 09:00 PM	49.8	46.7
06:20 PM - 06:25 PM	48.0	45.9	09:00 PM - 09:05 PM	52.8	46.8
06:25 PM - 06:30 PM	50.2	46.3	09:05 PM - 09:10 PM	52.3	48.2
06:30 PM - 06:35 PM	52.8	46.8	09:10 PM - 09:15 PM	51.2	47.1
06:35 PM - 06:40 PM	54.1	45.8	09:15 PM - 09:20 PM	52.0	46.9

Approved by

Sarayu Jitranont
Assistant General Manager

KED 104 Phatthanakan Rd., Phatthanakan Rd., Khlong Phatthanakan, Khlong Phatthanakan, Bangkok 10250 Thailand | Tel: +66 0 2760 3000 | Fax: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : รุ่งรัชชิต
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270016-1

Sample Number : 2211209-16
Parameter : Noise Level (Leq 5 min)
Location : N3 (หน้าอาคาร) (GPS 47P 0730757,1407391)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	46.6	43.4	02:40 AM - 02:45 AM	45.7	44.4	05:20 AM - 05:25 AM	49.7	45.2
12:05 AM - 12:10 AM	45.8	43.4	02:45 AM - 02:50 AM	47.1	45.3	05:25 AM - 05:30 AM	50.9	45.2
12:10 AM - 12:15 AM	56.4	44.5	02:50 AM - 02:55 AM	47.5	45.8	05:30 AM - 05:35 AM	54.8	45.5
12:15 AM - 12:20 AM	53.0	43.8	02:55 AM - 03:00 AM	55.6	45.2	05:35 AM - 05:40 AM	47.9	45.7
12:20 AM - 12:25 AM	51.2	43.7	03:00 AM - 03:05 AM	50.8	45.0	05:40 AM - 05:45 AM	45.8	45.8
12:25 AM - 12:30 AM	45.5	43.7	03:05 AM - 03:10 AM	63.0	45.7	05:45 AM - 05:50 AM	48.0	45.2
12:30 AM - 12:35 AM	45.5	43.8	03:10 AM - 03:15 AM	63.4	44.7	05:50 AM - 05:55 AM	47.2	45.2
12:35 AM - 12:40 AM	47.9	45.0	03:15 AM - 03:20 AM	47.8	44.6	05:55 AM - 06:00 AM	50.0	45.6
12:40 AM - 12:45 AM	44.8	44.5	03:20 AM - 03:25 AM	49.1	44.3	06:00 AM - 06:05 AM	49.1	45.5
12:45 AM - 12:50 AM	46.5	45.3	03:25 AM - 03:30 AM	48.3	45.2	06:05 AM - 06:10 AM	51.9	45.8
12:50 AM - 12:55 AM	62.3	43.7	03:30 AM - 03:35 AM	47.2	44.9	06:10 AM - 06:15 AM	51.6	47.0
12:55 AM - 01:00 AM	47.2	43.2	03:35 AM - 03:40 AM	48.8	46.2	06:15 AM - 06:20 AM	46.6	46.7
01:00 AM - 01:05 AM	44.4	42.7	03:40 AM - 03:45 AM	47.4	45.5	06:20 AM - 06:25 AM	55.1	47.1
01:05 AM - 01:10 AM	44.2	42.6	03:45 AM - 03:50 AM	48.0	45.6	06:25 AM - 06:30 AM	62.6	46.8
01:10 AM - 01:15 AM	44.7	43.9	03:50 AM - 03:55 AM	49.9	46.8	06:30 AM - 06:35 AM	60.0	47.2
01:15 AM - 01:20 AM	44.9	42.2	03:55 AM - 04:00 AM	49.6	45.2	06:35 AM - 06:40 AM	47.4	46.1
01:20 AM - 01:25 AM	45.1	42.5	04:00 AM - 04:05 AM	60.9	45.3	06:40 AM - 06:45 AM	57.1	46.5
01:25 AM - 01:30 AM	47.5	43.4	04:05 AM - 04:10 AM	61.1	44.8	06:45 AM - 06:50 AM	53.4	46.7
01:30 AM - 01:35 AM	44.9	42.6	04:10 AM - 04:15 AM	66.1	45.9	06:50 AM - 06:55 AM	46.6	46.9
01:35 AM - 01:40 AM	52.4	42.6	04:15 AM - 04:20 AM	59.5	45.8	06:55 AM - 07:00 AM	56.6	46.6
01:40 AM - 01:45 AM	43.8	42.2	04:20 AM - 04:25 AM	56.0	45.1	07:00 AM - 07:05 AM	58.2	50.0
01:45 AM - 01:50 AM	44.2	42.5	04:25 AM - 04:30 AM	47.5	45.4	07:05 AM - 07:10 AM	62.9	57.2
01:50 AM - 01:55 AM	47.6	43.4	04:30 AM - 04:35 AM	46.8	45.5	07:10 AM - 07:15 AM	68.8	66.4
01:55 AM - 02:00 AM	44.3	42.8	04:35 AM - 04:40 AM	47.5	44.7	07:15 AM - 07:20 AM	72.6	71.1
02:00 AM - 02:05 AM	45.9	43.4	04:40 AM - 04:45 AM	48.8	46.2	07:20 AM - 07:25 AM	74.0	73.5
02:05 AM - 02:10 AM	46.5	43.8	04:45 AM - 04:50 AM	53.9	46.2	07:25 AM - 07:30 AM	73.9	73.6
02:10 AM - 02:15 AM	50.2	44.0	04:50 AM - 04:55 AM	48.7	46.7	07:30 AM - 07:35 AM	73.1	73.6
02:15 AM - 02:20 AM	45.4	43.0	04:55 AM - 05:00 AM	49.3	47.2	07:35 AM - 07:40 AM	73.1	72.6
02:20 AM - 02:25 AM	46.0	44.3	05:00 AM - 05:05 AM	52.6	46.4	07:40 AM - 07:45 AM	73.5	73.1
02:25 AM - 02:30 AM	46.2	44.3	05:05 AM - 05:10 AM	55.5	44.6	07:45 AM - 07:50 AM	72.6	72.1
02:30 AM - 02:35 AM	47.3	45.3	05:10 AM - 05:15 AM	47.2	45.5	07:50 AM - 07:55 AM	70.3	69.0
02:35 AM - 02:40 AM	47.0	45.2	05:15 AM - 05:20 AM	47.9	46.0	07:55 AM - 08:00 AM	66.7	64.3



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Ananya

Project Name : Project AIE Rayong

Project Location : Project AIE Rayong

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270017-1

Sample Number : 2211209-17
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nuanruan) (GPS 47P 0730757,1407391)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	52.0	40.9	10:40 AM - 10:45 AM	55.4	45.9	01:20 PM - 01:25 PM	50.0	45.0
08:05 AM - 08:10 AM	53.1	40.4	10:45 AM - 10:50 AM	55.9	47.9	01:25 PM - 01:30 PM	53.5	43.5
08:10 AM - 08:15 AM	55.2	41.9	10:50 AM - 10:55 AM	54.3	47.9	01:30 PM - 01:35 PM	49.3	43.1
08:15 AM - 08:20 AM	57.3	43.7	10:55 AM - 11:00 AM	52.2	46.1	01:35 PM - 01:40 PM	52.4	42.7
08:20 AM - 08:25 AM	55.5	42.6	11:00 AM - 11:05 AM	51.1	46.1	01:40 PM - 01:45 PM	50.4	43.6
08:25 AM - 08:30 AM	59.6	49.5	11:05 AM - 11:10 AM	52.4	45.5	01:45 PM - 01:50 PM	52.8	43.8
08:30 AM - 08:35 AM	59.0	48.5	11:10 AM - 11:15 AM	55.4	45.6	01:50 PM - 01:55 PM	51.6	43.8
08:35 AM - 08:40 AM	60.3	46.3	11:15 AM - 11:20 AM	53.5	44.2	01:55 PM - 02:00 PM	50.0	44.0
08:40 AM - 08:45 AM	58.4	45.6	11:20 AM - 11:25 AM	46.8	44.2	02:00 PM - 02:05 PM	44.0	41.1
08:45 AM - 08:50 AM	58.6	45.9	11:25 AM - 11:30 AM	46.6	44.2	02:05 PM - 02:10 PM	51.9	42.6
08:50 AM - 08:55 AM	58.3	47.7	11:30 AM - 11:35 AM	45.8	43.1	02:10 PM - 02:15 PM	50.8	43.1
08:55 AM - 09:00 AM	56.5	45.5	11:35 AM - 11:40 AM	47.3	44.5	02:15 PM - 02:20 PM	47.0	42.7
09:00 AM - 09:05 AM	60.7	46.4	11:40 AM - 11:45 AM	48.3	45.2	02:20 PM - 02:25 PM	49.1	43.6
09:05 AM - 09:10 AM	57.8	46.4	11:45 AM - 11:50 AM	47.9	44.7	02:25 PM - 02:30 PM	46.0	43.0
09:10 AM - 09:15 AM	59.3	47.0	11:50 AM - 11:55 AM	47.3	44.4	02:30 PM - 02:35 PM	46.1	42.3
09:15 AM - 09:20 AM	61.3	49.2	11:55 AM - 12:00 PM	48.0	44.0	02:35 PM - 02:40 PM	48.6	43.0
09:20 AM - 09:25 AM	58.4	48.2	12:00 PM - 12:05 PM	46.4	43.6	02:40 PM - 02:45 PM	46.2	44.3
09:25 AM - 09:30 AM	59.7	48.0	12:05 PM - 12:10 PM	48.3	43.6	02:45 PM - 02:50 PM	45.4	43.8
09:30 AM - 09:35 AM	60.8	46.9	12:10 PM - 12:15 PM	47.9	43.4	02:50 PM - 02:55 PM	58.2	43.9
09:35 AM - 09:40 AM	57.5	44.2	12:15 PM - 12:20 PM	48.4	44.2	02:55 PM - 03:00 PM	45.9	43.3
09:40 AM - 09:45 AM	56.9	45.4	12:20 PM - 12:25 PM	48.6	44.1	03:00 PM - 03:05 PM	51.2	43.2
09:45 AM - 09:50 AM	60.2	48.1	12:25 PM - 12:30 PM	50.0	42.3	03:05 PM - 03:10 PM	51.2	43.0
09:50 AM - 09:55 AM	61.8	49.6	12:30 PM - 12:35 PM	51.4	44.3	03:10 PM - 03:15 PM	49.8	43.1
09:55 AM - 10:00 AM	57.4	44.8	12:35 PM - 12:40 PM	51.2	42.5	03:15 PM - 03:20 PM	49.3	44.5
10:00 AM - 10:05 AM	53.7	44.6	12:40 PM - 12:45 PM	50.3	43.1	03:20 PM - 03:25 PM	53.2	45.4
10:05 AM - 10:10 AM	55.6	45.4	12:45 PM - 12:50 PM	48.0	43.8	03:25 PM - 03:30 PM	56.3	44.2
10:10 AM - 10:15 AM	54.2	45.0	12:50 PM - 12:55 PM	50.9	44.1	03:30 PM - 03:35 PM	49.3	45.4
10:15 AM - 10:20 AM	57.6	47.9	12:55 PM - 01:00 PM	51.4	43.5	03:35 PM - 03:40 PM	49.2	45.9
10:20 AM - 10:25 AM	56.3	48.5	01:00 PM - 01:05 PM	46.7	42.6	03:40 PM - 03:45 PM	48.1	41.2
10:25 AM - 10:30 AM	53.9	49.2	01:05 PM - 01:10 PM	53.7	45.2	03:45 PM - 03:50 PM	45.2	43.4
10:30 AM - 10:35 AM	54.5	50.2	01:10 PM - 01:15 PM	49.8	44.6	03:50 PM - 03:55 PM	45.5	42.8
10:35 AM - 10:40 AM	54.9	48.2	01:15 PM - 01:20 PM	49.1	44.3	03:55 PM - 04:00 PM	47.8	42.0

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Ananya

Project Name : Project AIE Rayong

Project Location : Project AIE Rayong

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270017-1

Sample Number : 2211209-17
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nuanruan) (GPS 47P 0730757,1407391)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17 - Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	47.5	43.1	06:40 PM - 06:45 PM	54.2	42.9	09:20 PM - 09:25 PM	42.8	38.8
04:05 PM - 04:10 PM	49.1	44.1	06:45 PM - 06:50 PM	54.5	52.7	09:25 PM - 09:30 PM	43.4	39.0
04:10 PM - 04:15 PM	48.6	43.6	06:50 PM - 06:55 PM	54.5	51.6	09:30 PM - 09:35 PM	43.7	38.7
04:15 PM - 04:20 PM	44.9	42.6	06:55 PM - 07:00 PM	54.6	53.0	09:35 PM - 09:40 PM	45.2	38.7
04:20 PM - 04:25 PM	45.0	43.2	07:00 PM - 07:05 PM	54.6	52.9	09:40 PM - 09:45 PM	46.0	38.4
04:25 PM - 04:30 PM	44.8	42.0	07:05 PM - 07:10 PM	54.5	52.8	09:45 PM - 09:50 PM	44.0	38.4
04:30 PM - 04:35 PM	45.5	42.6	07:10 PM - 07:15 PM	48.7	40.9	09:50 PM - 09:55 PM	44.1	38.2
04:35 PM - 04:40 PM	45.0	41.5	07:15 PM - 07:20 PM	54.2	45.2	09:55 PM - 10:00 PM	43.2	38.1
04:40 PM - 04:45 PM	47.2	42.1	07:20 PM - 07:25 PM	53.7	42.2	10:00 PM - 10:05 PM	50.1	39.4
04:45 PM - 04:50 PM	47.8	41.1	07:25 PM - 07:30 PM	53.0	40.6	10:05 PM - 10:10 PM	56.5	52.2
04:50 PM - 04:55 PM	47.7	42.2	07:30 PM - 07:35 PM	54.0	45.5	10:10 PM - 10:15 PM	57.0	53.0
04:55 PM - 05:00 PM	46.0	42.3	07:35 PM - 07:40 PM	53.4	41.0	10:15 PM - 10:20 PM	55.7	53.0
05:00 PM - 05:05 PM	52.4	42.6	07:40 PM - 07:45 PM	53.7	42.2	10:20 PM - 10:25 PM	39.6	37.6
05:05 PM - 05:10 PM	45.1	42.1	07:45 PM - 07:50 PM	51.6	40.1	10:25 PM - 10:30 PM	38.8	37.5
05:10 PM - 05:15 PM	47.8	40.9	07:50 PM - 07:55 PM	53.2	42.9	10:30 PM - 10:35 PM	39.4	37.1
05:15 PM - 05:20 PM	47.3	41.9	07:55 PM - 08:00 PM	53.9	44.7	10:35 PM - 10:40 PM	36.3	37.1
05:20 PM - 05:25 PM	76.0	75.3	08:00 PM - 08:05 PM	53.5	42.4	10:40 PM - 10:45 PM	39.6	37.1
05:25 PM - 05:30 PM	75.3	73.5	08:05 PM - 08:10 PM	53.5	44.4	10:45 PM - 10:50 PM	38.9	37.5
05:30 PM - 05:35 PM	69.1	61.1	08:10 PM - 08:15 PM	50.6	39.8	10:50 PM - 10:55 PM	39.2	37.8
05:35 PM - 05:40 PM	55.2	41.9	08:15 PM - 08:20 PM	40.6	39.2	10:55 PM - 11:00 PM	40.3	37.9
05:40 PM - 05:45 PM	46.8	40.8	08:20 PM - 08:25 PM	40.4	39.2	11:00 PM - 11:05 PM	40.5	37.9
05:45 PM - 05:50 PM	52.5	41.8	08:25 PM - 08:30 PM	40.3	39.1	11:05 PM - 11:10 PM	41.2	37.7
05:50 PM - 05:55 PM	54.1	52.3	08:30 PM - 08:35 PM	41.3	39.5	11:10 PM - 11:15 PM	41.8	37.4
05:55 PM - 06:00 PM	52.0	41.9	08:35 PM - 08:40 PM	40.8	39.3	11:15 PM - 11:20 PM	46.0	37.4
06:00 PM - 06:05 PM	53.1	42.4	08:40 PM - 08:45 PM	41.2	39.9	11:20 PM - 11:25 PM	45.8	37.5
06:05 PM - 06:10 PM	53.7	43.8	08:45 PM - 08:50 PM	40.9	39.8	11:25 PM - 11:30 PM	45.6	37.1
06:10 PM - 06:15 PM	53.1	41.7	08:50 PM - 08:55 PM	45.7	40.1	11:30 PM - 11:35 PM	41.1	37.1
06:15 PM - 06:20 PM	53.7	42.0	08:55 PM - 09:00 PM	41.6	40.3	11:35 PM - 11:40 PM	43.5	37.5
06:20 PM - 06:25 PM	53.3	42.0	09:00 PM - 09:05 PM	41.9	39.3	11:40 PM - 11:45 PM	44.4	37.2
06:25 PM - 06:30 PM	55.2	52.8	09:05 PM - 09:10 PM	41.8	39.0	11:45 PM - 11:50 PM	45.4	37.2
06:30 PM - 06:35 PM	54.6	52.7	09:10 PM - 09:15 PM	42.5	39.2	11:50 PM - 11:55 PM	42.9	36.9
06:35 PM - 06:40 PM	54.5	42.7	09:15 PM - 09:20 PM	52.2	38.8	11:55 PM - 12:00 AM	45.6	36.9

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Ananya

Project Name : Project AIE Rayong

Project Location : Project AIE Rayong

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270017-1

Sample Number : 2211209-17
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nuanruan) (GPS 47P 0730757,1407391)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	45.2	36.4	02:40 AM - 02:45 AM	40.6	37.0	05:20 AM - 05:25 AM	49.9	42.7
12:05 AM - 12:10 AM	47.0	38.4	02:45 AM - 02:50 AM	40.8	36.4	05:25 AM - 05:30 AM	46.4	43.3
12:10 AM - 12:15 AM	49.1	43.2	02:50 AM - 02:55 AM	41.8	37.0	05:30 AM - 05:35 AM	47.2	42.9
12:15 AM - 12:20 AM	47.3	40.1	02:55 AM - 03:00 AM	40.4	37.1	05:35 AM - 05:40 AM	45.8	42.6
12:20 AM - 12:25 AM	45.1	38.3	03:00 AM - 03:05 AM	41.0	37.0	05:40 AM - 05:45 AM	53.4	42.7
12:25 AM - 12:30 AM	42.1	37.8	03:05 AM - 03:10 AM	42.5	37.6	05:45 AM - 05:50 AM	45.6	41.5
12:30 AM - 12:35 AM	42.9	39.6	03:10 AM - 03:15 AM	42.5	37.3	05:50 AM - 05:55 AM	43.9	41.2
12:35 AM - 12:40 AM	36.0	41.9	03:15 AM - 03:20 AM	41.5	36.7	05:55 AM - 06:00 AM	48.5	42.2
12:40 AM - 12:45 AM	66.2	57.3	03:20 AM - 03:25 AM	42.0	37.4	06:00 AM - 06:05 AM	47.9	43.2
12:45 AM - 12:50 AM	69.2	68.4	03:25 AM - 03:30 AM	43.2	37.4	06:05 AM - 06:10 AM	46.2	41.4
12:50 AM - 12:55 AM	62.8	49.2	03:30 AM - 03:35 AM	41.9	37.4	06:10 AM - 06:15 AM	45.5	41.6
12:55 AM - 01:00 AM	38.0	37.6	03:35 AM - 03:40 AM	43.0	37.0	06:15 AM - 06:20 AM	46.2	42.3
01:00 AM - 01:05 AM	38.5	36.5	03:40 AM - 03:45 AM	42.6	37.3	06:20 AM - 06:25 AM	51.0	43.1
01:05 AM - 01:10 AM	37.8	36.4	03:45 AM - 03:50 AM	44.6	36.6	06:25 AM - 06:30 AM	45.5	41.6
01:10 AM - 01:15 AM	39.1	36.7	03:50 AM - 03:55 AM	43.4	37.1	06:30 AM - 06:35 AM	46.3	42.5
01:15 AM - 01:20 AM	37.9	36.7	03:55 AM - 04:00 AM	43.4	37.1	06:35 AM - 06:40 AM	46.7	41.9
01:20 AM - 01:25 AM	38.0	37.0	04:00 AM - 04:05 AM	43.2	37.2	06:40 AM - 06:45 AM	45.3	40.9
01:25 AM - 01:30 AM	38.4	37.1	04:05 AM - 04:10 AM	43.3	37.1	06:45 AM - 06:50 AM	49.2	40.4
01:30 AM - 01:35 AM	39.0	37.4	04:10 AM - 04:15 AM	43.7	37.6	06:50 AM - 06:55 AM	50.5	41.8
01:35 AM - 01:40 AM	40.8	37.3	04:15 AM - 04:20 AM	45.4	37.6	06:55 AM - 07:00 AM	46.8	41.5
01:40 AM - 01:45 AM	39.0	37.0	04:20 AM - 04:25 AM	45.6	38.6	07:00 AM - 07:05 AM	46.7	40.1
01:45 AM - 01:50 AM	39.0	36.5	04:25 AM - 04:30 AM	45.9	38.3	07:05 AM - 07:10 AM	46.4	39.8
01:50 AM - 01:55 AM	39.4	36.9	04:30 AM - 04:35 AM	45.9	39.5	07:10 AM - 07:15 AM	52.7	39.9
01:55 AM - 02:00 AM	39.3	36.9	04:35 AM - 04:40 AM	44.9	39.8	07:15 AM - 07:20 AM	55.4	44.4
02:00 AM - 02:05 AM	38.4	36.7	04:40 AM - 04:45 AM	44.7	41.6	07:20 AM - 07:25 AM	47.8	43.0
02:05 AM - 02:10 AM	39.0	36.5	04:45 AM - 04:50 AM	43.7	42.0	07:25 AM - 07:30 AM	46.1	40.5
02:10 AM - 02:15 AM	44.8	36.6	04:50 AM - 04:55 AM	70.3	67.6	07:30 AM - 07:35 AM	46.6	40.7
02:15 AM - 02:20 AM	46.2	42.0	04:55 AM - 05:00 AM	45.8	43.0	07:35 AM - 07:40 AM	47.3	39.7
02:20 AM - 02:25 AM	40.3	37.8	05:00 AM - 05:05 AM	57.1	43.9	07:40 AM - 07:45 AM	51.2	42.5
02:25 AM - 02:30 AM	40.4	36.6	05:05 AM - 05:10 AM	55.0	44.8	07:45 AM - 07:50 AM	45.4	41.1
02:30 AM - 02:35 AM	41.2	37.2	05:10 AM - 05:15 AM	55.9	44.9	07:50 AM - 07:55 AM	49.2	45.3
02:35 AM - 02:40 AM	42.3	37.4	05:15 AM - 05:20 AM	53.0	43.7	07:55 AM - 08:00 AM	49.1	45.1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : อนุทิน
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270018-1

Sample Number	2211209-18	Parameter	Noise Level (Leq 5 min)	Location	N3 (สวนสาธารณะ) (GPS 47P 0730757,1407391)	Measurement Date	Mar 18 - Mar 19, 2022	Measurement by	Nontachai Uppathamp	Sound Level meter	Serial No. 01222716
Time	Leq dB(A)	L90 dB(A)	Time	Leq dB(A)	L90 dB(A)	Time	Leq dB(A)	L90 dB(A)	Time	Leq dB(A)	L90 dB(A)
04:00 PM - 04:05 PM	40.3	45.1	06:40 PM - 06:45 PM	40.3	47.1	09:20 PM - 09:25 PM	54.0	51.2	04:00 PM - 04:05 PM	50.8	50.3
04:05 PM - 04:10 PM	51.5	48.6	06:45 PM - 06:50 PM	47.8	46.5	09:25 PM - 09:30 PM	52.0	50.3	04:05 PM - 04:10 PM	50.5	50.0
04:10 PM - 04:15 PM	48.6	47.6	06:50 PM - 06:55 PM	47.6	46.3	09:30 PM - 09:35 PM	50.7	49.8	04:10 PM - 04:15 PM	50.9	50.3
04:15 PM - 04:20 PM	49.1	48.1	06:55 PM - 07:00 PM	48.4	47.0	09:35 PM - 09:40 PM	51.2	49.7	04:15 PM - 04:20 PM	50.5	49.9
04:20 PM - 04:25 PM	49.7	48.8	07:00 PM - 07:05 PM	48.7	47.6	09:40 PM - 09:45 PM	51.3	49.9	04:20 PM - 04:25 PM	50.2	49.8
04:25 PM - 04:30 PM	49.3	48.3	07:05 PM - 07:10 PM	48.6	47.4	09:45 PM - 09:50 PM	55.7	52.2	04:25 PM - 04:30 PM	50.4	49.9
04:30 PM - 04:35 PM	49.2	48.0	07:10 PM - 07:15 PM	48.1	46.9	09:50 PM - 09:55 PM	52.9	50.4	04:30 PM - 04:35 PM	51.1	50.7
04:35 PM - 04:40 PM	49.1	48.1	07:15 PM - 07:20 PM	47.1	46.1	09:55 PM - 10:00 PM	51.4	50.0	04:35 PM - 04:40 PM	50.8	50.3
04:40 PM - 04:45 PM	49.0	47.5	07:20 PM - 07:25 PM	47.4	46.0	10:00 PM - 10:05 PM	50.8	50.0	04:40 PM - 04:45 PM	51.2	50.8
04:45 PM - 04:50 PM	49.6	48.7	07:25 PM - 07:30 PM	50.4	47.4	10:05 PM - 10:10 PM	50.1	49.5	04:45 PM - 04:50 PM	51.1	50.6
04:50 PM - 04:55 PM	49.4	47.9	07:30 PM - 07:35 PM	47.7	46.7	10:10 PM - 10:15 PM	50.1	49.4	04:50 PM - 04:55 PM	51.1	50.6
04:55 PM - 05:00 PM	48.8	47.6	07:35 PM - 07:40 PM	48.6	47.4	10:15 PM - 10:20 PM	50.6	49.5	04:55 PM - 05:00 PM	50.9	50.4
05:00 PM - 05:05 PM	48.8	47.7	07:40 PM - 07:45 PM	48.5	47.2	10:20 PM - 10:25 PM	50.2	49.4	05:00 PM - 05:05 PM	51.0	50.6
05:05 PM - 05:10 PM	48.7	47.4	07:45 PM - 07:50 PM	50.2	47.1	10:25 PM - 10:30 PM	50.2	49.7	05:05 PM - 05:10 PM	51.6	51.0
05:10 PM - 05:15 PM	48.3	46.9	07:50 PM - 07:55 PM	49.3	47.3	10:30 PM - 10:35 PM	50.0	49.5	05:10 PM - 05:15 PM	51.4	50.8
05:15 PM - 05:20 PM	48.6	47.5	07:55 PM - 08:00 PM	48.1	47.2	10:35 PM - 10:40 PM	50.0	49.5	05:15 PM - 05:20 PM	51.1	50.5
05:20 PM - 05:25 PM	47.9	46.5	08:00 PM - 08:05 PM	48.2	47.4	10:40 PM - 10:45 PM	50.8	49.5	05:20 PM - 05:25 PM	51.4	50.8
05:25 PM - 05:30 PM	47.8	46.8	08:05 PM - 08:10 PM	48.1	47.3	10:45 PM - 10:50 PM	49.9	49.4	05:25 PM - 05:30 PM	51.5	50.9
05:30 PM - 05:35 PM	47.6	46.5	08:10 PM - 08:15 PM	48.0	47.2	10:50 PM - 10:55 PM	50.6	50.1	05:30 PM - 05:35 PM	51.6	51.0
05:35 PM - 05:40 PM	48.2	46.9	08:15 PM - 08:20 PM	47.5	46.6	10:55 PM - 11:00 PM	50.4	49.9	05:35 PM - 05:40 PM	51.2	50.8
05:40 PM - 05:45 PM	48.6	47.4	08:20 PM - 08:25 PM	47.5	46.6	11:00 PM - 11:05 PM	49.9	49.4	05:40 PM - 05:45 PM	51.5	51.0
05:45 PM - 05:50 PM	48.5	47.2	08:25 PM - 08:30 PM	48.0	47.0	11:05 PM - 11:10 PM	50.1	49.5	05:45 PM - 05:50 PM	51.3	50.8
05:50 PM - 05:55 PM	47.5	46.6	08:30 PM - 08:35 PM	48.3	47.4	11:10 PM - 11:15 PM	51.0	50.1	05:50 PM - 05:55 PM	51.2	50.8
05:55 PM - 06:00 PM	47.6	46.7	08:35 PM - 08:40 PM	47.3	46.5	11:15 PM - 11:20 PM	50.7	50.3	05:55 PM - 06:00 PM	51.4	50.9
06:00 PM - 06:05 PM	47.8	46.8	08:40 PM - 08:45 PM	47.6	46.9	11:20 PM - 11:25 PM	50.7	50.1	06:00 PM - 06:05 PM	51.5	51.0
06:05 PM - 06:10 PM	47.9	46.9	08:45 PM - 08:50 PM	48.1	47.3	11:25 PM - 11:30 PM	50.7	50.1	06:05 PM - 06:10 PM	51.3	50.8
06:10 PM - 06:15 PM	47.5	46.6	08:50 PM - 08:55 PM	47.7	46.3	11:30 PM - 11:35 PM	51.6	50.7	06:10 PM - 06:15 PM	51.2	50.8
06:15 PM - 06:20 PM	47.6	46.7	08:55 PM - 09:00 PM	48.3	48.4	11:35 PM - 11:40 PM	51.4	50.6	06:15 PM - 06:20 PM	51.6	51.0
06:20 PM - 06:25 PM	47.5	46.7	09:00 PM - 09:05 PM	49.9	48.3	11:40 PM - 11:45 PM	51.5	50.7	06:20 PM - 06:25 PM	51.7	51.2
06:25 PM - 06:30 PM	47.7	46.7	09:05 PM - 09:10 PM	51.1	50.2	11:45 PM - 11:50 PM	50.8	50.3	06:25 PM - 06:30 PM	51.9	51.4
06:30 PM - 06:35 PM	47.5	46.5	09:10 PM - 09:15 PM	53.4	50.7	11:50 PM - 11:55 PM	50.5	50.1	06:30 PM - 06:35 PM	51.8	51.3
06:35 PM - 06:40 PM	48.4	47.1	09:15 PM - 09:20 PM	55.3	50.7	11:55 PM - 12:00 AM	51.3	50.3	06:35 PM - 06:40 PM	51.4	51.1

Approved by
Sarayu Jitranont
Assistant General Manager

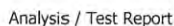


Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Papat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : อนุทิน
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270018-1

Sample Number	2211209-18		Parameter	Noise Level (Leq 5 min)		Location	N3 (สวนสาธารณะ) (GPS 47P 0730757,1407391)	
Measurement Date	Mar 18 - Mar 19, 2022		Measurement by	Nontachai Uppathamp		Sound Level meter	Serial No. 01222716	
Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	50.8	50.3	02:40 AM - 02:45 AM	51.4	51.0	05:20 AM - 05:25 AM	49.9	49.4
12:05 AM - 12:10 AM	50.5	50.0	02:45 AM - 02:50 AM	51.3	49.8	05:25 AM - 05:30 AM	49.8	49.3
12:10 AM - 12:15 AM	50.9	50.3	02:50 AM - 02:55 AM	51.3	50.4	05:30 AM - 05:35 AM	49.9	49.4
12:15 AM - 12:20 AM	50.5	49.9	02:55 AM - 03:00 AM	51.2	50.7	05:35 AM - 05:40 AM	50.2	49.5
12:20 AM - 12:25 AM	50.2	49.8	03:00 AM - 03:05 AM	51.1	50.6	05:40 AM - 05:45 AM	50.1	49.6
12:25 AM - 12:30 AM	50.4	49.9	03:05 AM - 03:10 AM	51.1	50.7	05:45 AM - 05:50 AM	50.3	49.8
12:30 AM - 12:35 AM	50.5	49.9	03:10 AM - 03:15 AM	50.8	50.3	05:50 AM - 05:55 AM	50.4	50.1
12:35 AM - 12:40 AM	50.3	50.0	03:15 AM - 03:20 AM	51.1	50.5	05:55 AM - 06:00 AM	50.3	49.8
12:40 AM - 12:45 AM	50.6	50.1	03:20 AM - 03:25 AM	52.6	51.0	06:00 AM - 06:05 AM	50.1	49.6
12:45 AM - 12:50 AM	51.1	50.5	03:25 AM - 03:30 AM	51.4	50.7	06:05 AM - 06:10 AM	50.2	49.8
12:50 AM - 12:55 AM	50.9	50.4	03:30 AM - 03:35 AM	51.1	50.6	06:10 AM - 06:15 AM	50.1	49.7
12:55 AM - 01:00 AM	51.0	50.6	03:35 AM - 03:40 AM	51.1	50.4	06:15 AM - 06:20 AM	49.9	49.2
01:00 AM - 01:05 AM	51.3	50.8	03:40 AM - 03:45 AM	51.6	50.3	06:20 AM - 06:25 AM	47.1	46.6
01:05 AM - 01:10 AM	51.6	51.0	03:45 AM - 03:50 AM	50.7	49.9	06:25 AM - 06:30 AM	46.9	46.3
01:10 AM - 01:15 AM	50.8	50.3	03:50 AM - 03:55 AM	50.5	49.9	06:30 AM - 06:35 AM	47.0	46.3
01:15 AM - 01:20 AM	51.1	50.5	03:55 AM - 04:00 AM	50.5	50.1	06:35 AM - 06:40 AM	50.2	49.6
01:20 AM - 01:25 AM	51.4	50.8	04:00 AM - 04:05 AM	50.8	50.3	06:40 AM - 06:45 AM	49.5	48.7
01:25 AM - 01:30 AM	51.5	50.9	04:05 AM - 04:10 AM	50.8	50.4	06:45 AM - 06:50 AM	47.4	46.8
01:30 AM - 01:35 AM	51.6	51.0	04:10 AM - 04:15 AM	50.6	50.2	06:50 AM - 06:55 AM	47.6	46.9
01:35 AM - 01:40 AM	52.5	51.0	04:15 AM - 04:20 AM	50.7	50.3	06:55 AM - 07:00 AM	47.4	46.5
01:40 AM - 01:45 AM	51.5	51.0	04:20 AM - 04:25 AM	50.6	50.1	07:00 AM - 07:05 AM	46.9	46.1
01:45 AM - 01:50 AM	51.3	50.8	04:25 AM - 04:30 AM	50.2	50.2	07:05 AM - 07:10 AM	49.6	48.1
01:50 AM - 01:55 AM	51.2	50.8	04:30 AM - 04:35 AM	50.8	50.1	07:10 AM - 07:15 AM	47.2	46.4
01:55 AM - 02:00 AM	51.4	50.9	04:35 AM - 04:40 AM	50.3	50.3	07:15 AM - 07:20 AM	47.5	46.8
02:00 AM - 02:05 AM	51.3	50.8	04:40 AM - 04:45 AM	50.2	49.7	07:20 AM - 07:25 AM	47.5	46.9
02:05 AM - 02:10 AM	51.5	51.0	04:45 AM - 04:50 AM	51.3	49.9	07:25 AM - 07:30 AM	49.0	48.6
02:10 AM - 02:15 AM	51.2	50.8	04:50 AM - 04:55 AM	50.8	49.9	07:30 AM - 07:35 AM	47.6	46.9
02:15 AM - 02:20 AM	51.4	51.0	04:55 AM - 05:00 AM	50.3	49.9	07:35 AM - 07:40 AM	48.8	47.8
02:20 AM - 02:25 AM	51.7	51.2	05:00 AM - 05:05 AM	50.3	49.9	07:40 AM - 07:45 AM	48.6	48.1
02:25 AM - 02:30 AM	51.9	51.4	05:05 AM - 05:10 AM	50.1	49.6	07:45 AM - 07:50 AM	48.7	48.2
02:30 AM - 02:35 AM	51.8	51.3	05:10 AM - 05:15 AM	50.0	49.5	07:50 AM - 07:55 AM	50.3	49.7
02:35 AM - 02:40 AM	51.4	51.1	05:15 AM - 05:20 AM	49.8	49.4	07:55 AM - 08:00 AM	52.0	51.3



Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270019-1

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Sample Number	2211209-19
Parameter	Noise Level (Leq 5 min)
Location	N3 (Nounuan) (GPS 47 0730757, 1407391)
Measurement Date	Mar 19 - Mar 20, 2022
Measurement by	Northchi Upstairhiep
Sound Level meter	Serial No. 01227216

Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	65.2	48.4	02:40 AM - 02:45 AM	48.3	44.8	05:20 AM - 05:25 AM	45.5	43.6
12:05 AM - 12:10 AM	64.4	48.6	02:45 AM - 02:50 AM	47.0	45.2	05:25 AM - 05:30 AM	45.9	43.9
12:10 AM - 12:15 AM	64.4	48.6	02:50 AM - 02:55 AM	47.2	45.0	05:30 AM - 05:35 AM	46.4	43.6
12:15 AM - 12:20 AM	61.5	48.6	02:55 AM - 03:00 AM	46.8	43.6	05:35 AM - 05:40 AM	47.9	43.8
12:20 AM - 12:25 AM	63.2	48.8	03:00 AM - 03:05 AM	46.9	44.6	05:40 AM - 05:45 AM	44.7	43.5
12:25 AM - 12:30 AM	52.6	48.8	03:05 AM - 03:10 AM	49.7	44.9	05:45 AM - 05:50 AM	44.8	42.5
12:30 AM - 12:35 AM	53.4	46.9	03:10 AM - 03:15 AM	45.9	43.4	05:50 AM - 05:55 AM	45.4	43.6
12:35 AM - 12:40 AM	51.1	48.9	03:15 AM - 03:20 AM	47.6	43.9	05:55 AM - 06:00 AM	45.9	43.4
12:40 AM - 12:45 AM	51.1	49.2	03:20 AM - 03:25 AM	48.1	45.1	06:00 AM - 06:05 AM	46.7	44.0
12:45 AM - 12:50 AM	51.1	49.2	03:25 AM - 03:30 AM	48.3	46.2	06:05 AM - 06:10 AM	48.0	43.9
12:50 AM - 12:55 AM	52.0	49.4	03:30 AM - 03:35 AM	48.3	46.2	06:10 AM - 06:15 AM	47.9	43.9
12:55 AM - 01:00 AM	50.4	48.3	03:35 AM - 03:40 AM	45.2	45.2	06:15 AM - 06:20 AM	47.3	43.8
01:00 AM - 01:05 AM	52.1	48.8	03:40 AM - 03:45 AM	45.9	45.4	06:20 AM - 06:25 AM	46.3	44.1
01:05 AM - 01:10 AM	52.9	48.5	03:45 AM - 03:50 AM	45.2	46.4	06:25 AM - 06:30 AM	47.7	43.7
01:10 AM - 01:15 AM	52.7	47.8	03:50 AM - 03:55 AM	50.4	44.9	06:30 AM - 06:35 AM	49.7	44.9
01:15 AM - 01:20 AM	51.4	48.3	03:55 AM - 04:00 AM	47.8	43.6	06:35 AM - 06:40 AM	51.1	45.0
01:20 AM - 01:25 AM	52.8	48.4	04:00 AM - 04:05 AM	45.2	43.7	06:40 AM - 06:45 AM	52.1	46.9
01:25 AM - 01:30 AM	58.1	48.1	04:05 AM - 04:10 AM	48.2	43.2	06:45 AM - 06:50 AM	49.1	46.4
01:30 AM - 01:35 AM	55.8	48.9	04:10 AM - 04:15 AM	50.2	44.5	06:50 AM - 06:55 AM	51.2	44.1
01:35 AM - 01:40 AM	64.5	48.9	04:15 AM - 04:20 AM	50.1	44.2	06:55 AM - 07:00 AM	47.0	44.3
01:40 AM - 01:45 AM	55.5	49.0	04:20 AM - 04:25 AM	49.3	43.9	07:00 AM - 07:05 AM	50.7	45.2
01:45 AM - 01:50 AM	62.9	48.7	04:25 AM - 04:30 AM	47.0	43.9	07:05 AM - 07:10 AM	46.8	43.9
01:50 AM - 01:55 AM	62.4	48.4	04:30 AM - 04:35 AM	48.0	43.2	07:10 AM - 07:15 AM	47.0	43.3
01:55 AM - 02:00 AM	50.9	47.8	04:35 AM - 04:40 AM	47.4	43.1	07:15 AM - 07:20 AM	46.5	43.1
02:00 AM - 02:05 AM	62.9	48.0	04:40 AM - 04:45 AM	44.7	42.0	07:20 AM - 07:25 AM	45.3	42.2
02:05 AM - 02:10 AM	62.9	47.7	04:45 AM - 04:50 AM	46.8	43.6	07:25 AM - 07:30 AM	58.2	42.5
02:10 AM - 02:15 AM	49.5	47.5	04:50 AM - 04:55 AM	45.5	45.3	07:30 AM - 07:35 AM	57.5	42.1
02:15 AM - 02:20 AM	63.6	47.4	04:55 AM - 05:00 AM	54.9	43.1	07:35 AM - 07:40 AM	58.5	44.8
02:20 AM - 02:25 AM	48.3	45.6	05:00 AM - 05:05 AM	54.5	42.7	07:40 AM - 07:45 AM	47.8	43.5
02:25 AM - 02:30 AM	57.8	45.7	05:05 AM - 05:10 AM	52.1	43.5	07:45 AM - 07:50 AM	47.5	44.4
02:30 AM - 02:35 AM	47.4	45.3	05:10 AM - 05:15 AM	52.8	42.0	07:50 AM - 07:55 AM	46.7	44.2
02:35 AM - 02:40 AM	48.2	45.0	05:15 AM - 05:20 AM	49.6	42.4	07:55 AM - 08:00 AM	57.6	44.1

Approved by _____

Sarayuth Jitranont
Assistant General Manager

XS-09355 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand / PHONE +66 6 2760 3000 / FAX +66 6 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
E-MAIL: als.thailand@alsglobal.com www.alsglobal.com
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Lot ID: 2211209
Date Received: Mar 23, 2022
Date Reported: Mar 25, 2022
Report Number: 2270020-1

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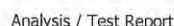
Sample Number	2211209-20
Parameter	Noise Level (Leq 5 min)
Location	N3 (Inuruva) (GPS: 47P 0730757,1407391)
Measurement Date	Mar 20 - Mar 21, 2022
by	Nontachi Uppathamp
Sound Level meter	Serial No. 11222716

Mar 20, 2022	Time		Mar 20, 2022	Time		Mar 20 - Mar 21, 2022	Time	
	Leq (dB(A))	L90 (dB(A))		Leq (dB(A))	L90 (dB(A))		Leq (dB(A))	L90 (dB(A))
04:00 PM - 04:05 PM	54.1	48.5	06:40 PM - 06:45 PM	59.5	49.3	09:20 PM - 09:25 PM	49.7	46.3
04:05 PM - 04:10 PM	53.7	49.5	06:45 PM - 06:50 PM	57.2	46.8	09:25 PM - 09:30 PM	50.1	45.9
04:10 PM - 04:15 PM	59.9	47.2	06:50 PM - 06:55 PM	51.7	46.4	09:30 PM - 09:35 PM	50.8	45.6
04:15 PM - 04:20 PM	52.4	47.0	06:55 PM - 07:00 PM	54.3	46.2	09:35 PM - 09:40 PM	61.2	44.8
04:20 PM - 04:25 PM	56.6	49.0	07:00 PM - 07:05 PM	59.6	46.8	09:40 PM - 09:45 PM	59.6	45.2
04:25 PM - 04:30 PM	56.5	49.0	07:05 PM - 07:10 PM	53.2	47.5	09:45 PM - 09:50 PM	50.4	46.1
04:30 PM - 04:35 PM	59.5	50.7	07:10 PM - 07:15 PM	59.7	47.7	09:50 PM - 09:55 PM	58.3	46.9
04:35 PM - 04:40 PM	60.6	49.8	07:15 PM - 07:20 PM	50.9	46.2	09:55 PM - 10:00 PM	60.9	45.1
04:40 PM - 04:45 PM	56.5	49.2	07:20 PM - 07:25 PM	54.8	48.0	10:00 PM - 10:05 PM	62.8	44.8
04:45 PM - 04:50 PM	61.4	49.0	07:25 PM - 07:30 PM	59.8	46.6	10:05 PM - 10:10 PM	63.7	44.9
04:50 PM - 04:55 PM	54.0	48.0	07:30 PM - 07:35 PM	65.0	46.2	10:10 PM - 10:15 PM	62.2	49.1
04:55 PM - 05:00 PM	67.4	48.0	07:35 PM - 07:40 PM	57.2	46.2	10:15 PM - 10:20 PM	59.0	47.8
05:00 PM - 05:05 PM	61.0	47.5	07:40 PM - 07:45 PM	54.4	45.9	10:20 PM - 10:25 PM	58.4	46.3
05:05 PM - 05:10 PM	50.5	47.0	07:45 PM - 07:50 PM	51.1	45.2	10:25 PM - 10:30 PM	49.4	45.0
05:10 PM - 05:15 PM	60.4	47.2	07:50 PM - 07:55 PM	58.0	44.8	10:30 PM - 10:35 PM	60.5	44.9
05:15 PM - 05:20 PM	49.9	45.6	07:55 PM - 08:00 PM	63.3	44.0	10:35 PM - 10:40 PM	60.7	43.3
05:20 PM - 05:25 PM	61.3	44.6	08:00 PM - 08:05 PM	49.6	44.2	10:40 PM - 10:45 PM	62.7	43.9
05:25 PM - 05:30 PM	46.7	44.9	08:05 PM - 08:10 PM	56.9	48.0	10:45 PM - 10:50 PM	47.1	43.6
05:30 PM - 05:35 PM	39.8	46.0	08:10 PM - 08:15 PM	62.7	44.6	10:50 PM - 10:55 PM	59.0	44.8
05:35 PM - 05:40 PM	59.7	44.4	08:15 PM - 08:20 PM	54.5	43.8	10:55 PM - 11:00 PM	54.3	44.9
05:40 PM - 05:45 PM	62.5	45.8	08:20 PM - 08:25 PM	67.0	44.9	11:00 PM - 11:05 PM	49.5	44.2
05:45 PM - 05:50 PM	56.8	44.3	08:25 PM - 08:30 PM	62.3	46.2	11:05 PM - 11:10 PM	47.1	44.4
05:50 PM - 05:55 PM	52.5	44.6	08:30 PM - 08:35 PM	60.2	45.3	11:10 PM - 11:15 PM	47.9	44.2
05:55 PM - 06:00 PM	55.0	47.1	08:35 PM - 08:40 PM	63.5	45.2	11:15 PM - 11:20 PM	49.2	45.0
06:00 PM - 06:05 PM	59.0	46.9	08:40 PM - 08:45 PM	50.7	44.4	11:20 PM - 11:25 PM	48.4	44.1
06:05 PM - 06:10 PM	62.6	48.1	08:45 PM - 08:50 PM	61.1	45.9	11:25 PM - 11:30 PM	47.8	43.0
06:10 PM - 06:15 PM	62.5	48.0	08:50 PM - 08:55 PM	58.1	46.4	11:30 PM - 11:35 PM	45.4	42.6
06:15 PM - 06:20 PM	62.5	51.1	08:55 PM - 09:00 PM	59.1	46.4	11:35 PM - 11:40 PM	45.2	43.8
06:20 PM - 06:25 PM	56.2	50.2	09:00 PM - 09:05 PM	60.8	46.5	11:40 PM - 11:45 PM	45.8	42.9
06:25 PM - 06:30 PM	56.0	49.3	09:05 PM - 09:10 PM	61.0	45.6	11:45 PM - 11:50 PM	47.0	42.3
06:30 PM - 06:35 PM	61.6	49.9	09:10 PM - 09:15 PM	53.4	45.8	11:50 PM - 11:55 PM	46.3	43.4
06:35 PM - 06:40 PM	56.3	48.6	09:15 PM - 09:20 PM	61.7	45.9	11:55 PM - 12:00 AM	47.2	43.0

Approved by _____

Sarayuth Jittranont
Assistant General Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10750 Thailand | TEL: +66 0 2760 3000 | FAX: +66 0 2760 3197
 ALL LABORATORY GROUP (THAILAND) CO., LTD. All ALS Limited Company
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Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270020-1

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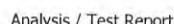
Sample Number	2211209-20
Parameter	Noise Level (Leq 5 min)
Location	N3 (Saurashtra) (GPS 47°30'57.5", 14°07'39.1")
Measurement Date	Mar 20 - Mar 21, 2022
Measurement by	Nonbachi Uppathamp
by Sound Level meter	Serial No. 01222716

Mar 20, 2022	Leq dB(A)	L90 dB(A)	Mar 20, 2022	Leq dB(A)	L90 dB(A)	Mar 20, 2022	Leq dB(A)	L90 dB(A)
Time			Time			Time		
08:00 AM - 08:05 AM	45.8	42.7	10:40 AM - 10:45 AM	52.1	48.2	01:20 PM - 01:25 PM	54.1	45.5
08:05 AM - 08:10 AM	46.2	42.0	10:45 AM - 10:50 AM	52.4	48.0	01:25 PM - 01:30 PM	54.6	45.9
08:10 AM - 08:15 AM	61.0	46.5	10:50 AM - 10:55 AM	48.7	45.0	01:30 PM - 01:35 PM	52.0	46.6
08:15 AM - 08:20 AM	55.0	45.7	10:55 AM - 11:00 AM	47.0	44.3	01:35 PM - 01:40 PM	48.5	45.1
08:20 AM - 08:25 AM	49.7	46.1	11:00 AM - 11:05 AM	49.9	46.2	01:40 PM - 01:45 PM	59.8	45.1
08:25 AM - 08:30 AM	46.8	44.3	11:05 AM - 11:10 AM	58.3	46.3	01:45 PM - 01:50 PM	57.3	45.9
08:30 AM - 08:35 AM	48.2	45.0	11:10 AM - 11:15 AM	49.8	46.4	01:50 PM - 01:55 PM	52.2	48.8
08:35 AM - 08:40 AM	55.6	44.3	11:15 AM - 11:20 AM	50.5	45.7	01:55 PM - 02:00 PM	59.4	47.2
08:40 AM - 08:45 AM	58.6	44.8	11:20 AM - 11:25 AM	49.4	45.7	02:00 PM - 02:05 PM	60.5	47.0
08:45 AM - 08:50 AM	52.1	45.9	11:25 AM - 11:30 AM	50.4	46.3	02:05 PM - 02:10 PM	58.2	45.7
08:50 AM - 09:00 AM	61.1	45.4	11:30 AM - 11:35 AM	52.2	48.0	02:10 PM - 02:15 PM	56.6	43.0
08:55 AM - 09:00 AM	50.5	45.4	11:35 AM - 11:40 AM	45.5	45.9	02:15 PM - 02:20 PM	49.6	42.7
09:00 AM - 09:05 AM	50.5	45.6	11:40 AM - 11:45 AM	55.4	48.6	02:20 PM - 02:25 PM	57.9	45.0
09:05 AM - 09:10 AM	61.3	44.3	11:45 AM - 11:50 AM	55.6	47.9	02:25 PM - 02:30 PM	50.3	45.0
09:10 AM - 09:15 AM	52.3	44.3	11:50 AM - 11:55 AM	52.0	47.0	02:30 PM - 02:35 PM	59.8	45.8
09:15 AM - 09:20 AM	50.0	45.5	11:55 AM - 12:00 PM	48.6	45.5	02:35 PM - 02:40 PM	51.8	45.1
09:20 AM - 09:25 AM	48.2	45.2	12:00 PM - 12:05 PM	49.6	46.1	02:40 PM - 02:45 PM	52.0	44.2
09:25 AM - 09:30 AM	48.8	45.9	12:05 PM - 12:10 PM	53.5	48.3	02:45 PM - 02:50 PM	53.7	45.0
09:30 AM - 09:35 AM	51.2	44.8	12:10 PM - 12:15 PM	53.0	47.1	02:50 PM - 02:55 PM	63.8	46.7
09:35 AM - 09:40 AM	48.5	43.5	12:15 PM - 12:20 PM	51.1	46.3	02:55 PM - 03:00 PM	53.9	46.9
09:40 AM - 09:45 AM	60.7	43.5	12:20 PM - 12:25 PM	50.1	45.9	03:00 PM - 03:05 PM	52.2	45.3
09:45 AM - 09:50 AM	47.6	43.4	12:25 PM - 12:30 PM	50.1	46.0	03:05 PM - 03:10 PM	56.4	48.7
09:50 AM - 09:55 AM	59.1	44.3	12:30 PM - 12:35 PM	51.1	45.7	03:10 PM - 03:15 PM	53.1	49.9
09:55 AM - 10:00 AM	62.7	44.7	12:35 PM - 12:40 PM	50.7	46.5	03:15 PM - 03:20 PM	54.9	51.9
10:00 AM - 10:05 AM	68.0	44.1	12:40 PM - 12:45 PM	51.3	47.2	03:20 PM - 03:25 PM	62.1	53.8
10:05 AM - 10:10 AM	49.8	43.8	12:45 PM - 12:50 PM	54.0	48.1	03:25 PM - 03:30 PM	55.4	52.1
10:10 AM - 10:15 AM	54.9	45.7	12:50 PM - 12:55 PM	54.2	47.3	03:30 PM - 03:35 PM	55.4	52.2
10:15 AM - 10:20 AM	47.8	44.2	12:55 PM - 01:00 PM	38.5	47.8	03:35 PM - 03:40 PM	55.4	51.3
10:20 AM - 10:25 AM	49.2	44.4	01:00 PM - 01:05 PM	51.7	47.4	03:40 PM - 03:45 PM	56.9	53.3
10:25 AM - 10:30 AM	49.8	45.5	01:05 PM - 01:10 PM	52.6	46.3	03:45 PM - 03:50 PM	56.7	54.0
10:30 AM - 10:35 AM	56.6	45.3	01:10 PM - 01:15 PM	50.5	44.6	03:50 PM - 03:55 PM	55.6	51.7
10:35 AM - 10:40 AM	47.4	44.5	01:15 PM - 01:20 PM	50.9	45.2	03:55 PM - 04:00 PM	53.8	49.2

Approved by _____

Sarayuth Jittranont
Assistant General Manager

ALSGLOBAL 104 Phatthanakan 40, Phatthanakan Rd. : Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10230 Thailand : TEL: +66 0 2760 3000 : FAX: +66 0 2760 3197
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Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270020-1

October 1998

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Sample Number 2211209-20
 Parameter Noise Level (Leq 5 min)
 Location N2 (Nourusane) (GPS: 47P 0730757,1407391)
 Measurement Date Mar 20 - Mar 21, 2022
 By Nontachi Uppatham
 By Sound Level meter Serial No. 01232716

Mar 21, 2022		Leq	L90	Mar 21, 2022		Leq	L90	Mar 21, 2022		Leq	L90
Time		dB(A)	dB(A)	Time		dB(A)	dB(A)	Time		dB(A)	dB(A)
12:00 AM - 12:05 AM		47.5	43.5	02:40 AM - 02:45 AM		52.6	47.8	05:20 AM - 05:25 AM		58.5	51.4
12:05 AM - 12:10 AM		47.5	44.6	02:45 AM - 02:50 AM		60.0	46.7	05:25 AM - 05:30 AM		58.7	49.2
12:10 AM - 12:15 AM		47.8	44.1	02:50 AM - 02:55 AM		51.0	46.4	05:30 AM - 05:35 AM		55.2	48.1
12:15 AM - 12:20 AM		46.8	44.4	02:55 AM - 03:00 AM		54.1	46.5	05:35 AM - 05:40 AM		61.2	49.1
12:20 AM - 12:25 AM		47.5	44.6	03:00 AM - 03:05 AM		53.8	44.3	05:40 AM - 05:45 AM		56.3	48.9
12:25 AM - 12:30 AM		51.5	44.4	03:05 AM - 03:10 AM		62.1	46.2	05:45 AM - 05:50 AM		52.2	50.3
12:30 AM - 12:35 AM		49.0	44.3	03:10 AM - 03:15 AM		51.1	48.1	05:50 AM - 05:55 AM		52.4	50.9
12:35 AM - 12:40 AM		52.9	45.1	03:15 AM - 03:20 AM		49.8	45.6	05:55 AM - 06:00 AM		56.6	52.4
12:40 AM - 12:45 AM		49.6	45.5	03:20 AM - 03:25 AM		53.5	47.3	06:00 AM - 06:05 AM		54.6	51.3
12:45 AM - 12:50 AM		48.0	44.7	03:25 AM - 03:30 AM		51.0	47.5	06:05 AM - 06:10 AM		59.0	49.4
12:50 AM - 12:55 AM		48.3	45.5	03:30 AM - 03:35 AM		52.9	47.0	06:10 AM - 06:15 AM		63.8	60.3
12:55 AM - 01:00 AM		49.3	45.6	03:35 AM - 03:40 AM		51.9	47.2	06:15 AM - 06:20 AM		66.5	63.6
01:00 AM - 01:05 AM		46.8	44.2	03:40 AM - 03:45 AM		51.4	47.8	06:20 AM - 06:25 AM		67.5	64.3
01:05 AM - 01:10 AM		49.1	45.6	03:45 AM - 03:50 AM		52.4	49.0	06:25 AM - 06:30 AM		66.5	64.1
01:10 AM - 01:15 AM		49.6	44.4	03:50 AM - 03:55 AM		53.8	49.5	06:30 AM - 06:35 AM		70.4	66.3
01:15 AM - 01:20 AM		52.0	46.1	03:55 AM - 04:00 AM		52.6	49.8	06:35 AM - 06:40 AM		68.4	65.7
01:20 AM - 01:25 AM		51.5	47.3	04:00 AM - 04:05 AM		52.4	50.0	06:40 AM - 06:45 AM		73.7	63.7
01:25 AM - 01:30 AM		51.6	46.7	04:05 AM - 04:10 AM		51.5	49.7	06:45 AM - 06:50 AM		71.1	62.4
01:30 AM - 01:35 AM		53.3	47.4	04:10 AM - 04:15 AM		51.6	49.6	06:50 AM - 06:55 AM		78.1	67.4
01:35 AM - 01:40 AM		53.3	48.5	04:15 AM - 04:20 AM		49.8	47.9	06:55 AM - 07:00 AM		75.8	64.1
01:40 AM - 01:45 AM		50.1	46.1	04:20 AM - 04:25 AM		50.1	47.8	07:00 AM - 07:05 AM		68.0	59.1
01:45 AM - 01:50 AM		49.2	45.8	04:25 AM - 04:30 AM		50.4	49.0	07:05 AM - 07:10 AM		57.6	47.8
01:50 AM - 01:55 AM		58.6	48.4	04:30 AM - 04:35 AM		51.2	48.4	07:10 AM - 07:15 AM		45.0	42.7
01:55 AM - 02:00 AM		61.8	46.7	04:35 AM - 04:40 AM		51.4	48.4	07:15 AM - 07:20 AM		45.9	41.4
02:00 AM - 02:05 AM		63.1	46.9	04:40 AM - 04:45 AM		49.6	46.3	07:20 AM - 07:25 AM		45.5	41.7
02:05 AM - 02:10 AM		49.4	46.3	04:45 AM - 04:50 AM		50.4	46.0	07:25 AM - 07:30 AM		45.7	42.2
02:10 AM - 02:15 AM		50.2	46.0	04:50 AM - 04:55 AM		48.7	46.5	07:30 AM - 07:35 AM		44.9	42.2
02:15 AM - 02:20 AM		49.9	46.1	04:55 AM - 05:00 AM		50.2	47.2	07:35 AM - 07:40 AM		45.5	43.2
02:20 AM - 02:25 AM		52.5	46.2	05:00 AM - 05:05 AM		50.4	47.0	07:40 AM - 07:45 AM		44.3	42.3
02:25 AM - 02:30 AM		65.6	46.7	05:05 AM - 05:10 AM		50.4	47.8	07:45 AM - 07:50 AM		46.2	41.0
02:30 AM - 02:35 AM		52.5	46.8	05:10 AM - 05:15 AM		51.4	48.1	07:50 AM - 07:55 AM		45.8	42.0
02:35 AM - 02:40 AM		58.9	47.9	05:15 AM - 05:20 AM		52.4	48.9	07:55 AM - 08:00 AM		45.2	42.3

Approved by _____

Sarayuth Jittranont
Assistant General Manager

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+66 LABOURATORY GROUP (THAILAND) CO., LTD.- An A/S Limited Company



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, S10m Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีไอเอส
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209-21
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270021-1

Sample Number : 2211209-21
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nantachai) (GPS 47P 0730757,1407391)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	52.0	42.5	10:40 AM - 10:45 AM	45.5	43.2	01:20 PM - 01:25 PM	47.8	44.9
08:05 AM - 08:10 AM	45.4	42.3	10:45 AM - 10:50 AM	45.5	43.2	01:25 PM - 01:30 PM	47.8	44.0
08:10 AM - 08:15 AM	45.5	43.1	10:50 AM - 10:55 AM	47.2	44.4	01:30 PM - 01:35 PM	56.7	44.5
08:15 AM - 08:20 AM	45.1	42.9	10:55 AM - 11:00 AM	55.4	45.3	01:35 PM - 01:40 PM	62.9	45.5
08:20 AM - 08:25 AM	44.9	42.9	11:00 AM - 11:05 AM	58.3	43.4	01:40 PM - 01:45 PM	50.6	45.2
08:25 AM - 08:30 AM	46.3	42.6	11:05 AM - 11:10 AM	51.2	42.7	01:45 PM - 01:50 PM	49.8	46.8
08:30 AM - 08:35 AM	43.9	42.1	11:10 AM - 11:15 AM	48.4	43.7	01:50 PM - 01:55 PM	48.2	45.5
08:35 AM - 08:40 AM	44.1	42.1	11:15 AM - 11:20 AM	47.2	43.0	01:55 PM - 02:00 PM	46.7	44.1
08:40 AM - 08:45 AM	45.8	42.1	11:20 AM - 11:25 AM	45.5	42.6	02:00 PM - 02:05 PM	50.1	44.3
08:45 AM - 08:50 AM	48.2	44.1	11:25 AM - 11:30 AM	54.2	44.5	02:05 PM - 02:10 PM	50.1	44.5
08:50 AM - 08:55 AM	47.4	45.0	11:30 AM - 11:35 AM	80.3	43.5	02:10 PM - 02:15 PM	50.2	46.0
08:55 AM - 09:00 AM	49.6	44.5	11:35 AM - 11:40 AM	76.7	42.9	02:15 PM - 02:20 PM	49.2	44.4
09:00 AM - 09:05 AM	51.2	45.1	11:40 AM - 11:45 AM	46.8	43.6	02:20 PM - 02:25 PM	46.0	44.4
09:05 AM - 09:10 AM	46.2	43.2	11:45 AM - 11:50 AM	53.7	45.3	02:25 PM - 02:30 PM	45.2	43.0
09:10 AM - 09:15 AM	48.5	44.1	11:50 AM - 11:55 AM	49.4	45.2	02:30 PM - 02:35 PM	44.1	41.6
09:15 AM - 09:20 AM	45.6	43.2	11:55 AM - 12:00 PM	52.2	45.5	02:35 PM - 02:40 PM	43.2	42.1
09:20 AM - 09:25 AM	48.1	44.5	12:00 PM - 12:05 PM	47.5	44.7	02:40 PM - 02:45 PM	44.5	42.4
09:25 AM - 09:30 AM	46.2	43.2	12:05 PM - 12:10 PM	47.2	43.8	02:45 PM - 02:50 PM	45.7	42.9
09:30 AM - 09:35 AM	46.0	43.3	12:10 PM - 12:15 PM	50.3	45.9	02:50 PM - 02:55 PM	45.9	43.3
09:35 AM - 09:40 AM	44.7	41.5	12:15 PM - 12:20 PM	46.9	44.4	02:55 PM - 03:00 PM	63.1	44.9
09:40 AM - 09:45 AM	46.8	43.0	12:20 PM - 12:25 PM	47.6	44.0	03:00 PM - 03:05 PM	61.8	44.3
09:45 AM - 09:50 AM	51.1	43.3	12:25 PM - 12:30 PM	46.3	43.6	03:05 PM - 03:10 PM	61.0	43.8
09:50 AM - 09:55 AM	49.6	45.0	12:30 PM - 12:35 PM	48.2	45.0	03:10 PM - 03:15 PM	59.7	42.6
09:55 AM - 10:00 AM	50.5	44.3	12:35 PM - 12:40 PM	47.4	44.8	03:15 PM - 03:20 PM	58.4	41.7
10:00 AM - 10:05 AM	45.4	43.3	12:40 PM - 12:45 PM	53.2	44.6	03:20 PM - 03:25 PM	51.5	42.8
10:05 AM - 10:10 AM	50.9	44.5	12:45 PM - 12:50 PM	47.4	45.3	03:25 PM - 03:30 PM	43.6	42.4
10:10 AM - 10:15 AM	56.7	44.6	12:50 PM - 12:55 PM	45.8	43.3	03:30 PM - 03:35 PM	46.3	43.1
10:15 AM - 10:20 AM	57.4	46.0	12:55 PM - 01:00 PM	46.3	43.6	03:35 PM - 03:40 PM	46.8	43.6
10:20 AM - 10:25 AM	47.2	45.5	01:00 PM - 01:05 PM	45.8	44.0	03:40 PM - 03:45 PM	54.6	46.0
10:25 AM - 10:30 AM	46.4	44.6	01:05 PM - 01:10 PM	46.1	44.7	03:45 PM - 03:50 PM	50.4	49.4
10:30 AM - 10:35 AM	46.1	43.9	01:10 PM - 01:15 PM	46.9	45.0	03:50 PM - 03:55 PM	50.2	49.4
10:35 AM - 10:40 AM	44.9	43.0	01:15 PM - 01:20 PM	47.3	44.9	03:55 PM - 04:00 PM	44.8	42.9

Approved by

Saranyut Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, S10m Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีไอเอส
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209-21
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270021-1

Sample Number : 2211209-21
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nantachai) (GPS 47P 0730757,1407391)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	44.0	42.4	06:40 PM - 06:45 PM	48.4	44.3	09:20 PM - 09:25 PM	53.0	50.1
04:05 PM - 04:10 PM	43.6	42.1	06:45 PM - 06:50 PM	46.1	44.3	09:25 PM - 09:30 PM	56.9	50.1
04:10 PM - 04:15 PM	43.4	42.2	06:50 PM - 06:55 PM	49.6	43.9	09:30 PM - 09:35 PM	52.2	50.6
04:15 PM - 04:20 PM	41.1	42.4	06:55 PM - 07:00 PM	47.7	44.6	09:35 PM - 09:40 PM	53.8	50.6
04:20 PM - 04:25 PM	46.3	42.1	07:00 PM - 07:05 PM	48.9	43.6	09:40 PM - 09:45 PM	53.8	49.1
04:25 PM - 04:30 PM	45.3	42.3	07:05 PM - 07:10 PM	47.4	44.0	09:45 PM - 09:50 PM	51.2	46.6
04:30 PM - 04:35 PM	45.6	42.7	07:10 PM - 07:15 PM	46.0	44.9	09:50 PM - 09:55 PM	47.3	45.2
04:35 PM - 04:40 PM	46.5	44.5	07:15 PM - 07:20 PM	46.8	45.3	09:55 PM - 10:00 PM	46.3	44.3
04:40 PM - 04:45 PM	47.0	44.1	07:20 PM - 07:25 PM	46.6	45.3	10:00 PM - 10:05 PM	49.2	46.7
04:45 PM - 04:50 PM	47.0	44.1	07:25 PM - 07:30 PM	46.9	44.5	10:05 PM - 10:10 PM	46.7	44.6
04:50 PM - 04:55 PM	50.1	44.6	07:30 PM - 07:35 PM	53.1	45.9	10:10 PM - 10:15 PM	47.3	44.0
04:55 PM - 05:00 PM	48.2	45.0	07:35 PM - 07:40 PM	48.6	45.5	10:15 PM - 10:20 PM	48.7	45.8
05:00 PM - 05:05 PM	48.6	42.7	07:40 PM - 07:45 PM	51.9	45.1	10:20 PM - 10:25 PM	48.0	46.2
05:05 PM - 05:10 PM	53.0	41.9	07:45 PM - 07:50 PM	47.2	45.1	10:25 PM - 10:30 PM	51.0	45.3
05:10 PM - 05:15 PM	54.6	43.1	07:50 PM - 07:55 PM	56.3	45.0	10:30 PM - 10:35 PM	50.3	45.4
05:15 PM - 05:20 PM	57.7	44.5	07:55 PM - 08:00 PM	60.7	45.7	10:35 PM - 10:40 PM	47.1	46.0
05:20 PM - 05:25 PM	47.9	45.4	08:00 PM - 08:05 PM	60.5	46.3	10:40 PM - 10:45 PM	50.5	44.9
05:25 PM - 05:30 PM	47.6	44.9	08:05 PM - 08:10 PM	59.8	45.9	10:45 PM - 10:50 PM	49.8	45.8
05:30 PM - 05:35 PM	46.8	43.9	08:10 PM - 08:15 PM	55.1	44.7	10:50 PM - 10:55 PM	50.3	45.8
05:35 PM - 05:40 PM	45.5	42.8	08:15 PM - 08:20 PM	54.7	44.6	10:55 PM - 11:00 PM	49.7	45.2
05:40 PM - 05:45 PM	45.5	42.8	08:20 PM - 08:25 PM	49.8	44.6	11:00 PM - 11:05 PM	57.4	45.9
05:45 PM - 05:50 PM	45.7	43.0	08:25 PM - 08:30 PM	46.7	44.6	11:05 PM - 11:10 PM	51.0	46.5
05:50 PM - 05:55 PM	43.9	42.6	08:30 PM - 08:35 PM	47.8	46.0	11:10 PM - 11:15 PM	46.6	45.3
05:55 PM - 06:00 PM	46.2	43.7	08:35 PM - 08:40 PM	47.2	46.0	11:15 PM - 11:20 PM	49.5	45.0
06:00 PM - 06:05 PM	48.0	46.0	08:40 PM - 08:45 PM	47.3	46.1	11:20 PM - 11:25 PM	49.3	44.5
06:05 PM - 06:10 PM	50.5	46.5	08:45 PM - 08:50 PM	49.4	45.9	11:25 PM - 11:30 PM	46.1	45.5
06:10 PM - 06:15 PM	47.3	44.2	08:50 PM - 08:55 PM	49.4	46.2	11:30 PM - 11:35 PM	48.9	45.2
06:15 PM - 06:20 PM	45.3	43.6	08:55 PM - 09:00 PM	47.4	44.6	11:35 PM - 11:40 PM	50.9	45.3
06:20 PM - 06:25 PM	45.8	43.1	09:00 PM - 09:05 PM	47.4	44.6	11:40 PM - 11:45 PM	61.2	46.7
06:25 PM - 06:30 PM	47.6	44.4	09:05 PM - 09:10 PM	48.4	44.2	11:45 PM - 11:50 PM	62.9	45.8
06:30 PM - 06:35 PM	51.9	46.6	09:10 PM - 09:15 PM	52.5	50.9	11:50 PM - 11:55 PM	66.5	46.8
06:35 PM - 06:40 PM	48.7	44.7	09:15 PM - 09:20 PM	51.0	50.9	11:55 PM - 12:00 AM	49.1	46.8

Approved by

Saranyut Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, S10m Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีไอเอส
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211209-21
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270021-1

Sample Number : 2211209-21
Parameter : Noise Level (Leq 5 min)
Location : N3 (Nantachai) (GPS 47P 0730757,1407391)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 01222716

Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90	Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	51.8	44.5	02:40 AM - 02:45 AM	52.5	46.4	05:20 AM - 05:25 AM	48.3	47.1
12:05 AM - 12:10 AM	57.8	44.8	02:45 AM - 02:50 AM	46.2	46.9	05:25 AM - 05:30 AM	48.2	46.8
12:10 AM - 12:15 AM	50.2	45.0	02:50 AM - 02:55 AM	58.0	46.3	05:30 AM - 05:35 AM	50.1	47.2
12:15 AM - 12:20 AM	49.8	45.4	02:55 AM - 03:00 AM	47.5	46.1	05:35 AM - 05:40 AM	46.7	46.7
12:20 AM - 12:25 AM	59.0	45.4	03:00 AM - 03:05 AM	46.6	45.7	05:40 AM - 05:45 AM	50.3	48.5
12:25 AM - 12:30 AM	47.9	46.1	03:05 AM - 03:10 AM	47.2	46.1	05:45 AM - 05:50 AM	49.0	48.1
12:30 AM - 12:35 AM	48.9	46.9	03:10 AM - 03:15 AM	50.1	47.9	05:50 AM - 05:55 AM	56.8	47.9
12:35 AM - 12:40 AM	46.6	46.4	03:15 AM - 03:20 AM	49.2	46.3	05:55 AM - 06:00 AM	62.3	48.0
12:40 AM - 12:45 AM	54.8	45.9	03:20 AM - 03:25 AM	47.6	46.3	06:00 AM - 06:05 AM	50.8	47.3
12:45 AM - 12:50 AM	48.7	46.0	03:25 AM - 03:30 AM	46.9	45.7	06:05 AM - 06:10 AM	51.5	47.2
12:50 AM - 12:55 AM	49.0	46.3	03:30 AM - 03:35 AM	48.2	46.8	06:10 AM - 06:15 AM	48.4	48.0
12:55 AM - 01:00 AM	49.7	45.6	03:35 AM - 03:40 AM	47.7	46.4	06:15 AM - 06:20 AM	59.7	48.3
01:00 AM - 01:05 AM	57.4	45.7	03:40 AM - 03:45 AM	54.7	46.4	06:20 AM - 06:25 AM	54.6	47.1
01:05 AM - 01:10 AM	48.6	46.2	03:45 AM - 03:50 AM	48.9	46.0	06:25 AM - 06:30 AM	49.3	47.5
01:10 AM - 01:15 AM	50.2	47.4	03:50 AM - 03:55 AM	46.9	45.8	06:30 AM - 06:35 AM	47.6	46.2
01:15 AM - 01:20 AM	49.3	46.9	03:55 AM - 04:00 AM	46.8	45.0	06:35 AM - 06:40 AM	48.7	46.4
01:20 AM - 01:25 AM	51.1	46.8	04:00 AM - 04:05 AM	52.1	46.3	06:40 AM - 06:45 AM	53.1	45.8
01:25 AM - 01:30 AM	49.0	45.8	04:05 AM - 04:10 AM	48.9	45.5	06:45 AM - 06:50 AM	49.0	46.9
01:30 AM - 01:35 AM	49.0	46.0	04:10 AM - 04:15 AM	45.2	44.5	06:50 AM - 06:55 AM	53.5	47.5
01:35 AM - 01:40 AM	48.1	46.5	04:15 AM - 04:20 AM	46.5	44.8	06:55 AM - 07:00 AM	52.9	46.9
01:40 AM - 01:45 AM	47.8	45.9	04:20 AM - 04:25 AM	47.0	45.3	07:00 AM - 07:05 AM	47.0	46.2
01:45 AM - 01:50 AM	46.9	45.6	04:25 AM - 04:30 AM	47.6	44.5	07:05 AM - 07:10 AM	52.9	46.5
01:50 AM - 01:55 AM	47.3	46.0	04:30 AM - 04:35 AM	48.2	44.8	07:10 AM - 07:15 AM	60.3	46.3
01:55 AM - 02:00 AM	47.8	46.0	04:35 AM - 04:40 AM	49.0	45.7	07:15 AM - 07:20 AM	65.0	61.3
02:00 AM - 02:05 AM	47.6	45.5	04:40 AM - 04:45 AM	47.4	45.2	07:20 AM - 07:25 AM	68.1	67.1
02:05 AM - 02:10 AM	47.3	45.3	04:45 AM - 04:50 AM	49.6	47.2	07:25 AM - 07:30 AM	69.1	68.4
02:10 AM - 02:15 AM	47.6	46.3	04:50 AM - 04:55 AM	49.3	47.3	07:30 AM - 07:35 AM	69.5	68.7
02:15 AM - 02:20 AM	47.4	46.0	04:55 AM - 05:00 AM	49.8	47.0	07:35 AM - 07:40 AM	68.4	67.6
02:20 AM - 02:25 AM	47.9	45.7	05:00 AM - 05:05 AM	47.0	46.2	07:40 AM - 07:45 AM	67.9	65.0
02:25 AM - 02:30 AM	46.3	45.3	05:05 AM - 05:10 AM	46.3	45.3	07:45 AM - 07:50 AM	62.7	61.7
02:30 AM - 02:35 AM	48.8	46.5	05:10 AM - 05:15 AM	46.5	46.8	07:50 AM - 07:55 AM	64.0	62.1
02:35 AM - 02:40 AM	46.8	45.4	05:15 AM - 05:20 AM	49.2	47.0	07:55 AM - 08:00 AM	62.4	60.0



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270022-1

Sample Number : 2211209-22
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าพื้นที่โครงการ) (GPS 47P 0727280,1406871)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 15, 2022	Leq	L90	Mar 15, 2022	Leq	L90	Mar 15 - Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:10 PM	55.3	44.1	06:40 PM - 06:45 PM	43.9	41.9	09:20 PM - 09:25 PM	43.5	42.3
04:10 PM - 04:15 PM	57.2	48.6	06:45 PM - 06:50 PM	46.9	43.0	09:25 PM - 09:30 PM	43.1	42.1
04:15 PM - 04:20 PM	56.7	50.0	06:50 PM - 06:55 PM	50.8	43.3	09:30 PM - 09:35 PM	43.1	41.7
04:20 PM - 04:25 PM	52.3	43.1	06:55 PM - 07:00 PM	45.4	43.6	09:35 PM - 09:40 PM	44.2	42.2
04:25 PM - 04:30 PM	55.4	43.5	07:00 PM - 07:05 PM	47.7	42.9	09:40 PM - 09:45 PM	53.4	43.5
04:30 PM - 04:35 PM	55.8	45.4	07:05 PM - 07:10 PM	44.1	43.0	09:45 PM - 09:50 PM	54.3	45.0
04:35 PM - 04:40 PM	53.4	45.1	07:10 PM - 07:15 PM	44.7	43.5	09:50 PM - 09:55 PM	48.1	42.3
04:40 PM - 04:45 PM	51.1	44.9	07:15 PM - 07:20 PM	45.2	43.9	09:55 PM - 10:00 PM	46.1	43.0
04:45 PM - 04:50 PM	54.9	45.1	07:20 PM - 07:25 PM	47.8	43.7	10:00 PM - 10:05 PM	45.2	43.2
04:50 PM - 04:55 PM	53.9	46.3	07:25 PM - 07:30 PM	45.7	43.5	10:05 PM - 10:10 PM	46.4	44.2
04:55 PM - 05:00 PM	56.9	45.1	07:30 PM - 07:35 PM	48.8	44.0	10:10 PM - 10:15 PM	51.7	43.9
05:00 PM - 05:05 PM	52.9	44.2	07:35 PM - 07:40 PM	46.1	44.0	10:15 PM - 10:20 PM	48.0	42.2
05:05 PM - 05:10 PM	57.1	44.3	07:40 PM - 07:45 PM	47.0	44.4	10:20 PM - 10:25 PM	43.7	42.2
05:10 PM - 05:15 PM	47.7	43.7	07:45 PM - 07:50 PM	54.2	44.4	10:25 PM - 10:30 PM	43.7	42.0
05:15 PM - 05:20 PM	49.2	43.4	07:50 PM - 07:55 PM	56.2	44.6	10:30 PM - 10:35 PM	46.2	41.5
05:20 PM - 05:25 PM	48.3	42.6	07:55 PM - 08:00 PM	45.2	43.7	10:35 PM - 10:40 PM	46.8	41.7
05:25 PM - 05:30 PM	51.3	42.6	08:00 PM - 08:05 PM	44.0	42.2	10:40 PM - 10:45 PM	42.1	41.3
05:30 PM - 05:35 PM	57.3	44.0	08:05 PM - 08:10 PM	44.6	42.5	10:45 PM - 10:50 PM	42.7	41.5
05:35 PM - 05:40 PM	56.5	44.2	08:10 PM - 08:15 PM	45.1	43.2	10:50 PM - 10:55 PM	42.6	41.6
05:40 PM - 05:45 PM	49.5	43.0	08:15 PM - 08:20 PM	46.5	44.7	10:55 PM - 11:00 PM	44.2	42.2
05:45 PM - 05:50 PM	51.3	42.8	08:20 PM - 08:25 PM	46.8	44.9	11:00 PM - 11:05 PM	48.2	43.3
05:50 PM - 05:55 PM	43.8	42.6	08:25 PM - 08:30 PM	56.2	44.7	11:05 PM - 11:10 PM	44.4	42.5
05:55 PM - 06:00 PM	48.1	42.7	08:30 PM - 08:35 PM	58.5	45.0	11:10 PM - 11:15 PM	42.7	41.2
06:00 PM - 06:05 PM	42.8	42.1	08:35 PM - 08:40 PM	47.5	43.1	11:15 PM - 11:20 PM	44.0	41.6
06:05 PM - 06:10 PM	45.4	42.4	08:40 PM - 08:45 PM	45.2	43.1	11:20 PM - 11:25 PM	43.5	41.9
06:10 PM - 06:15 PM	45.5	42.9	08:45 PM - 08:50 PM	44.6	42.8	11:25 PM - 11:30 PM	43.2	41.5
06:15 PM - 06:20 PM	53.6	43.0	08:50 PM - 08:55 PM	45.7	42.8	11:30 PM - 11:35 PM	44.0	42.1
06:20 PM - 06:25 PM	56.9	45.8	08:55 PM - 09:00 PM	43.8	42.5	11:35 PM - 11:40 PM	42.9	41.8
06:25 PM - 06:30 PM	53.6	42.8	09:00 PM - 09:05 PM	44.7	42.1	11:40 PM - 11:45 PM	42.8	42.0
06:30 PM - 06:35 PM	50.5	42.6	09:05 PM - 09:10 PM	43.4	41.8	11:45 PM - 11:50 PM	48.2	42.4
06:35 PM - 06:40 PM	46.6	42.4	09:10 PM - 09:15 PM	46.0	42.6	11:50 PM - 11:55 PM	43.5	42.3
			09:15 PM - 09:20 PM	44.1	42.7	11:55 PM - 12:00 AM	43.5	42.4

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Approved by

Saranyut Jitranont
Assistant General 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

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RIGHT SOLUTIONS PROJECTS & PLANTS DESIGN



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270022-1

Sample Number : 2211209-22
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าพื้นที่โครงการ) (GPS 47P 0727280,1406871)
Measurement Date : Mar 15 - Mar 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90	Mar 16 - Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	43.5	42.1	02:40 AM - 02:45 AM	44.8	42.2	05:20 AM - 05:25 AM	59.6	40.5
12:05 AM - 12:10 AM	43.7	42.1	02:45 AM - 02:50 AM	43.4	42.1	05:25 AM - 05:30 AM	58.4	39.3
12:10 AM - 12:15 AM	49.4	42.6	02:50 AM - 02:55 AM	42.8	41.8	05:30 AM - 05:35 AM	58.8	39.2
12:15 AM - 12:20 AM	50.9	43.2	02:55 AM - 03:00 AM	45.9	41.9	05:35 AM - 05:40 AM	55.6	39.4
12:20 AM - 12:25 AM	43.6	41.8	03:00 AM - 03:05 AM	43.7	42.2	05:40 AM - 05:45 AM	54.1	39.0
12:25 AM - 12:30 AM	42.2	40.9	03:05 AM - 03:10 AM	46.5	42.4	05:45 AM - 05:50 AM	50.4	38.8
12:30 AM - 12:35 AM	43.1	41.3	03:10 AM - 03:15 AM	50.5	42.2	05:50 AM - 05:55 AM	51.6	39.1
12:35 AM - 12:40 AM	47.3	41.5	03:15 AM - 03:20 AM	44.0	41.7	05:55 AM - 06:00 AM	48.8	39.9
12:40 AM - 12:45 AM	45.2	42.0	03:20 AM - 03:25 AM	51.6	42.9	06:00 AM - 06:05 AM	52.5	39.8
12:45 AM - 12:50 AM	43.2	41.4	03:25 AM - 03:30 AM	50.8	42.8	06:05 AM - 06:10 AM	49.2	39.1
12:50 AM - 12:55 AM	42.7	41.0	03:30 AM - 03:35 AM	53.1	50.6	06:10 AM - 06:15 AM	50.8	38.4
12:55 AM - 01:00 AM	42.6	41.2	03:35 AM - 03:40 AM	54.8	48.5	06:15 AM - 06:20 AM	42.5	38.5
01:00 AM - 01:05 AM	51.7	41.1	03:40 AM - 03:45 AM	53.5	46.0	06:20 AM - 06:25 AM	51.3	39.1
01:05 AM - 01:10 AM	42.4	41.1	03:45 AM - 03:50 AM	54.2	44.7	06:25 AM - 06:30 AM	54.9	39.1
01:10 AM - 01:15 AM	42.0	40.9	03:50 AM - 03:55 AM	54.7	44.6	06:30 AM - 06:35 AM	49.0	39.5
01:15 AM - 01:20 AM	42.2	41.1	03:55 AM - 04:00 AM	55.9	44.9	06:35 AM - 06:40 AM	48.6	38.5
01:20 AM - 01:25 AM	42.6	40.6	04:00 AM - 04:05 AM	53.7	43.9	06:40 AM - 06:45 AM	42.5	39.7
01:25 AM - 01:30 AM	46.5	41.4	04:05 AM - 04:10 AM	55.8	43.6	06:45 AM - 06:50 AM	51.3	40.6
01:30 AM - 01:35 AM	50.7	42.2	04:10 AM - 04:15 AM	55.3	43.3	06:50 AM - 06:55 AM	45.9	41.1
01:35 AM - 01:40 AM	51.0	42.2	04:15 AM - 04:20 AM	58.1	43.8	06:55 AM - 07:00 AM	42.7	40.8
01:40 AM - 01:45 AM	50.5	42.0	04:20 AM - 04:25 AM	57.7	43.0	07:00 AM - 07:05 AM	46.7	39.7
01:45 AM - 01:50 AM	50.2	41.9	04:25 AM - 04:30 AM	66.1	42.5	07:05 AM - 07:10 AM	47.7	40.4
01:50 AM - 01:55 AM	47.6	41.3	04:30 AM - 04:35 AM	53.5	42.6	07:10 AM - 07:15 AM	44.0	41.0
01:55 AM - 02:00 AM	43.0	41.3	04:35 AM - 04:40 AM	57.3	43.9	07:15 AM - 07:20 AM	46.7	42.0
02:00 AM - 02:05 AM	46.0	41.1	04:40 AM - 04:45 AM	61.1	43.8	07:20 AM - 07:25 AM	51.8	42.0
02:05 AM - 02:10 AM	43.1	41.9	04:45 AM - 04:50 AM	59.4	43.0	07:25 AM - 07:30 AM	47.6	41.1
02:10 AM - 02:15 AM	42.3	41.0	04:50 AM - 04:55 AM	59.8	43.3	07:30 AM - 07:35 AM	60.3	40.9
02:15 AM - 02:20 AM	42.9	41.9	04:55 AM - 05:00 AM	57.4	43.9	07:35 AM - 07:40 AM	49.2	42.9
02:20 AM - 02:25 AM	47.3	41.9	05:00 AM - 05:05 AM	60.7	43.1	07:40 AM - 07:45 AM	43.6	40.7
02:25 AM - 02:30 AM	42.9	42.0	05:05 AM - 05:10 AM	66.2	45.0	07:45 AM - 07:50 AM	51.6	40.4
02:30 AM - 02:35 AM	45.8	42.4	05:10 AM - 05:15 AM	59.3	43.4	07:50 AM - 07:55 AM	47.2	40.7
02:35 AM - 02:40 AM	46.5	41.9	05:15 AM - 05:20 AM	62.6	40.5	07:55 AM - 08:00 AM	49.9	41.3

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Approved by

Saranyut Jitranont
Assistant General 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

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RIGHT SOLUTIONS PROJECTS & PLANTS DESIGN



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silo 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270022-1

Sample Number : 2211209-23
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าพื้นที่โครงการ) (GPS 47P 0727280,1406871)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90	Mar 16, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	49.8	41.0	10:40 AM - 10:45 AM	53.5	41.2	01:20 PM - 01:25 PM	49.7	40.7
08:05 AM - 08:10 AM	70.9	43.3	10:45 AM - 10:50 AM	49.4	41.3	01:25 PM - 01:30 PM	46.6	40.7
08:10 AM - 08:15 AM	44.9	41.8	10:50 AM - 10:55 AM	44.3	41.7	01:30 PM - 01:35 PM	49.4	40.5
08:15 AM - 08:20 AM	51.9	41.9	10:55 AM - 11:00 AM	49.7	41.0	01:35 PM - 01:40 PM	50.5	40.0
08:20 AM - 08:25 AM	46.0	41.8	11:00 AM - 11:05 AM	50.6	40.7	01:40 PM - 01:45 PM	45.7	40.7
08:25 AM - 08:30 AM	45.6	42.4	11:05 AM - 11:10 AM	46.9	40.9	01:45 PM - 01:50 PM	51.0	41.8
08:30 AM - 08:35 AM	50.2	41.7	11:10 AM - 11:15 AM	49.5	40.9	01:50 PM - 01:55 PM	43.1	40.5
08:35 AM - 08:40 AM	46.8	42.2	11:15 AM - 11:20 AM	49.4	39.8	01:55 PM - 02:00 PM	48.9	40.8
08:40 AM - 08:45 AM	53.7	42.2	11:20 AM - 11:25 AM	45.3	40.5	02:00 PM - 02:05 PM	48.1	40.5
08:45 AM - 08:50 AM	50.4	41.9	11:25 AM - 11:30 AM	53.2	41.7	02:05 PM - 02:10 PM	51.4	40.9
08:50 AM - 08:55 AM	52.8	43.4	11:30 AM - 11:35 AM	51.9	42.3	02:10 PM - 02:15 PM	50.3	40.2
08:55 AM - 09:00 AM	51.1	42.0	11:35 AM - 11:40 AM	52.0	43.1	02:15 PM - 02:20 PM	49.1	39.9
09:00 AM - 09:05 AM	52.8	42.3	11:40 AM - 11:45 AM	49.5	41.0	02:20 PM - 02:25 PM	52.5	41.9
09:05 AM - 09:10 AM	52.7	42.0	11:45 AM - 11:50 AM	44.9	41.1	02:25 PM - 02:30 PM	49.2	40.5
09:10 AM - 09:15 AM	48.2	42.2	11:50 AM - 11:55 AM	46.0	41.3	02:30 PM - 02:35 PM	57.8	41.6
09:15 AM - 09:20 AM	51.7	42.7	11:55 AM - 12:00 PM	43.9	40.9	02:35 PM - 02:40 PM	57.0	42.2
09:20 AM - 09:25 AM	47.3	42.2	12:00 PM - 12:05 PM	49.5	41.8	02:40 PM - 02:45 PM	55.2	40.9
09:25 AM - 09:30 AM	54.5	42.5	12:05 PM - 12:10 PM	50.2	41.7	02:45 PM - 02:50 PM	53.1	40.7
09:30 AM - 09:35 AM	48.9	42.2	12:10 PM - 12:15 PM	44.9	41.8	02:50 PM - 02:55 PM	51.9	39.4
09:35 AM - 09:40 AM	48.4	41.3	12:15 PM - 12:20 PM	49.2	41.4	02:55 PM - 03:00 PM	50.5	40.5
09:40 AM - 09:45 AM	46.8	42.3	12:20 PM - 12:25 PM	45.2	42.4	03:00 PM - 03:05 PM	50.2	40.8
09:45 AM - 09:50 AM	44.8	42.2	12:25 PM - 12:30 PM	51.5	42.8	03:05 PM - 03:10 PM	48.7	40.3
09:50 AM - 09:55 AM	50.1	42.5	12:30 PM - 12:35 PM	44.3	41.4	03:10 PM - 03:15 PM	53.5	42.1
09:55 AM - 10:00 AM	51.5	41.8	12:35 PM - 12:40 PM	50.7	41.7	03:15 PM - 03:20 PM	52.8	41.2
10:00 AM - 10:05 AM	46.5	41.3	12:40 PM - 12:45 PM	50.3	41.8	03:20 PM - 03:25 PM	52.8	41.4
10:05 AM - 10:10 AM	45.4	40.8	12:45 PM - 12:50 PM	50.1	41.4	03:25 PM - 03:30 PM	52.5	41.6
10:10 AM - 10:15 AM	48.7	41.4	12:50 PM - 12:55 PM	45.8	41.4	03:30 PM - 03:35 PM	53.5	42.1
10:15 AM - 10:20 AM	43.2	43.6	12:55 PM - 01:00 PM	45.7	41.5	03:35 PM - 03:40 PM	57.8	42.8
10:20 AM - 10:25 AM	54.1	41.6	01:00 PM - 01:05 PM	45.2	40.8	03:40 PM - 03:45 PM	49.6	42.5
10:25 AM - 10:30 AM	53.0	40.9	01:05 PM - 01:10 PM	45.0	41.0	03:45 PM - 03:50 PM	49.6	42.6
10:30 AM - 10:35 AM	53.6	41.9	01:10 PM - 01:15 PM	47.2	41.3	03:50 PM - 03:55 PM	54.2	42.9
10:35 AM - 10:40 AM	59.0	41.0	01:15 PM - 01:20 PM	43.0	41.2	03:55 PM - 04:00 PM	52.9	42.9



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-23
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270024-1

P/O : บริษัท อีเอ แอเรีย จำกัด
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Sample Number : 2211209-23
Parameter : Noise Level (Leq 5 min)
Location : H4 (หน้าห้องโถงอาคาร) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 16 - Mar 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	43.7	42.7	02:40 AM - 02:45 AM	46.6	45.7	05:20 AM - 05:25 AM	58.8	42.9
12:05 AM - 12:10 AM	43.0	42.2	02:45 AM - 02:50 AM	46.6	45.8	05:25 AM - 05:30 AM	58.6	47.8
12:10 AM - 12:15 AM	43.2	42.4	02:50 AM - 02:55 AM	46.7	45.8	05:30 AM - 05:35 AM	59.5	41.0
12:15 AM - 12:20 AM	43.5	42.6	02:55 AM - 03:00 AM	47.0	46.0	05:35 AM - 05:40 AM	55.5	41.1
12:20 AM - 12:25 AM	43.5	42.7	03:00 AM - 03:05 AM	46.4	45.2	05:40 AM - 05:45 AM	53.5	38.6
12:25 AM - 12:30 AM	50.0	43.1	03:05 AM - 03:10 AM	48.4	45.2	05:45 AM - 05:50 AM	53.5	40.2
12:30 AM - 12:35 AM	51.2	42.8	03:10 AM - 03:15 AM	49.6	45.2	05:50 AM - 05:55 AM	53.1	39.3
12:35 AM - 12:40 AM	49.6	43.2	03:15 AM - 03:20 AM	55.6	47.7	05:55 AM - 06:00 AM	51.9	40.1
12:40 AM - 12:45 AM	44.2	43.5	03:20 AM - 03:25 AM	57.9	47.2	06:00 AM - 06:05 AM	46.1	39.3
12:45 AM - 12:50 AM	45.8	44.6	03:25 AM - 03:30 AM	52.9	47.8	06:05 AM - 06:10 AM	47.0	40.1
12:50 AM - 12:55 AM	49.1	45.2	03:30 AM - 03:35 AM	58.0	55.3	06:10 AM - 06:15 AM	53.6	40.4
12:55 AM - 01:00 AM	45.4	44.6	03:35 AM - 03:40 AM	56.1	51.6	06:15 AM - 06:20 AM	46.4	39.5
01:00 AM - 01:05 AM	45.5	44.8	03:40 AM - 03:45 AM	52.8	48.1	06:20 AM - 06:25 AM	47.9	39.4
01:05 AM - 01:10 AM	44.9	44.1	03:45 AM - 03:50 AM	53.6	47.6	06:25 AM - 06:30 AM	47.7	39.1
01:10 AM - 01:15 AM	45.0	43.8	03:50 AM - 03:55 AM	54.6	47.2	06:30 AM - 06:35 AM	50.2	39.8
01:15 AM - 01:20 AM	44.3	43.5	03:55 AM - 04:00 AM	53.2	47.2	06:35 AM - 06:40 AM	52.3	39.9
01:20 AM - 01:25 AM	43.8	43.0	04:00 AM - 04:05 AM	60.0	45.4	06:40 AM - 06:45 AM	40.6	39.5
01:25 AM - 01:30 AM	48.5	43.0	04:05 AM - 04:10 AM	57.1	44.9	06:45 AM - 06:50 AM	40.6	39.4
01:30 AM - 01:35 AM	43.7	42.9	04:10 AM - 04:15 AM	57.2	44.5	06:50 AM - 06:55 AM	51.3	39.2
01:35 AM - 01:40 AM	44.8	43.6	04:15 AM - 04:20 AM	57.5	45.3	06:55 AM - 07:00 AM	48.9	38.9
01:40 AM - 01:45 AM	45.4	44.2	04:20 AM - 04:25 AM	57.6	44.9	07:00 AM - 07:05 AM	50.6	39.5
01:45 AM - 01:50 AM	44.8	43.7	04:25 AM - 04:30 AM	59.4	44.3	07:05 AM - 07:10 AM	45.8	40.0
01:50 AM - 01:55 AM	45.8	44.2	04:30 AM - 04:35 AM	54.3	43.7	07:10 AM - 07:15 AM	48.5	39.7
01:55 AM - 02:00 AM	48.4	44.5	04:35 AM - 04:40 AM	58.4	45.8	07:15 AM - 07:20 AM	45.4	40.0
02:00 AM - 02:05 AM	46.6	45.4	04:40 AM - 04:45 AM	56.3	46.0	07:20 AM - 07:25 AM	48.9	40.7
02:05 AM - 02:10 AM	47.8	45.9	04:45 AM - 04:50 AM	59.7	46.2	07:25 AM - 07:30 AM	44.6	40.3
02:10 AM - 02:15 AM	47.2	45.8	04:50 AM - 04:55 AM	59.1	46.8	07:30 AM - 07:35 AM	45.2	39.6
02:15 AM - 02:20 AM	46.7	45.6	04:55 AM - 05:00 AM	59.0	45.9	07:35 AM - 07:40 AM	49.9	39.0
02:20 AM - 02:25 AM	49.1	45.4	05:00 AM - 05:05 AM	55.6	44.3	07:40 AM - 07:45 AM	55.0	40.5
02:25 AM - 02:30 AM	45.6	44.6	05:05 AM - 05:10 AM	62.9	45.0	07:45 AM - 07:50 AM	49.6	40.4
02:30 AM - 02:35 AM	45.5	44.6	05:10 AM - 05:15 AM	70.3	44.9	07:50 AM - 07:55 AM	41.4	39.6
02:35 AM - 02:40 AM	46.6	45.7	05:15 AM - 05:20 AM	61.9	43.3	07:55 AM - 08:00 AM	46.8	40.0

Approved by

Saranyut Jitranont
Assistant General Manager

104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 0 2760 3000 | FAX: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-24
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270024-1

P/O : บริษัท อีเอ แอเรีย จำกัด
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Sample Number : 2211209-24
Parameter : Noise Level (Leq 5 min)
Location : H4 (หน้าห้องโถงอาคาร) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90	Mar 17, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	43.9	40.4	10:40 AM - 10:45 AM	49.8	40.1	01:20 PM - 01:25 PM	47.6	40.4
08:05 AM - 08:10 AM	43.9	39.7	10:45 AM - 10:50 AM	45.2	40.5	01:25 PM - 01:30 PM	41.5	39.7
08:10 AM - 08:15 AM	53.9	39.3	10:50 AM - 10:55 AM	51.2	41.7	01:30 PM - 01:35 PM	44.9	40.8
08:15 AM - 08:20 AM	48.4	39.7	10:55 AM - 11:00 AM	18.0	40.8	01:35 PM - 01:40 PM	52.3	40.8
08:20 AM - 08:25 AM	48.5	40.4	11:00 AM - 11:05 AM	46.0	42.6	01:40 PM - 01:45 PM	50.4	40.8
08:25 AM - 08:30 AM	49.4	40.2	11:05 AM - 11:10 AM	47.6	41.4	01:45 PM - 01:50 PM	48.4	40.3
08:30 AM - 08:35 AM	43.9	39.4	11:10 AM - 11:15 AM	43.1	41.1	01:50 PM - 01:55 PM	51.0	41.5
08:35 AM - 08:40 AM	49.9	40.6	11:15 AM - 11:20 AM	44.2	41.6	01:55 PM - 02:00 PM	52.7	41.0
08:40 AM - 08:45 AM	50.6	41.0	11:20 AM - 11:25 AM	48.6	41.8	02:00 PM - 02:05 PM	43.4	41.9
08:45 AM - 08:50 AM	46.9	40.8	11:25 AM - 11:30 AM	42.8	40.9	02:05 PM - 02:10 PM	53.6	41.5
08:50 AM - 08:55 AM	49.9	41.7	11:30 AM - 11:35 AM	47.0	41.6	02:10 PM - 02:15 PM	49.4	40.8
08:55 AM - 09:00 AM	49.4	42.3	11:35 AM - 11:40 AM	43.0	41.3	02:15 PM - 02:20 PM	53.1	41.9
09:00 AM - 09:05 AM	54.8	42.8	11:40 AM - 11:45 AM	43.4	41.2	02:20 PM - 02:25 PM	45.6	41.4
09:05 AM - 09:10 AM	53.3	42.7	11:45 AM - 11:50 AM	52.7	42.9	02:25 PM - 02:30 PM	53.4	42.2
09:10 AM - 09:15 AM	48.8	41.5	11:50 AM - 11:55 AM	45.7	42.5	02:30 PM - 02:35 PM	57.4	41.8
09:15 AM - 09:20 AM	52.0	40.8	11:55 AM - 12:00 PM	46.6	42.9	02:35 PM - 02:40 PM	57.2	42.2
09:20 AM - 09:25 AM	56.4	42.3	12:00 PM - 12:05 PM	47.3	42.8	02:40 PM - 02:45 PM	52.6	41.3
09:25 AM - 09:30 AM	51.6	42.3	12:05 PM - 12:10 PM	45.3	42.5	02:45 PM - 02:50 PM	52.9	41.1
09:30 AM - 09:35 AM	54.3	41.5	12:10 PM - 12:15 PM	47.0	41.5	02:50 PM - 02:55 PM	51.2	41.9
09:35 AM - 09:40 AM	49.0	41.4	12:15 PM - 12:20 PM	48.0	42.1	02:55 PM - 03:00 PM	48.8	42.2
09:40 AM - 09:45 AM	46.8	41.6	12:20 PM - 12:25 PM	50.6	42.7	03:00 PM - 03:05 PM	52.4	42.6
09:45 AM - 09:50 AM	43.1	40.4	12:25 PM - 12:30 PM	43.9	41.6	03:05 PM - 03:10 PM	48.3	42.5
09:50 AM - 09:55 AM	53.8	41.8	12:30 PM - 12:35 PM	49.6	42.0	03:10 PM - 03:15 PM	53.3	43.5
09:55 AM - 10:00 AM	46.6	40.5	12:35 PM - 12:40 PM	51.3	41.5	03:15 PM - 03:20 PM	53.7	42.8
10:00 AM - 10:05 AM	42.2	40.5	12:40 PM - 12:45 PM	49.7	41.4	03:20 PM - 03:25 PM	45.7	42.3
10:05 AM - 10:10 AM	43.3	40.4	12:45 PM - 12:50 PM	43.0	41.1	03:25 PM - 03:30 PM	45.2	42.0
10:10 AM - 10:15 AM	46.1	40.1	12:50 PM - 12:55 PM	43.4	41.3	03:30 PM - 03:35 PM	52.5	42.9
10:15 AM - 10:20 AM	47.2	40.7	12:55 PM - 01:00 PM	46.7	41.5	03:35 PM - 03:40 PM	54.9	43.1
10:20 AM - 10:25 AM	61.1	41.7	01:00 PM - 01:05 PM	44.6	42.6	03:40 PM - 03:45 PM	53.6	42.9
10:25 AM - 10:30 AM	50.6	40.7	01:05 PM - 01:10 PM	47.9	42.3	03:45 PM - 03:50 PM	53.6	42.6
10:30 AM - 10:35 AM	51.4	41.8	01:10 PM - 01:15 PM	48.6	42.3	03:50 PM - 03:55 PM	54.2	43.6
10:35 AM - 10:40 AM	54.5	41.4	01:15 PM - 01:20 PM	48.1	41.4	03:55 PM - 04:00 PM	54.6	43.4

Approved by

Saranyut Jitranont
Assistant General Manager

104 Phatthanakan Rd., Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE: +66 0 2760 3000 | FAX: +66 0 2760 3197
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

Lot ID: 2211209-23
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270024-1

P/O : บริษัท อีเอ แอเรีย จำกัด
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Sample Number : 2211209-24
Parameter : Noise Level (Leq 5 min)
Location : H4 (หน้าห้องโถงอาคาร) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 17 - Mar 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 17, 2022			Mar 17, 2022			Mar 17 - Mar 18, 2022		
Time	Leq	L90	Time	Leq	L90	Time	Leq	L90
	dB(A)	dB(A)		dB(A)	dB(A)		dB(A)	dB(A)
04:00 PM - 04:05 PM	53.1	44.5	06:40 PM - 06:45 PM	47.9	46.1	09:20 PM - 09:25 PM	46.4	45.7
04:05 PM - 04:10 PM	50.9	51.7	06:45 PM - 06:50 PM	50.2		09:25 PM - 09:30 PM	46.1	45.4
04:10 PM - 04:15 PM	56.3	52.7	06:50 PM - 06:55 PM	48.7	45.7	09:30 PM - 09:35 PM	47.8	44.9
04:15 PM - 04:20 PM	54.4	44.8	06:55 PM - 07:00 PM	48.8	46.0	09:35 PM - 09:40 PM	45.3	44.4
04:20 PM - 04:25 PM	53.4	44.9	07:00 PM - 07:05 PM	53.1	46.1	09:40 PM - 09:45 PM	45.9	45.2
04:25 PM - 04:30 PM	54.3	45.7	07:05 PM - 07:10 PM	57.0		09:45 PM - 09:50 PM	45.9	44.9
04:30 PM - 04:35 PM	55.5	47.6	07:10 PM - 07:15 PM	47.3	45.4	09:50 PM - 09:55 PM	45.9	45.0
04:35 PM - 04:40 PM	55.9	48.7	07:15 PM - 07:20 PM	46.7	45.3	09:55 PM - 10:00 PM	48.4	45.9
04:40 PM - 04:45 PM	54.2	47.0	07:20 PM - 07:25 PM	48.0	45.3	10:00 PM - 10:05 PM	46.7	45.6
04:45 PM - 04:50 PM	56.3	46.7	07:25 PM - 07:30 PM	49.1	45.7	10:05 PM - 10:10 PM	47.0	46.2
04:50 PM - 04:55 PM	55.2	46.3	07:30 PM - 07:35 PM	52.9	45.9	10:10 PM - 10:15 PM	46.4	44.8
04:55 PM - 05:00 PM	51.4	46.1	07:35 PM - 07:40 PM	48.7	44.8	10:15 PM - 10:20 PM	46.3	44.8
05:00 PM - 05:05 PM	51.3	46.3	07:40 PM - 07:45 PM	46.4	44.7	10:20 PM - 10:25 PM	46.6	45.1
05:05 PM - 05:10 PM	51.2	45.2	07:45 PM - 07:50 PM	49.1	45.9	10:25 PM - 10:30 PM	46.9	45.3
05:10 PM - 05:15 PM	52.5	44.7	07:50 PM - 07:55 PM	49.9	46.2	10:30 PM - 10:35 PM	48.7	44.9
05:15 PM - 05:20 PM	50.2	45.5	07:55 PM - 08:00 PM	48.4	46.8	10:35 PM - 10:40 PM	51.9	44.9
05:20 PM - 05:25 PM	52.6	46.7	08:00 PM - 08:05 PM	49.2	47.2	10:40 PM - 10:45 PM	45.3	43.8
05:25 PM - 05:30 PM	55.4	47.0	08:05 PM - 08:10 PM	48.9	46.9	10:45 PM - 10:50 PM	45.6	44.0
05:30 PM - 05:35 PM	54.0	46.7	08:10 PM - 08:15 PM	46.6	47.6	10:50 PM - 10:55 PM	50.3	44.8
05:35 PM - 05:40 PM	59.5	49.0	08:15 PM - 08:20 PM	48.5	47.4	10:55 PM - 11:00 PM	45.4	44.5
05:40 PM - 05:45 PM	54.0	46.8	08:20 PM - 08:25 PM	49.1	47.4	11:00 PM - 11:05 PM	45.5	44.7
05:45 PM - 05:50 PM	51.8	46.0	08:25 PM - 08:30 PM	47.2	46.3	11:05 PM - 11:10 PM	46.0	45.1
05:50 PM - 05:55 PM	48.0	46.0	08:30 PM - 08:35 PM	48.9	46.3	11:10 PM - 11:15 PM	46.4	45.5
05:55 PM - 06:00 PM	47.3	45.8	08:35 PM - 08:40 PM	49.8	46.8	11:15 PM - 11:20 PM	45.6	44.7
06:00 PM - 06:05 PM	54.0	46.7	08:40 PM - 08:45 PM	50.0	46.5	11:20 PM - 11:25 PM	46.3	45.0
06:05 PM - 06:10 PM	49.6	47.3	08:45 PM - 08:50 PM	46.6	45.2	11:25 PM - 11:30 PM	47.1	45.8
06:10 PM - 06:15 PM	48.8	46.8	08:50 PM - 08:55 PM	47.4	46.3	11:30 PM - 11:35 PM	48.1	46.3
06:15 PM - 06:20 PM	48.3	47.1	08:55 PM - 09:00 PM	51.2	46.7	11:35 PM - 11:40 PM	47.5	46.3
06:20 PM - 06:25 PM	49.3	47.0	09:00 PM - 09:05 PM	48.4	45.9	11:40 PM - 11:45 PM	47.5	46.3
06:25 PM - 06:30 PM	48.4	47.1	09:05 PM - 09:10 PM	47.0	45.9	11:45 PM - 11:50 PM	49.4	46.1
06:30 PM - 06:35 PM	48.2	46.5	09:10 PM - 09:15 PM	51.4	46.8	11:50 PM - 11:55 PM	47.7	45.8
06:35 PM - 06:40 PM	51.4	47.7	09:15 PM - 09:20 PM	51.2	45.7	11:55 PM - 12:00 AM	47.9	46.6



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270025-1

Page 1 of 3

Sample Number : 2211209-25
Parameter : Noise Level (Leq 5 min)
Location : N4 (แนวเส้นกั้นเขตของโรงงาน) (GPS 47P 0727280,1406871)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	45.5	40.4	10:40 AM - 10:45 AM	51.6	44.7	01:20 PM - 01:25 PM	46.5	42.6
08:05 AM - 08:10 AM	43.6	40.6	10:45 AM - 10:50 AM	50.5	47.3	01:25 PM - 01:30 PM	44.5	42.8
08:10 AM - 08:15 AM	45.5	43.5	10:50 AM - 10:55 AM	54.3	50.7	01:30 PM - 01:35 PM	50.5	42.8
08:15 AM - 08:20 AM	46.3	41.7	10:55 AM - 11:00 AM	57.2	55.8	01:35 PM - 01:40 PM	50.4	42.5
08:20 AM - 08:25 AM	50.7	40.1	11:00 AM - 11:05 AM	58.1	56.1	01:40 PM - 01:45 PM	52.6	42.0
08:25 AM - 08:30 AM	50.5	41.4	11:05 AM - 11:10 AM	53.8	52.9	01:45 PM - 01:50 PM	51.4	42.1
08:30 AM - 08:35 AM	48.7	41.3	11:10 AM - 11:15 AM	55.0	53.5	01:50 PM - 01:55 PM	51.4	42.2
08:35 AM - 08:40 AM	53.9	42.0	11:15 AM - 11:20 AM	53.9	52.8	01:55 PM - 02:00 PM	45.9	42.1
08:40 AM - 08:45 AM	54.4	43.6	11:20 AM - 11:25 AM	50.9	50.3	02:00 PM - 02:05 PM	46.5	41.8
08:45 AM - 08:50 AM	46.2	41.1	11:25 AM - 11:30 AM	53.5	48.9	02:05 PM - 02:10 PM	47.8	42.0
08:50 AM - 08:55 AM	49.6	41.4	11:30 AM - 11:35 AM	52.7	48.3	02:10 PM - 02:15 PM	52.5	43.2
08:55 AM - 09:00 AM	67.4	42.1	11:35 AM - 11:40 AM	48.5	47.5	02:15 PM - 02:20 PM	54.5	42.9
09:00 AM - 09:05 AM	50.2	43.4	11:40 AM - 11:45 AM	49.8	48.7	02:20 PM - 02:25 PM	49.0	43.1
09:05 AM - 09:10 AM	52.0	44.0	11:45 AM - 11:50 AM	49.3	47.8	02:25 PM - 02:30 PM	44.6	42.5
09:10 AM - 09:15 AM	51.0	43.2	11:50 AM - 11:55 AM	51.8	51.0	02:30 PM - 02:35 PM	60.0	42.6
09:15 AM - 09:20 AM	47.0	40.8	11:55 AM - 12:00 PM	51.8	50.9	02:35 PM - 02:40 PM	58.0	42.6
09:20 AM - 09:25 AM	55.1	46.2	12:00 PM - 12:05 PM	53.3	47.7	02:40 PM - 02:45 PM	52.5	43.9
09:25 AM - 09:30 AM	54.7	45.5	12:05 PM - 12:10 PM	52.0	46.5	02:45 PM - 02:50 PM	56.8	44.5
09:30 AM - 09:35 AM	61.6	44.9	12:10 PM - 12:15 PM	52.1	50.5	02:50 PM - 02:55 PM	52.8	43.2
09:35 AM - 09:40 AM	66.0	63.9	12:15 PM - 12:20 PM	54.9	46.4	02:55 PM - 03:00 PM	51.3	43.2
09:40 AM - 09:45 AM	64.9	60.5	12:20 PM - 12:25 PM	47.3	44.1	03:00 PM - 03:05 PM	48.7	43.6
09:45 AM - 09:50 AM	58.1	52.0	12:25 PM - 12:30 PM	49.5	44.0	03:05 PM - 03:10 PM	51.5	43.5
09:50 AM - 09:55 AM	55.1	50.0	12:30 PM - 12:35 PM	51.2	44.4	03:10 PM - 03:15 PM	49.8	43.6
09:55 AM - 10:00 AM	53.7	47.9	12:35 PM - 12:40 PM	46.2	42.7	03:15 PM - 03:20 PM	52.8	44.0
10:00 AM - 10:05 AM	50.9	46.9	12:40 PM - 12:45 PM	46.3	42.0	03:20 PM - 03:25 PM	47.3	43.8
10:05 AM - 10:10 AM	47.4	46.1	12:45 PM - 12:50 PM	47.4	42.6	03:25 PM - 03:30 PM	51.6	44.6
10:10 AM - 10:15 AM	47.3	45.0	12:50 PM - 12:55 PM	47.9	43.2	03:30 PM - 03:35 PM	51.1	44.3
10:15 AM - 10:20 AM	50.2	45.7	12:55 PM - 01:00 PM	45.2	43.3	03:35 PM - 03:40 PM	51.8	46.3
10:20 AM - 10:25 AM	48.1	45.6	01:00 PM - 01:05 PM	43.9	42.3	03:40 PM - 03:45 PM	53.5	45.7
10:25 AM - 10:30 AM	53.1	46.1	01:05 PM - 01:10 PM	46.3	43.1	03:45 PM - 03:50 PM	52.9	46.1
10:30 AM - 10:35 AM	52.0	45.9	01:10 PM - 01:15 PM	46.9	43.2	03:50 PM - 03:55 PM	55.0	46.2
10:35 AM - 10:40 AM	53.1	45.6	01:15 PM - 01:20 PM	51.6	43.5	03:55 PM - 04:00 PM	52.6	46.3

Approved by

Saranyut Jitranont
Assistant General Manager

400/111 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | Phone: +66 2 2760 3000 | Fax: +66 2 2760 3197
ALS LABORATORY GROUP (THAILAND) LTD. AN ALS Limited Company
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RIGHT SOLUTIONS. PROTECT. IMPROVE.



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270025-1

Page 2 of 3

Sample Number : 2211209-25
Parameter : Noise Level (Leq 5 min)
Location : N4 (แนวเส้นกั้นเขตของโรงงาน) (GPS 47P 0727280,1406871)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 18, 2022	Leq	L90	Mar 18, 2022	Leq	L90	Mar 18 - Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	51.4	46.2	06:40 PM - 06:45 PM	48.5	46.5	09:20 PM - 09:25 PM	48.1	46.4
04:05 PM - 04:10 PM	55.4	52.0	06:45 PM - 06:50 PM	47.0	45.9	09:25 PM - 09:30 PM	46.9	45.9
04:10 PM - 04:15 PM	55.7	48.8	06:50 PM - 06:55 PM	60.9	45.5	09:30 PM - 09:35 PM	50.3	45.9
04:15 PM - 04:20 PM	53.0	47.6	06:55 PM - 07:00 PM	46.6	45.0	09:35 PM - 09:40 PM	47.5	46.3
04:20 PM - 04:25 PM	55.2	47.8	07:00 PM - 07:05 PM	47.0	45.2	09:40 PM - 09:45 PM	47.2	46.0
04:25 PM - 04:30 PM	53.5	48.0	07:05 PM - 07:10 PM	45.9	44.5	09:45 PM - 09:50 PM	52.2	45.4
04:30 PM - 04:35 PM	54.8	48.1	07:10 PM - 07:15 PM	48.3	44.9	09:50 PM - 09:55 PM	47.2	45.4
04:35 PM - 04:40 PM	56.4	48.0	07:15 PM - 07:20 PM	47.0	45.1	09:55 PM - 10:00 PM	49.2	45.1
04:40 PM - 04:45 PM	53.8	47.7	07:20 PM - 07:25 PM	50.0	45.0	10:00 PM - 10:05 PM	45.8	45.0
04:45 PM - 04:50 PM	53.6	47.4	07:25 PM - 07:30 PM	48.7	45.8	10:05 PM - 10:10 PM	45.9	45.1
04:50 PM - 04:55 PM	55.4	47.4	07:30 PM - 07:35 PM	45.4	46.3	10:10 PM - 10:15 PM	55.7	45.7
04:55 PM - 05:00 PM	52.3	47.3	07:35 PM - 07:40 PM	48.8	46.0	10:15 PM - 10:20 PM	54.2	45.7
05:00 PM - 05:05 PM	51.6	46.2	07:40 PM - 07:45 PM	50.3	46.1	10:20 PM - 10:25 PM	51.7	44.4
05:05 PM - 05:10 PM	52.1	46.2	07:45 PM - 07:50 PM	50.7	46.1	10:25 PM - 10:30 PM	47.1	45.5
05:10 PM - 05:15 PM	51.1	45.8	07:50 PM - 07:55 PM	56.8	45.9	10:30 PM - 10:35 PM	54.6	45.5
05:15 PM - 05:20 PM	49.7	45.5	07:55 PM - 08:00 PM	51.7	45.4	10:35 PM - 10:40 PM	48.5	45.8
05:20 PM - 05:25 PM	52.3	45.4	08:00 PM - 08:05 PM	46.7	45.6	10:40 PM - 10:45 PM	50.1	45.5
05:25 PM - 05:30 PM	51.5	46.1	08:05 PM - 08:10 PM	46.3	45.3	10:45 PM - 10:50 PM	48.6	45.2
05:30 PM - 05:35 PM	51.9	46.6	08:10 PM - 08:15 PM	47.5	45.7	10:50 PM - 10:55 PM	46.8	44.8
05:35 PM - 05:40 PM	56.8	47.7	08:15 PM - 08:20 PM	46.7	45.8	10:55 PM - 11:00 PM	48.9	44.4
05:40 PM - 05:45 PM	59.8	48.8	08:20 PM - 08:25 PM	47.3	45.7	11:00 PM - 11:05 PM	47.2	45.1
05:45 PM - 05:50 PM	54.1	46.7	08:25 PM - 08:30 PM	47.2	46.2	11:05 PM - 11:10 PM	45.9	44.3
05:50 PM - 05:55 PM	50.7	45.9	08:30 PM - 08:35 PM	48.0	46.2	11:10 PM - 11:15 PM	48.8	44.9
05:55 PM - 06:00 PM	47.1	45.9	08:35 PM - 08:40 PM	50.9	47.1	11:15 PM - 11:20 PM	49.7	46.4
06:00 PM - 06:05 PM	46.5	45.3	08:40 PM - 08:45 PM	51.4	47.5	11:20 PM - 11:25 PM	47.8	45.4
06:05 PM - 06:10 PM	47.4	45.8	08:45 PM - 08:50 PM	50.7	47.4	11:25 PM - 11:30 PM	46.6	44.8
06:10 PM - 06:15 PM	47.1	45.8	08:50 PM - 08:55 PM	50.1	46.7	11:30 PM - 11:35 PM	50.3	45.9
06:15 PM - 06:20 PM	46.5	45.4	08:55 PM - 09:00 PM	47.7	45.7	11:35 PM - 11:40 PM	48.0	45.9
06:20 PM - 06:25 PM	45.9	45.1	09:00 PM - 09:05 PM	47.6	45.2	11:40 PM - 11:45 PM	50.7	46.3
06:25 PM - 06:30 PM	49.9	45.5	09:05 PM - 09:10 PM	46.9	45.1	11:45 PM - 11:50 PM	47.1	45.3
06:30 PM - 06:35 PM	51.9	46.2	09:10 PM - 09:15 PM	46.8	44.8	11:50 PM - 11:55 PM	52.7	45.8
06:35 PM - 06:40 PM	51.9	46.6	09:15 PM - 09:20 PM	48.1	45.5	11:55 PM - 12:00 AM	51.3	45.3

Approved by

Saranyut Jitranont
Assistant General Manager

400/111 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | Phone: +66 2 2760 3000 | Fax: +66 2 2760 3197
ALS LABORATORY GROUP (THAILAND) LTD. AN ALS Limited Company
www.alsglobal.com
RIGHT SOLUTIONS. PROTECT. IMPROVE.



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2211209

Date Received : Mar 23, 2022

Date Reported : Mar 25, 2022

Report Number : 2270025-1

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Sample Number : 2211209-25
Parameter : Noise Level (Leq 5 min)
Location : N4 (แนวเส้นกั้นเขตของโรงงาน) (GPS 47P 0727280,1406871)
Measurement Date : Mar 18 - Mar 19, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	50.6	45.3	02:40 AM - 02:45 AM	52.7	50.8	05:20 AM - 05:25 AM	51.4	45.2
12:05 AM - 12:10 AM	48.7	43.7	02:45 AM - 02:50 AM	52.2	50.4	05:25 AM - 05:30 AM	59.0	44.5
12:10 AM - 12:15 AM	48.8	45.4	02:50 AM - 02:55 AM	52.4	50.8	05:30 AM - 05:35 AM	55.5	44.8
12:15 AM - 12:20 AM	51.0	48.7	02:55 AM - 03:00 AM	53.8	51.3	05:35 AM - 05:40 AM	58.5	45.0
12:20 AM - 12:25 AM	49.8	45.7	03:00 AM - 03:05 AM	54.2	51.7	05:40 AM - 05:45 AM	56.6	44.6
12:25 AM - 12:30 AM	48.8	46.2	03:05 AM - 03:10 AM	52.3	49.8	05:45 AM - 05:50 AM	55.0	43.6
12:30 AM - 12:35 AM	47.4	45.1	03:10 AM - 03:15 AM	52.7	49.6	05:50 AM - 05:55 AM	50.0	40.9
12:35 AM - 12:40 AM	50.3	44.7	03:15 AM - 03:20 AM	52.3	48.1	05:55 AM - 06:00 AM	49.0	41.5
12:40 AM - 12:45 AM	47.7	45.2	03:20 AM - 03:25 AM	55.3	50.7	06:00 AM - 06:05 AM	50.6	41.9
12:45 AM - 12:50 AM	49.1	46.2	03:25 AM - 03:30 AM	55.1	51.6	06:05 AM - 06:10 AM	47.6	42.5
12:50 AM - 12:55 AM	49.9	46.5	03:30 AM - 03:35 AM	58.6	55.7	06:10 AM - 06:15 AM	49.2	42.2
12:55 AM - 01:00 AM	49.8	46.3	03:35 AM - 03:40 AM	57.7	53.4	06:15 AM - 06:20 AM	43.6	42.2
01:00 AM - 01:05 AM	52.4	48.9	03:40 AM - 03:45 AM	55.9	52.6	06:20 AM - 06:25 AM	52.3	42.8
01:05 AM - 01:10 AM	51.7	45.5	03:45 AM - 03:50 AM	54.1	51.7	06:25 AM - 06:30 AM	47.3	42.6
01:10 AM - 01:15 AM	51.7	46.7	03:50 AM - 03:55 AM	55.5	51.5	06:30 AM - 06:35 AM	44.9	41.8
01:15 AM - 01:20 AM	50.2	45.5	03:55 AM - 04:00 AM	56.2	50.4	06:35 AM - 06:40 AM	48.1	42.2
01:20 AM - 01:25 AM	48.8	45.5	04:00 AM - 04:05 AM	53.2	50.2	06:40 AM - 06:45 AM	43.5	41.9
01:25 AM - 01:30 AM	52.4	46.7	04:05 AM - 04:10 AM	58.2	50.5	06:45 AM - 06:50 AM	48.2	41.0
01:30 AM - 01:35 AM	50.1	46.0	04:10 AM - 04:15 AM	58.5	47.9	06:50 AM - 06:55 AM	54.2	42.6
01:35 AM - 01:40 AM	51.1	46.1	04:15 AM - 04:20 AM	55.2	47.8	06:55 AM - 07:00 AM	43.2	41.9
01:40 AM - 01:45 AM	49.7	45.1	04:20 AM - 04:25 AM	65.7	49.2	07:00 AM - 07:05 AM	47.6	42.6
01:45 AM - 01:50 AM	51.0	46.8	04:25 AM - 04:30 AM	56.9	50.0	07:05 AM - 07:10 AM	48.7	42.8
01:50 AM - 01:55 AM	51.1	47.0	04:30 AM - 04:35 AM	64.3	50.2	07:10 AM - 07:15 AM	41.6	42.6
01:55 AM - 02:00 AM	49.0	47.3	04:35 AM - 04:40 AM	58.0	50.0	07:15 AM - 07:20 AM	44.7	42.7
02:00 AM - 02:05 AM	51.6	47.0	04:40 AM - 04:45 AM	59.0	50.1	07:20 AM - 07:25 AM	48.1	41.3
02:05 AM - 02:10 AM	50.6	47.4	04:45 AM - 04:50 AM	56.9	49.7	07:25 AM - 07:30 AM	44.3	42.0
02:10 AM - 02:15 AM	52.1	48.2	04:50 AM - 04:55 AM	57.5	49.7	07:30 AM - 07:35 AM	45.5	41.9
02:15 AM - 02:20 AM	52.6	48.3	04:55 AM - 05:00 AM	58.1	49.2	07:35 AM - 07:40 AM	45.0	42.1
02:20 AM - 02:25 AM	52.1	48.2	05:00 AM - 05:05 AM	58.0	48.8	07:40 AM - 07:45 AM	44.8	41.8
02:25 AM - 02:30 AM	52.8	48.9	05:05 AM - 05:10 AM	55.9	49.2	07:45 AM - 07:50 AM	41.8	42.2
02:30 AM - 02:35 AM	53.2	51.2	05:10 AM - 05:15 AM	59.6	49.8	07:50 AM - 07:55 AM	48.3	41.0
02:35 AM - 02:40 AM	53.1	51.1	05:15 AM - 05:20 AM	59.0	44.5	07:55 AM - 08:00 AM	47.2	40.2



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : อัญญา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270026-1

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Sample Number 2211209-26
Parameter Noise Level (Leq 5 min)
Location N4 (หน้าสวนพืชมงคล) (GPS 47P 0727280,1406871)
Measurement Date Mar 19 - Mar 20, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Serial No. 00734225

Mar 19, 2022	Leq	L90	Mar 19, 2022	Leq	L90	Mar 19 - Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	51.1	44.2	06:40 PM - 06:45 PM	47.5	45.9	09:20 PM - 09:25 PM	49.6	45.0
04:05 PM - 04:10 PM	57.6	46.6	06:45 PM - 06:50 PM	47.2	45.7	09:25 PM - 09:30 PM	48.1	45.1
04:10 PM - 04:15 PM	60.6	58.8	06:50 PM - 06:55 PM	48.7	45.9	09:30 PM - 09:35 PM	54.6	45.2
04:15 PM - 04:20 PM	57.0	47.5	06:55 PM - 07:00 PM	48.2	46.1	09:35 PM - 09:40 PM	50.5	44.9
04:20 PM - 04:25 PM	53.1	45.7	07:00 PM - 07:05 PM	47.5	45.2	09:40 PM - 09:45 PM	46.5	45.4
04:25 PM - 04:30 PM	50.7	46.1	07:05 PM - 07:10 PM	48.6	45.5	09:45 PM - 09:50 PM	48.4	45.4
04:30 PM - 04:35 PM	56.4	47.0	07:10 PM - 07:15 PM	49.1	45.4	09:50 PM - 09:55 PM	46.6	45.1
04:35 PM - 04:40 PM	55.5	47.1	07:15 PM - 07:20 PM	47.0	45.7	09:55 PM - 10:00 PM	50.3	45.1
04:40 PM - 04:45 PM	54.9	46.5	07:20 PM - 07:25 PM	47.3	45.6	10:00 PM - 10:05 PM	52.8	45.5
04:45 PM - 04:50 PM	51.4	46.6	07:25 PM - 07:30 PM	48.1	46.0	10:05 PM - 10:10 PM	49.5	45.2
04:50 PM - 04:55 PM	55.2	46.8	07:30 PM - 07:35 PM	48.0	46.3	10:10 PM - 10:15 PM	46.3	45.2
04:55 PM - 05:00 PM	50.6	46.2	07:35 PM - 07:40 PM	48.3	45.1	10:15 PM - 10:20 PM	46.3	45.0
05:00 PM - 05:05 PM	52.8	46.5	07:40 PM - 07:45 PM	48.5	45.5	10:20 PM - 10:25 PM	46.4	45.2
05:05 PM - 05:10 PM	51.9	47.2	07:45 PM - 07:50 PM	51.7	45.6	10:25 PM - 10:30 PM	46.5	45.1
05:10 PM - 05:15 PM	48.7	47.2	07:50 PM - 07:55 PM	47.5	46.0	10:30 PM - 10:35 PM	47.0	46.0
05:15 PM - 05:20 PM	50.8	47.2	07:55 PM - 08:00 PM	47.6	46.2	10:35 PM - 10:40 PM	46.7	45.7
05:20 PM - 05:25 PM	54.2	46.4	08:00 PM - 08:05 PM	46.7	45.6	10:40 PM - 10:45 PM	49.5	45.6
05:25 PM - 05:30 PM	51.1	46.7	08:05 PM - 08:10 PM	47.7	46.3	10:45 PM - 10:50 PM	49.1	46.6
05:30 PM - 05:35 PM	55.1	46.2	08:10 PM - 08:15 PM	47.6	45.7	10:50 PM - 10:55 PM	50.4	46.7
05:35 PM - 05:40 PM	58.5	46.8	08:15 PM - 08:20 PM	54.7	45.6	10:55 PM - 11:00 PM	47.2	45.8
05:40 PM - 05:45 PM	56.3	46.8	08:20 PM - 08:25 PM	48.4	45.9	11:00 PM - 11:05 PM	49.3	46.2
05:45 PM - 05:50 PM	50.8	46.3	08:25 PM - 08:30 PM	47.5	45.9	11:05 PM - 11:10 PM	47.1	45.9
05:50 PM - 05:55 PM	49.1	45.7	08:30 PM - 08:35 PM	47.7	46.2	11:10 PM - 11:15 PM	46.1	45.2
05:55 PM - 06:00 PM	47.1	45.6	08:35 PM - 08:40 PM	48.7	46.2	11:15 PM - 11:20 PM	45.5	44.7
06:00 PM - 06:05 PM	46.6	45.3	08:40 PM - 08:45 PM	49.3	45.3	11:20 PM - 11:25 PM	45.6	44.5
06:05 PM - 06:10 PM	48.0	46.3	08:45 PM - 08:50 PM	46.6	45.0	11:25 PM - 11:30 PM	47.3	44.3
06:10 PM - 06:15 PM	57.2	46.7	08:50 PM - 08:55 PM	55.3	44.9	11:30 PM - 11:35 PM	46.2	44.4
06:15 PM - 06:20 PM	50.3	46.1	08:55 PM - 09:00 PM	46.7	45.0	11:35 PM - 11:40 PM	48.9	45.3
06:20 PM - 06:25 PM	49.0	46.1	09:00 PM - 09:05 PM	46.6	44.9	11:40 PM - 11:45 PM	47.1	45.5
06:25 PM - 06:30 PM	49.3	45.5	09:05 PM - 09:10 PM	50.0	44.7	11:45 PM - 11:50 PM	46.7	45.2
06:30 PM - 06:35 PM	47.0	45.4	09:10 PM - 09:15 PM	46.1	44.5	11:50 PM - 11:55 PM	46.5	44.8
06:35 PM - 06:40 PM	49.6	45.0	09:15 PM - 09:20 PM	46.6	44.6	11:55 PM - 12:00 AM	46.3	44.7

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : อัญญา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270026-1

Page 3 of 3

Sample Number 2211209-26
Parameter Noise Level (Leq 5 min)
Location N4 (หน้าสวนพืชมงคล) (GPS 47P 0727280,1406871)
Measurement Date Mar 19 - Mar 20, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Serial No. 00734225

Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90	Mar 20, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	46.2	44.9	02:40 AM - 02:45 AM	44.3	42.8	05:20 AM - 05:25 AM	55.8	47.9
12:05 AM - 12:10 AM	47.8	45.2	02:45 AM - 02:50 AM	47.4	43.9	05:25 AM - 05:30 AM	58.6	46.8
12:10 AM - 12:15 AM	46.6	44.7	02:50 AM - 02:55 AM	45.2	43.6	05:30 AM - 05:35 AM	54.6	46.5
12:15 AM - 12:20 AM	45.5	44.4	02:55 AM - 03:00 AM	47.3	43.0	05:35 AM - 05:40 AM	53.3	46.8
12:20 AM - 12:25 AM	45.7	44.7	03:00 AM - 03:05 AM	45.6	43.0	05:40 AM - 05:45 AM	52.0	44.6
12:25 AM - 12:30 AM	45.2	44.3	03:05 AM - 03:10 AM	47.0	45.6	05:45 AM - 05:50 AM	47.2	45.0
12:30 AM - 12:35 AM	48.2	44.3	03:10 AM - 03:15 AM	45.7	44.5	05:50 AM - 05:55 AM	51.2	46.1
12:35 AM - 12:40 AM	48.8	44.3	03:15 AM - 03:20 AM	49.8	44.5	05:55 AM - 06:00 AM	50.1	44.3
12:40 AM - 12:45 AM	49.8	43.7	03:20 AM - 03:25 AM	47.3	43.5	06:00 AM - 06:05 AM	51.4	44.2
12:45 AM - 12:50 AM	43.6	42.9	03:25 AM - 03:30 AM	50.1	43.9	06:05 AM - 06:10 AM	46.4	43.8
12:50 AM - 12:55 AM	43.9	43.1	03:30 AM - 03:35 AM	55.5	44.0	06:10 AM - 06:15 AM	46.2	44.0
12:55 AM - 01:00 AM	47.2	43.2	03:35 AM - 03:40 AM	59.9	55.8	06:15 AM - 06:20 AM	45.5	43.7
01:00 AM - 01:05 AM	45.3	43.5	03:40 AM - 03:45 AM	53.8	49.5	06:20 AM - 06:25 AM	50.4	42.6
01:05 AM - 01:10 AM	45.7	43.9	03:45 AM - 03:50 AM	53.8	47.7	06:25 AM - 06:30 AM	49.4	43.1
01:10 AM - 01:15 AM	45.1	43.7	03:50 AM - 03:55 AM	58.7	48.8	06:30 AM - 06:35 AM	47.4	42.7
01:15 AM - 01:20 AM	44.6	43.2	03:55 AM - 04:00 AM	66.5	53.3	06:35 AM - 06:40 AM	49.9	43.4
01:20 AM - 01:25 AM	45.9	44.2	04:00 AM - 04:05 AM	51.9	45.2	06:40 AM - 06:45 AM	44.4	42.7
01:25 AM - 01:30 AM	46.2	44.2	04:05 AM - 04:10 AM	50.4	44.5	06:45 AM - 06:50 AM	47.9	41.9
01:30 AM - 01:35 AM	45.9	44.0	04:10 AM - 04:15 AM	53.8	46.1	06:50 AM - 06:55 AM	53.5	42.2
01:35 AM - 01:40 AM	45.7	44.6	04:15 AM - 04:20 AM	56.9	46.8	06:55 AM - 07:00 AM	52.4	42.7
01:40 AM - 01:45 AM	48.4	43.6	04:20 AM - 04:25 AM	55.2	46.5	07:00 AM - 07:05 AM	46.5	42.4
01:45 AM - 01:50 AM	44.5	42.6	04:25 AM - 04:30 AM	56.0	46.8	07:05 AM - 07:10 AM	52.1	42.7
01:50 AM - 01:55 AM	45.5	43.8	04:30 AM - 04:35 AM	60.2	47.2	07:10 AM - 07:15 AM	53.2	42.3
01:55 AM - 02:00 AM	48.1	45.2	04:35 AM - 04:40 AM	57.6	48.0	07:15 AM - 07:20 AM	54.7	42.6
02:00 AM - 02:05 AM	48.7	46.2	04:40 AM - 04:45 AM	54.7	47.8	07:20 AM - 07:25 AM	47.2	42.5
02:05 AM - 02:10 AM	47.4	44.8	04:45 AM - 04:50 AM	53.7	48.2	07:25 AM - 07:30 AM	43.5	41.9
02:10 AM - 02:15 AM	46.8	44.6	04:50 AM - 04:55 AM	54.9	48.8	07:30 AM - 07:35 AM	47.6	42.7
02:15 AM - 02:20 AM	47.4	44.3	04:55 AM - 05:00 AM	53.3	48.9	07:35 AM - 07:40 AM	45.6	42.0
02:20 AM - 02:25 AM	47.0	43.7	05:00 AM - 05:05 AM	55.4	46.8	07:40 AM - 07:45 AM	52.3	42.4
02:25 AM - 02:30 AM	44.6	43.3	05:05 AM - 05:10 AM	54.4	49.1	07:45 AM - 07:50 AM	47.7	42.5
02:30 AM - 02:35 AM	44.7	43.4	05:10 AM - 05:15 AM	54.2	48.5	07:50 AM - 07:55 AM	46.7	41.5
02:35 AM - 02:40 AM	46.1	43.7	05:15 AM - 05:20 AM	56.2	48.6	07:55 AM - 08:00 AM	49.3	42.1

Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S10m 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : อัญญา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270027-1

Page 1 of 3

Sample Number 2211209-27
Parameter Noise Level (Leq 5 min)
Location N4 (หน้าสวนพืชมงคล) (GPS 47P 0727280,1406871)
Measurement Date Mar 20 - Mar 21, 2022
Measurement by Nontachai Uppathamp
Sound Level meter Serial No. 00734225

Mar 20, 2022			Mar 20, 2022			Mar 20, 2022		
Time	Leq	L90	Time	Leq	L90	Time	Leq	L90
	dB(A)	dB(A)		dB(A)	dB(A)		dB(A)	dB(A)
08:00 AM - 08:05 AM	54.5	42.3	10:40 AM - 10:45 AM	49.3	43.9	01:20 PM - 01:25 PM	45.1	43.6
08:05 AM - 08:10 AM	45.8	42.3	10:45 AM - 10:50 AM	49.7	43.2	01:25 PM - 01:30 PM	45.0	43.7
08:10 AM - 08:15 AM	46.7	41.8	10:50 AM - 10:55 AM	45.9	42.9	01:30 PM - 01:35 PM	49.3	44.2
08:15 AM - 08:20 AM	45.6	42.3	10:55 AM - 11:00 AM	44.8	43.6	01:35 PM - 01:40 PM	46.1	43.2
08:20 AM - 08:25 AM	46.6	42.5	11:00 AM - 11:05 AM	45.8	43.5	01:40 PM - 01:45 PM	46.7	43.4
08:25 AM - 08:30 AM	46.9	44.0	11:05 AM - 11:10 AM	52.1	43.5	01:45 PM - 01:50 PM	49.4	43.6
08:30 AM - 08:35 AM	52.4	43.6	11:10 AM - 11:15 AM	50.9	43.6	01:50 PM - 01:55 PM	48.4	44.2
08:35 AM - 08:40 AM	50.7	43.1	11:15 AM - 11:20 AM	47.1	43.5	01:55 PM - 02:00 PM	51.2	44.0
08:40 AM - 08:45 AM	58.8	43.3	11:20 AM - 11:25 AM	45.6	43.0	02:00 PM - 02:05 PM	48.3	43.9
08:45 AM - 08:50 AM	50.1	43.3	11:25 AM - 11:30 AM	46.7	43.2	02:05 PM - 02:10 PM	49.0	44.7
08:50 AM - 08:55 AM	50.5	43.1	11:30 AM - 11:35 AM	47.6	43.8	02:10 PM - 02:15 PM	53.6	44.2
08:55 AM - 09:00 AM	46.8	42.9	11:35 AM - 11:40 AM	45.6	42.9	02:15 PM - 02:20 PM	50.9	44.3
09:00 AM - 09:05 AM	49.4	44.1	11:40 AM - 11:45 AM	47.9	44.8	02:20 PM - 02:25 PM	49.8	44.0
09:05 AM - 09:10 AM	55.5	44.2	11:45 AM - 11:50 AM	48.1	43.7	02:25 PM - 02:30 PM	53.4	44.2
09:10 AM - 09:15 AM	50.7	44.8	11:50 AM - 11:55 AM	46.0	44.4	02:30 PM - 02:35 PM	60.6	44.2
09:15 AM - 09:20 AM	49.8	43.5	11:55 AM - 12:00 PM	48.2	44.6	02:35 PM - 02:40 PM	57.9	45.3
09:20 AM - 09:25 AM	48.3	44.3	12:00 PM - 12:05 PM	50.8	44.7	02:40 PM - 02:45 PM	51.4	44.3
09:25 AM - 09:30 AM	52.9	43.8	12:05 PM - 12:10 PM	46.7	44.9	02:45 PM - 02:50 PM	51.7	44.2
09:30 AM - 09:35 AM	50.6	43.9	12:10 PM - 12:15 PM	46.2	44.2	02:50 PM - 02:55 PM	54.4	44.4
09:35 AM - 09:40 AM	47.8	43.0	12:15 PM - 12:20 PM	48.6	44.8	02:55 PM - 03:00 PM	47.0	44.0
09:40 AM - 09:45 AM	51.2	43.5	12:20 PM - 12:25 PM	50.9	45.6	03:00 PM - 03:05 PM	50.7	44.3
09:45 AM - 09:50 AM	47.8	43.2	12:25 PM - 12:30 PM	56.5	52.2	03:05 PM - 03:10 PM	53.4	43.6
09:50 AM - 09:55 AM	49.9	43.6	12:30 PM - 12:35 PM	49.1	44.6	03:10 PM - 03:15 PM	50.5	43.8
09:55 AM - 10:00 AM	51.1	43.7	12:35 PM - 12:40 PM	50.3	46.4	03:15 PM - 03:20 PM	53.6	43.6
10:00 AM - 10:05 AM	47.3	42.6	12:40 PM - 12:45 PM	48.2	45.2	03:20 PM - 03:25 PM	49.3	43.8
10:05 AM - 10:10 AM	51.9	43.4	12:45 PM - 12:50 PM	46.8	45.0	03:25 PM - 03:30 PM	55.7	44.4
10:10 AM - 10:15 AM	47.5	42.7	12:50 PM - 12:55 PM	45.7	43.6	03:30 PM - 03:35 PM	51.5	45.7
10:15 AM - 10:20 AM	46.6	42.8	12:55 PM - 01:00 PM	47.6	43.4	03:35 PM - 03:40 PM	53.8	45.2
10:20 AM - 10:25 AM	52.2	43.3	01:00 PM - 01:05 PM	40.9	43.0	03:40 PM - 03:45 PM	48.9	44.7
10:25 AM - 10:30 AM	55.5	42.7	01:05 PM - 01:10 PM	45.1	43.5	03:45 PM - 03:50 PM	59.3	45.3
10:30 AM - 10:35 AM	51.9	45.0	01:10 PM - 01:15 PM	44.1	42.9	03:50 PM - 03:55 PM	51.7	45.1
10:35 AM - 10:40 AM	47.7	44.2	01:15 PM - 01:20 PM	48.0	43.5	03:55 PM - 04:00 PM	53.1	45.2



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270028-1

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Sample Number : 2211209-27
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าถนนสุขุมวิท) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 20 - Mar 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
12:00 AM - 12:05 AM	48.0	45.4	02:40 AM - 02:45 AM	59.5	46.3	05:20 AM - 05:25 AM	60.4	46.5
12:05 AM - 12:10 AM	52.4	48.7	02:45 AM - 02:50 AM	61.6	47.1	05:25 AM - 05:30 AM	58.0	44.7
12:10 AM - 12:15 AM	51.2	46.8	02:50 AM - 02:55 AM	61.6	46.1	05:30 AM - 05:35 AM	55.5	45.6
12:15 AM - 12:20 AM	50.8	46.7	02:55 AM - 03:00 AM	61.8	46.2	05:35 AM - 05:40 AM	55.9	45.4
12:20 AM - 12:25 AM	56.6	50.7	03:00 AM - 03:05 AM	64.5	45.8	05:40 AM - 05:45 AM	54.5	44.6
12:25 AM - 12:30 AM	57.7	46.9	03:05 AM - 03:10 AM	67.5	46.1	05:45 AM - 05:50 AM	57.2	44.3
12:30 AM - 12:35 AM	49.5	44.2	03:10 AM - 03:15 AM	66.9	46.4	05:50 AM - 05:55 AM	53.8	43.7
12:35 AM - 12:40 AM	50.0	45.3	03:15 AM - 03:20 AM	64.9	46.3	05:55 AM - 06:00 AM	52.2	43.8
12:40 AM - 12:45 AM	48.9	46.8	03:20 AM - 03:25 AM	71.1	47.3	06:00 AM - 06:05 AM	50.0	44.0
12:45 AM - 12:50 AM	53.8	47.0	03:25 AM - 03:30 AM	71.2	46.9	06:05 AM - 06:10 AM	49.0	43.3
12:50 AM - 12:55 AM	47.4	45.9	03:30 AM - 03:35 AM	66.3	54.7	06:10 AM - 06:15 AM	47.4	42.9
12:55 AM - 01:00 AM	48.0	46.0	03:35 AM - 03:40 AM	60.0	48.2	06:15 AM - 06:20 AM	45.9	43.9
01:00 AM - 01:05 AM	47.4	46.0	03:40 AM - 03:45 AM	55.0	46.0	06:20 AM - 06:25 AM	45.7	43.5
01:05 AM - 01:10 AM	47.2	45.1	03:45 AM - 03:50 AM	53.7	45.3	06:25 AM - 06:30 AM	49.0	43.4
01:10 AM - 01:15 AM	52.1	46.0	03:50 AM - 03:55 AM	53.7	46.9	06:30 AM - 06:35 AM	46.6	42.6
01:15 AM - 01:20 AM	50.5	56.1	03:55 AM - 04:00 AM	53.2	47.1	06:35 AM - 06:40 AM	48.0	43.4
01:20 AM - 01:25 AM	54.9	46.9	04:00 AM - 04:05 AM	58.0	47.4	06:40 AM - 06:45 AM	46.9	43.0
01:25 AM - 01:30 AM	49.5	47.3	04:05 AM - 04:10 AM	58.0	47.4	06:45 AM - 06:50 AM	48.7	43.7
01:30 AM - 01:35 AM	48.5	47.0	04:10 AM - 04:15 AM	57.3	47.5	06:50 AM - 06:55 AM	52.1	44.1
01:35 AM - 01:40 AM	49.7	48.2	04:15 AM - 04:20 AM	58.5	47.7	06:55 AM - 07:00 AM	47.8	44.0
01:40 AM - 01:45 AM	48.6	48.0	04:20 AM - 04:25 AM	55.1	46.6	07:00 AM - 07:05 AM	44.4	43.5
01:45 AM - 01:50 AM	47.8	47.8	04:25 AM - 04:30 AM	58.8	46.8	07:05 AM - 07:10 AM	48.4	43.1
01:50 AM - 01:55 AM	47.3	45.9	04:30 AM - 04:35 AM	62.5	47.9	07:10 AM - 07:15 AM	49.2	43.7
01:55 AM - 02:00 AM	48.4	46.8	04:35 AM - 04:40 AM	58.5	47.7	07:15 AM - 07:20 AM	41.9	43.1
02:00 AM - 02:05 AM	47.8	47.1	04:40 AM - 04:45 AM	58.8	47.0	07:20 AM - 07:25 AM	49.4	42.5
02:05 AM - 02:10 AM	53.0	47.6	04:45 AM - 04:50 AM	53.6	45.5	07:25 AM - 07:30 AM	47.0	42.9
02:10 AM - 02:15 AM	48.5	47.7	04:50 AM - 04:55 AM	58.7	47.3	07:30 AM - 07:35 AM	47.7	42.3
02:15 AM - 02:20 AM	48.3	46.4	04:55 AM - 05:00 AM	55.3	46.8	07:35 AM - 07:40 AM	44.7	42.3
02:20 AM - 02:25 AM	47.8	46.4	05:00 AM - 05:05 AM	57.5	46.7	07:40 AM - 07:45 AM	49.6	42.6
02:25 AM - 02:30 AM	66.0	47.3	05:05 AM - 05:10 AM	58.5	46.8	07:45 AM - 07:50 AM	45.9	43.1
02:30 AM - 02:35 AM	62.0	46.7	05:10 AM - 05:15 AM	60.8	46.9	07:50 AM - 07:55 AM	46.1	43.0
02:35 AM - 02:40 AM	59.9	46.4	05:15 AM - 05:20 AM	58.7	47.0	07:55 AM - 08:00 AM	50.2	43.1

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270028-1

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Sample Number : 2211209-28
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าถนนสุขุมวิท) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
08:00 AM - 08:05 AM	49.8	43.0	10:40 AM - 10:45 AM	52.2	42.6	01:20 PM - 01:25 PM	45.9	43.3
08:05 AM - 08:10 AM	51.9	42.6	10:45 AM - 10:50 AM	46.4	42.7	01:25 PM - 01:30 PM	49.2	43.5
08:10 AM - 08:15 AM	55.5	44.5	10:50 AM - 10:55 AM	50.9	43.3	01:30 PM - 01:35 PM	44.0	43.0
08:15 AM - 08:20 AM	50.4	46.3	10:55 AM - 11:00 AM	41.0	42.7	01:35 PM - 01:40 PM	48.9	42.8
08:20 AM - 08:25 AM	46.5	45.1	11:00 AM - 11:05 AM	46.4	42.7	01:40 PM - 01:45 PM	46.1	42.3
08:25 AM - 08:30 AM	47.4	43.9	11:05 AM - 11:10 AM	43.9	42.5	01:45 PM - 01:50 PM	48.1	42.0
08:30 AM - 08:35 AM	47.3	44.5	11:10 AM - 11:15 AM	47.0	43.4	01:50 PM - 01:55 PM	48.8	42.9
08:35 AM - 08:40 AM	50.7	44.8	11:15 AM - 11:20 AM	47.8	44.5	01:55 PM - 02:00 PM	52.1	42.9
08:40 AM - 08:45 AM	48.0	44.7	11:20 AM - 11:25 AM	48.6	43.3	02:00 PM - 02:05 PM	46.9	42.6
08:45 AM - 08:50 AM	52.1	45.8	11:25 AM - 11:30 AM	44.2	43.2	02:05 PM - 02:10 PM	54.5	43.5
08:50 AM - 08:55 AM	54.3	43.2	11:30 AM - 11:35 AM	44.7	42.7	02:10 PM - 02:15 PM	52.6	43.6
08:55 AM - 09:00 AM	52.8	42.3	11:35 AM - 11:40 AM	45.2	42.8	02:15 PM - 02:20 PM	51.4	42.9
09:00 AM - 09:05 AM	51.6	42.6	11:40 AM - 11:45 AM	44.5	42.9	02:20 PM - 02:25 PM	57.3	44.1
09:05 AM - 09:10 AM	50.0	44.7	11:45 AM - 11:50 AM	46.5	43.4	02:25 PM - 02:30 PM	48.5	43.6
09:10 AM - 09:15 AM	50.8	44.8	11:50 AM - 11:55 AM	44.5	43.0	02:30 PM - 02:35 PM	54.5	44.4
09:15 AM - 09:20 AM	48.1	44.0	11:55 AM - 12:00 PM	47.6	42.5	02:35 PM - 02:40 PM	57.0	45.2
09:20 AM - 09:25 AM	52.0	44.3	12:00 PM - 12:05 PM	43.4	42.4	02:40 PM - 02:45 PM	57.8	44.4
09:25 AM - 09:30 AM	46.4	43.7	12:05 PM - 12:10 PM	47.3	42.8	02:45 PM - 02:50 PM	51.1	43.8
09:30 AM - 09:35 AM	52.9	43.9	12:10 PM - 12:15 PM	43.7	42.7	02:50 PM - 02:55 PM	52.8	44.2
09:35 AM - 09:40 AM	63.2	44.1	12:15 PM - 12:20 PM	45.7	42.8	02:55 PM - 03:00 PM	54.5	43.8
09:40 AM - 09:45 AM	53.1	44.5	12:20 PM - 12:25 PM	45.4	42.4	03:00 PM - 03:05 PM	51.4	43.7
09:45 AM - 09:50 AM	48.7	43.1	12:25 PM - 12:30 PM	49.0	42.4	03:05 PM - 03:10 PM	51.2	44.0
09:50 AM - 09:55 AM	43.6	42.6	12:30 PM - 12:35 PM	47.8	42.8	03:10 PM - 03:15 PM	50.7	43.5
09:55 AM - 10:00 AM	51.0	43.4	12:35 PM - 12:40 PM	52.3	42.4	03:15 PM - 03:20 PM	50.2	43.8
10:00 AM - 10:05 AM	44.0	42.6	12:40 PM - 12:45 PM	45.1	42.1	03:20 PM - 03:25 PM	48.6	42.7
10:05 AM - 10:10 AM	43.6	42.2	12:45 PM - 12:50 PM	47.1	42.4	03:25 PM - 03:30 PM	51.4	44.6
10:10 AM - 10:15 AM	47.4	42.9	12:50 PM - 12:55 PM	44.7	43.1	03:30 PM - 03:35 PM	52.5	45.2
10:15 AM - 10:20 AM	55.5	43.3	12:55 PM - 01:00 PM	43.6	42.5	03:35 PM - 03:40 PM	52.0	45.3
10:20 AM - 10:25 AM	57.7	43.0	01:00 PM - 01:05 PM	49.3	42.9	03:40 PM - 03:45 PM	60.6	46.2
10:25 AM - 10:30 AM	52.9	43.4	01:05 PM - 01:10 PM	48.7	43.6	03:45 PM - 03:50 PM	51.9	45.9
10:30 AM - 10:35 AM	48.1	42.0	01:10 PM - 01:15 PM	45.9	42.5	03:50 PM - 03:55 PM	53.8	45.6
10:35 AM - 10:40 AM	52.8	43.2	01:15 PM - 01:20 PM	49.4	43.2	03:55 PM - 04:00 PM	51.0	45.8

Approved by

Sarayu Jitranont
Assistant General Manager



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2211209
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2270028-1

Page 2 of 3

Sample Number : 2211209-28
Parameter : Noise Level (Leq 5 min)
Location : N4 (ทางเข้าถนนสุขุมวิท) (GPS 47P 0727280, 1406871)
Measurement Date : Mar 21 - Mar 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level meter : Serial No. 00734225

Mar 21, 2022	Leq	L90	Mar 21, 2022	Leq	L90	Mar 21 - Mar 22, 2022	Leq	L90
Time	dB(A)	dB(A)	Time	dB(A)	dB(A)	Time	dB(A)	dB(A)
04:00 PM - 04:05 PM	54.6	45.8	06:40 PM - 06:45 PM	50.9	44.7	09:20 PM - 09:25 PM	47.9	46.0
04:05 PM - 04:10 PM	64.3	49.2	06:45 PM - 06:50 PM	55.5	45.3	09:25 PM - 09:30 PM	58.5	45.8
04:10 PM - 04:15 PM	64.3	52.3	06:50 PM - 06:55 PM	46.5	45.6	09:30 PM - 09:35 PM	51.0	45.7
04:15 PM - 04:20 PM	52.7	46.6	06:55 PM - 07:00 PM	46.5	45.4	09:35 PM - 09:40 PM	47.2	46.0
04:20 PM - 04:25 PM	53.5	47.5	07:00 PM - 07:05 PM	46.9	45.9	09:40 PM - 09:45 PM	55.5	46.9
04:25 PM - 04:30 PM	50.6	47.3	07:05 PM - 07:10 PM	50.1	44.9	09:45 PM - 09:50 PM	48.3	46.1
04:30 PM - 04:35 PM	56.4	47.8	07:10 PM - 07:15 PM	46.4	45.7	09:50 PM - 09:55 PM	50.3	45.9
04:35 PM - 04:40 PM	56.1	47.8	07:15 PM - 07:20 PM	46.5	45.3	09:55 PM - 10:00 PM	49.5	45.5
04:40 PM - 04:45 PM	55.8	47.8	07:20 PM - 07:25 PM	46.4	45.6	10:00 PM - 10:05 PM	49.1	46.3
04:45 PM - 04:50 PM	52.6	47.2	07:25 PM - 07:30 PM	46.6	45.4	10:05 PM - 10:10 PM	47.7	45.9
04:50 PM - 04:55 PM	56.4	47.0	07:30 PM - 07:35 PM	47.8	45.3	10:10 PM - 10:15 PM	51.4	45.4
04:55 PM - 05:00 PM	52.8	46.7	07:35 PM - 07:40 PM	49.9	45.4	10:15 PM - 10:20 PM	56.7	45.1
05:00 PM - 05:05 PM	47.1	45.7	07:40 PM - 07:45 PM	46.8	45.3	10:20 PM - 10:25 PM	54.3	44.7
05:05 PM - 05:10 PM	51.7	46.2	07:45 PM - 07:50 PM	45.7	45.0	10:25 PM - 10:30 PM	54.7	44.9
05:10 PM - 05:15 PM	52.9	46.1	07:50 PM - 07:55 PM	45.4	44.6	10:30 PM - 10:35 PM	45.2	43.9
05:15 PM - 05:20 PM	50.8	45.3	07:55 PM - 08:00 PM	47.7	45.2	10:35 PM - 10:40 PM	45.1	44.0
05:20 PM - 05:25 PM	49.7	45.5	08:00 PM - 08:05 PM	45.8	44.9	10:40 PM - 10:45 PM	54.3	44.5
05:25 PM - 05:30 PM	49.6	45.9	08:05 PM - 08:10 PM	48.6	44.5	10:45 PM - 10:50 PM	44.4	44.4
05:30 PM - 05:35 PM	53.1	46.0	08:10 PM - 08:15 PM	45.6	44.9	10:50 PM - 10:55 PM	53.8	43.4
05:35 PM - 05:40 PM	58.8	46.9	08:15 PM - 08:20 PM	45.4	44.6	10:55 PM - 11:00 PM	44.6	43.8
05:40 PM - 05:45 PM	56.5	46.1	08:20 PM - 08:25 PM	46.3	44.5	11:00 PM - 11:05 PM	41.6	43.8
05:45 PM - 05:50 PM	51.0	45.6	08:25 PM - 08:30 PM	45.3	44.1	11:05 PM - 11:10 PM	53.6	44.5
05:50 PM - 05:55 PM	47.3	45.6	08:30 PM - 08:35 PM	45.4	44.2	11:10 PM - 11:15 PM	48.0	44.1
05:55 PM - 06:00 PM	49.6	45.0	08:35 PM - 08:40 PM	45.4	44.3	11:15 PM - 11:20 PM	46.8	44.5
06:00 PM - 06:05 PM	46.7	45.7	08:40 PM - 08:45 PM	50.2	44.6	11:20 PM - 11:25 PM	44.8	43.7
06:05 PM - 06:10 PM	46.5	45.3	08:45 PM - 08:50 PM	50.3	45.0	11:25 PM - 11:30 PM	45.1	44.2
06:10 PM - 06:15 PM	46.6	45.6	08:50 PM - 08:55 PM	47.0	45.5	11:30 PM - 11:35 PM	45.5	44.5
06:15 PM - 06:20 PM	46.6	45.6	08:55 PM - 09:00 PM	46.1	45.0	11:35 PM - 11:40 PM	53.9	45.1
06:20 PM - 06:25 PM	47.1	45.9	09:00 PM - 09:05 PM	45.4	45.2	11:40 PM - 11:45 PM	45.5	44.6
06:25 PM - 06:30 PM	46.0	45.4	09:05 PM - 09:10 PM	57.1	45.7	11:45 PM - 11:50 PM	46.5	44.6
06:30 PM - 06:35 PM	46.5	44.2	09:10 PM - 09:15 PM	46.7	45.9	11:50 PM - 11:55 PM	45.9	44.1
06:35 PM - 06:40 PM	44.8	44.2	09:15 PM - 09:20 PM	58.0	45.7	11:55 PM - 12:00 AM	51.7	45.5



Analysis / Test Report



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :
Sample No. : 2211210-1
Parameter :
Location : N1 (หน้าประตู) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270112-1

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เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน		
10:00 AM - 11:00 AM	55.4	57.1	-1.7	7.0	-	-	45.9	2.5
11:00 AM - 12:00 PM	58.4	56.1	2.3	4.5	53.9	-	46.2	7.7
12:00 PM - 01:00 PM	54.8	53.2	1.6	4.5	50.3	-	44.4	5.9
01:00 PM - 02:00 PM	54.6	51.8	2.8	3.0	51.6	-	43.6	8.0
02:00 PM - 03:00 PM	55.8	52.4	3.2	3.0	52.8	-	43.9	8.7
03:00 PM - 04:00 PM	54.2	53.0	1.2	7.0	47.2	-	44.7	2.5
04:00 PM - 05:00 PM	56.7	56.4	0.3	7.0	49.7	-	47.6	2.1
05:00 PM - 06:00 PM	55.4	56.1	-0.7	7.0	48.4	-	47.8	0.6
06:00 PM - 07:00 PM	53.2	58.0	-4.8	7.0	48.2	-	48.8	-0.6
07:00 PM - 08:00 PM	58.5	52.8	5.7	1.5	57.0	-	45.2	11.8
08:00 PM - 09:00 PM	58.8	51.4	7.4	1.5	57.3	-	43.7	14.1
09:00 PM - 10:00 PM	60.2	51.1	9.1	0.5	59.7	-	40.5	19.2
10:00 PM - 10:55 PM	60.1	50.2	9.9	0.5	-	62.6	38.9	23.7
10:55 PM - 11:00 PM	58.2	47.8	10.4	0.5	-	60.7	39.4	21.3
11:00 PM - 11:55 PM	60.0	46.0	14.0	0.0	-	63.0	39.2	23.8
11:55 PM - 12:00 PM	61.6	47.6	14.0	0.0	-	64.6	39.6	25.0
12:00 PM - 12:05 PM	54.6	47.9	6.7	1.0	-	56.6	39.5	17.1
12:05 PM - 12:10 PM	53.3	50.5	2.8	3.0	-	53.3	39.8	13.5
12:10 PM - 12:15 PM	53.9	47.8	6.1	1.5	-	55.4	38.7	16.7
12:15 PM - 12:20 PM	50.5	50.6	-0.1	7.0	-	46.5	39.3	7.2
12:20 PM - 12:25 PM	51.5	45.3	6.2	1.5	-	53.0	38.3	14.7
12:25 PM - 12:30 PM	50.9	44.8	6.1	1.5	-	52.4	38.4	14.0
12:30 PM - 12:35 PM	53.5	46.2	7.2	1.0	-	55.5	38.6	16.9
12:35 PM - 11:00 PM	53.3	46.7	6.6	1.0	-	55.3	38.0	17.3
11:00 PM - 11:05 PM	53.3	58.1	-4.8	7.0	-	49.3	38.6	10.7
11:05 PM - 11:10 PM	55.9	46.3	9.6	0.5	-	58.4	38.1	20.3
11:10 PM - 11:15 PM	55.8	47.2	8.6	0.5	-	57.8	38.9	18.9
11:15 PM - 11:20 PM	61.8	51.9	9.9	0.5	-	64.3	37.6	26.7
11:20 PM - 11:25 PM	70.8	44.2	26.6	0.0	-	71.8	37.9	32.9
11:25 PM - 11:30 PM	61.3	49.2	12.1	0.5	-	60.8	38.6	22.2
11:30 PM - 11:35 PM	60.2	49.0	11.2	0.5	-	62.7	43.6	19.1
11:35 PM - 11:40 PM	54.2	47.5	6.7	1.0	-	56.2	38.8	17.4
11:40 PM - 11:45 PM	62.2	45.4	16.8	0.0	-	65.2	37.4	27.8
11:45 PM - 11:50 PM	60.3	50.8	9.4	0.5	-	62.8	37.7	25.1
11:50 PM - 11:55 PM	56.3	45.4	10.9	0.5	-	58.8	38.0	20.8
11:55 PM - 12:00 AM	59.2	41.6	17.6	0.0	-	62.2	37.6	24.6
12:00 AM - 12:05 AM	58.2	47.6	10.6	0.5	-	60.7	38.5	22.2
12:05 AM - 12:10 AM	57.7	42.8	14.9	0.0	-	60.7	38.1	22.6
12:10 AM - 12:15 AM	64.0	47.0	17.0	0.0	-	67.0	37.9	29.1
12:15 AM - 12:20 AM	56.1	43.2	12.9	0.0	-	59.1	37.1	22.0

Approved by

Dej Chongchon
Senior Manager



Analysis / Test Report



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :
Sample No. : 2211210-1
Parameter :
Location : N1 (หน้าประตู) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270112-1

Page 3 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน		
03:40 AM - 03:45 AM	71.5	55.8	15.7	0.0	-	74.5	35.7	38.8
03:45 AM - 03:50 AM	71.5	52.8	18.7	0.0	-	74.5	36.1	38.4
03:50 AM - 03:55 AM	66.9	43.2	23.7	0.0	-	66.9	35.9	34.0
03:55 AM - 04:00 AM	65.1	43.7	21.4	0.0	-	68.1	37.0	31.1
04:00 AM - 04:05 AM	64.6	39.8	24.8	0.0	-	67.6	36.1	31.5
04:05 AM - 04:10 AM	64.1	41.2	22.9	0.0	-	67.1	36.4	30.7
04:10 AM - 04:15 AM	63.3	46.0	17.3	0.0	-	66.3	37.7	28.6
04:15 AM - 04:20 AM	62.5	48.2	14.3	0.0	-	64.8	38.6	26.2
04:20 AM - 04:25 AM	62.4	58.6	3.8	2.0	-	63.4	37.3	26.1
04:25 AM - 04:30 AM	60.6	50.4	10.2	0.5	-	64.1	38.2	24.9
04:30 AM - 04:35 AM	61.5	48.9	12.6	0.0	-	63.9	37.4	25.5
04:35 AM - 04:40 AM	61.5	46.2	15.3	0.0	-	64.5	37.2	27.3
04:40 AM - 04:45 AM	59.9	44.9	15.0	0.0	-	62.9	37.0	25.9
04:45 AM - 04:50 AM	60.7	51.1	9.6	0.5	-	63.2	37.9	25.2
04:50 AM - 04:55 AM	62.5	47.0	15.5	0.0	-	65.5	38.5	27.0
04:55 AM - 05:00 AM	63.8	47.3	16.5	0.0	-	66.8	39.2	27.8
05:00 AM - 05:05 AM	63.4	47.9	15.5	0.0	-	66.4	38.5	27.9
05:05 AM - 05:10 AM	63.9	50.8	13.0	0.0	-	66.8	38.7	28.1
05:10 AM - 05:15 AM	61.2	54.0	7.2	1.0	-	63.2	40.0	23.2
05:15 AM - 05:20 AM	59.6	54.9	4.7	1.5	-	61.1	40.0	21.1
05:20 AM - 05:25 AM	58.8	53.2	5.5	1.5	-	60.3	42.2	18.1
05:25 AM - 05:30 AM	59.2	48.7	10.5	0.0	-	54.7	44.1	10.6
05:30 AM - 05:35 AM	59.3	53.0	6.3	1.5	-	60.8	43.1	17.7
05:35 AM - 05:40 AM	59.5	55.8	3.7	2.0	-	60.5	46.3	14.2
05:40 AM - 05:45 AM	61.6	55.4	6.2	7.0	-	52.6	49.0	-4.4
05:45 AM - 05:50 AM	58.0	60.4	-2.4	7.0	-	54.0	49.8	4.2
05:50 AM - 05:55 AM	58.1	55.8	2.3	4.5	-	56.6	46.2	10.4
05:55 AM - 06:00 AM	60.5	53.3	7.2	1.0	-	62.5	45.6	16.9
06:00 AM - 07:00 AM	61.9	57.6	4.3	7.0	49.0	-	47.6	1.4
07:00 AM - 08:00 AM	54.7	56.3	-1.6	7.0	47.7	-	48.8	-1.1
08:00 AM - 09:00 AM	60.8	55.8	5.0	1.5	59.3	-	48.8	14.5
09:00 AM - 10:00 AM	71.6	53.1	18.5	0.0	71.6	-	42.9	28.7

Reference Method : Based on ISO 1996-1 and ISO 1996-2

1. เป็นการตรวจวัดเสียงรบกวน ที่งานก่อสร้างอาคารพาณิชย์และโรงงานอุตสาหกรรมในเขตเมืองตามข้อกำหนดของกรมฯ พ.ศ. 2558
2. เป็นการตรวจวัดเสียงรบกวนตามข้อกำหนดของกรมฯ พ.ศ. 2558
3. เป็นการตรวจวัดเสียงรบกวนตามข้อกำหนดของกรมฯ พ.ศ. 2558 และเป็นการตรวจวัดเสียงรบกวนตามข้อกำหนดของกรมฯ พ.ศ. 2558
4. เป็นการตรวจวัดเสียงรบกวนตามข้อกำหนดของกรมฯ พ.ศ. 2558 และเป็นการตรวจวัดเสียงรบกวนตามข้อกำหนดของกรมฯ พ.ศ. 2558

Approved by

Dej Chongchon
Senior Manager



Analysis / Test Report



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :
Sample No. : 2211210-1
Parameter :
Location : N1 (หน้าประตู) (GPS 47P 0726474,1407389)
Measurement Date : Mar 15 - 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270112-1

Page 2 of 3

Sample No.	2211210-1
Parameter	(เสียงรบกวน)
Location	M1 (บ้านผู้พัก) (GPS 47 0726474,1407389)
Measurement Date	Mar 15, 2016
Measurement by	Nontachai Uppathamp
Sound Level Meter	01222723

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่าง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					กลางคืน	กลางวัน		
12:20 AM - 12:25 AM	56.9	46.9	10.0	0.5	-	59.4	37.4	22.0
12:25 AM - 12:30 AM	55.3	45.9	9.4	0.0	-	58.3	37.6	20.7
12:30 AM - 12:35 AM	55.8	43.4	12.4	0.5	-	58.3	37.9	20.4
12:35 AM - 12:40 AM	57.2	42.7	14.5	0.0	-	60.2	37.1	23.1
12:40 AM - 12:45 AM	53.7	41.2	12.5	0.0	-	56.7	37.0	19.7
12:45 AM - 12:50 AM	59.2	35.4	23.8	0.0	-	62.2	36.4	25.8
12:50 AM - 12:55 AM	53.0	42.4	10.6	0.5	-	55.5	36.8	18.7
12:55 AM - 01:00 AM	51.7	43.0	8.7	0.5	-	54.2	36.5	17.7
01:00 AM - 01:05 AM	54.2	41.8	12.4	0.0	-	57.1	37.4	20.1
01:05 AM - 01:10 AM	55.9	45.2	10.7	0.5	-	58.4	36.9	21.5
01:10 AM - 01:15 AM	50.4	47.6	2.8	3.0	-	50.4	37.6	12.8
01:15 AM - 01:20 AM	53.5	50.8	2.5	3.0	-	51.3	37.4	13.9
01:20 AM - 01:25 AM	65.2	37.9	27.3	0.0	-	68.2	35.8	32.4
01:25 AM - 01:30 AM	53.0	43.7	9.3	0.5	-	55.5	36.0	19.5
01:30 AM - 01:35 AM	55.1	40.6	14.5	0.0	-	58.1	36.3	21.8
01:35 AM - 01:40 AM	63.4	43.8	19.6	0.0	-	66.4	36.4	30.0
01:40 AM - 01:45 AM	57.4	37.6	19.8	0.0	-	60.4	35.5	24.9
01:45 AM - 01:50 AM	66.2	41.6	24.6	0.0	-	69.2	35.8	33.4
01:50 AM - 01:55 AM	64.6	42.5	22.1	0.0	-	67.6	35.8	31.8
01:55 AM - 02:00 AM	66.3	41.7	24.6	0.0	-	69.3	36.1	33.2
02:00 AM - 02:05 AM	72.6	43.5	29.1	0.0	-	75.6	36.1	39.5
02:05 AM - 02:10 AM	74.6	39.4	35.2	0.0	-	77.6	35.9	41.7
02:10 AM - 02:15 AM	69.0	41.1	27.9	0.0	-	72.0	35.8	38.2
02:15 AM - 02:20 AM	73.2	42.8	30.4	0.0	-	76.2	35.9	40.3
02:20 AM - 02:25 AM	71.8	43.1	28.7	0.0	-	74.8	36.2	38.6
02:25 AM - 02:30 AM	73.7	55.2	18.5	0.0	-	76.7	36.5	40.2
02:30 AM - 02:35 AM	72.6	56.9	14.3	0.0	-	80.6	37.2	43.4
02:35 AM - 02:40 AM	78.0	37.6	40.4	0.0	-	81.0	36.2	44.8
02:40 AM - 02:45 AM	76.6	41.9	34.7	0.0	-	79.6	35.6	44.0
02:45 AM - 02:50 AM	71.8	41.5	30.3	0.0	-	78.8	35.6	41.2
02:50 AM - 02:55 AM	76.8	42.3	34.5	0.0	-	79.8	36.5	43.3
02:55 AM - 03:00 AM	78.1	41.8	36.3	0.0	-	81.1	36.1	45.0
03:00 AM - 03:05 AM	78.1	42.5	35.6	0.0	-	81.1	36.6	44.3
03:05 AM - 03:10 AM	76.7	44.1	32.6	0.0	-	79.7	37.4	42.1
03:10 AM - 03:15 AM	77.0	46.7	30.3	0.0	-	80.0	37.6	42.4
03:15 AM - 03:20 AM	71.8	41.8	30.0	0.0	-	78.8	37.4	39.5
03:20 AM - 03:25 AM	72.7	45.8	26.9	0.0	-	75.7	36.7	39.0
03:25 AM - 03:30 AM	71.9	38.6	33.3	0.0	-	74.9	35.5	39.4
03:30 AM - 03:35 AM	65.9	43.2	22.7	0.0	-	68.9	36.3	33.8
03:35 AM - 03:40 AM	66.9	38.8	28.1	0.0	-	69.9	36.3	33.6



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : ผู้จัดการโรงงาน
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270113-1

Page 2 of 3

Sample No. Parameter : 2212110-2
Location : โรงบรรจุภัณฑ์ (N1) (หน่วยบรรจุภัณฑ์) (GPS 47P 0726474,1407389)
Measurement Date : Mar 16 - 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัดการจราจร	ผลรวม	ค่าปรับ	ปรับตามเสียงจากแหล่งกำเนิด		เสียงที่ตรวจพบ	ค่าระดับการจราจร
					ค่าปรับ	ค่าปรับ		
12:20 AM - 12:25 AM	54.7	46.9	7.8	0.5	-	57.2	37.4	19.8
12:25 AM - 12:30 AM	53.1	41.9	11.2	0.5	-	55.6	37.9	18.0
12:30 AM - 12:35 AM	56.4	43.4	13.0	0.0	-	59.4	37.9	21.5
12:35 AM - 12:40 AM	55.0	42.7	12.3	0.5	-	57.5	37.1	20.4
12:40 AM - 12:45 AM	57.6	43.2	14.4	0.0	-	60.6	37.0	23.6
12:45 AM - 12:50 AM	58.0	43.4	14.6	0.0	-	61.0	36.4	24.6
12:50 AM - 12:55 AM	58.0	42.4	15.6	0.0	-	61.0	36.8	24.2
12:55 AM - 01:00 AM	57.0	41.0	16.0	0.0	-	60.0	36.5	23.5
01:00 AM - 01:05 AM	53.8	41.3	12.5	0.0	-	56.8	36.2	20.8
01:05 AM - 01:10 AM	54.2	45.2	9.0	0.5	-	59.9	37.9	22.2
01:10 AM - 01:15 AM	57.3	47.6	9.7	0.5	-	59.8	37.6	22.2
01:15 AM - 01:20 AM	65.3	50.8	14.5	0.0	-	68.3	37.4	30.9
01:20 AM - 01:25 AM	61.4	47.9	13.5	0.0	-	64.4	35.8	28.6
01:25 AM - 01:30 AM	61.0	43.7	17.3	0.0	-	64.0	36.0	28.0
01:30 AM - 01:35 AM	59.3	40.6	18.7	0.0	-	62.3	36.3	26.0
01:35 AM - 01:40 AM	60.0	45.8	14.2	0.0	-	63.0	36.4	26.6
01:40 AM - 01:45 AM	60.4	37.6	22.8	0.0	-	63.4	35.5	27.8
01:45 AM - 01:50 AM	56.2	41.6	14.6	0.0	-	59.2	35.8	23.4
01:50 AM - 01:55 AM	55.5	42.5	13.0	0.0	-	58.5	35.8	22.7
01:55 AM - 02:00 AM	53.4	41.7	11.7	0.5	-	55.9	36.1	19.8
02:00 AM - 02:05 AM	60.1	43.5	16.6	0.0	-	63.1	36.1	27.0
02:05 AM - 02:10 AM	57.0	39.4	17.6	0.0	-	60.0	35.9	24.1
02:10 AM - 02:15 AM	57.3	41.1	16.2	0.0	-	60.3	35.8	24.5
02:15 AM - 02:20 AM	57.2	42.8	14.4	0.0	-	60.2	35.9	24.3
02:20 AM - 02:25 AM	57.6	43.1	14.5	0.0	-	60.6	36.2	24.4
02:25 AM - 02:30 AM	53.6	55.2	-1.6	7.0	-	49.6	36.5	13.1
02:30 AM - 02:35 AM	55.5	56.9	-1.4	7.0	-	51.5	37.2	14.3
02:35 AM - 02:40 AM	63.0	37.6	25.4	0.0	-	66.0	36.2	29.8
02:40 AM - 02:45 AM	60.2	41.9	18.3	0.0	-	63.2	35.6	27.6
02:45 AM - 02:50 AM	55.9	41.5	14.4	0.0	-	58.9	35.6	23.3
02:50 AM - 02:55 AM	56.4	42.3	14.1	0.0	-	59.4	36.9	22.5
02:55 AM - 03:00 AM	52.7	41.8	10.9	0.5	-	55.2	36.1	19.1
03:00 AM - 03:05 AM	55.9	42.5	13.4	0.0	-	58.9	36.6	22.3
03:05 AM - 03:10 AM	54.8	44.1	10.7	0.5	-	57.3	37.4	19.9
03:10 AM - 03:15 AM	57.0	46.7	10.3	0.5	-	59.5	37.6	21.6
03:15 AM - 03:20 AM	54.5	41.8	12.7	0.0	-	57.5	36.3	21.2
03:20 AM - 03:25 AM	57.9	45.8	12.1	0.5	-	60.4	36.7	23.7
03:25 AM - 03:30 AM	56.3	38.6	17.7	0.0	-	58.1	35.5	22.8
03:30 AM - 03:35 AM	61.7	43.2	18.5	0.0	-	64.7	36.0	28.7
03:35 AM - 03:40 AM	67.5	49.8	17.7	0.0	-	70.5	36.3	34.2

The above results are valid only for the equipment and conditions as stated in the report. The report is valid only for the equipment and conditions as stated in the report. The report is valid only for the equipment and conditions as stated in the report.

Approved by

Dej Changchong
Senior Manager

ADDRESS 616/10 Moo 5 T. Maekham Kh. A. Phakdang Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556
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RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : ผู้จัดการโรงงาน
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270114-1

Page 1 of 3

Sample No. Parameter : 2212110-3
Location : โรงบรรจุภัณฑ์ (N1) (หน่วยบรรจุภัณฑ์) (GPS 47P 0726474,1407389)
Measurement Date : Mar 17 - 18, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัดการจราจร	ผลรวม	ค่าปรับ	ปรับตามเสียงจากแหล่งกำเนิด		เสียงที่ตรวจพบ	ค่าระดับการจราจร
					ค่าปรับ	ค่าปรับ		
10:00 AM - 11:00 AM	56.9	57.1	-0.2	7.0	-	49.9	-	45.9
11:00 AM - 12:00 PM	63.1	56.1	7.0	1.0	-	62.1	-	46.9
12:00 PM - 01:00 PM	57.8	53.2	4.6	1.5	-	56.3	-	44.4
01:00 PM - 02:00 PM	55.4	51.8	3.6	2.0	-	53.4	-	43.6
02:00 PM - 03:00 PM	57.8	52.4	5.4	1.5	-	56.3	-	43.9
03:00 PM - 04:00 PM	56.2	52.0	4.2	3.0	-	53.2	-	44.7
04:00 PM - 05:00 PM	55.9	56.4	-0.5	7.0	-	48.9	-	47.6
05:00 PM - 06:00 PM	54.4	56.1	-1.7	7.0	-	47.4	-	47.4
06:00 PM - 07:00 PM	54.7	58.8	-4.1	7.0	-	47.7	-	48.8
07:00 PM - 08:00 PM	57.0	52.8	4.2	7.0	-	55.0	-	45.2
08:00 PM - 09:00 PM	54.6	51.4	3.2	7.0	-	47.6	-	43.2
09:00 PM - 10:00 PM	54.6	51.1	3.5	2.0	-	52.6	-	40.5
10:00 PM - 10:05 PM	55.8	50.2	5.6	1.5	-	57.3	-	38.9
10:05 PM - 10:10 PM	54.8	47.8	6.8	1.0	-	56.6	-	39.4
10:10 PM - 10:15 PM	55.6	46.0	9.6	0.5	-	58.1	-	39.2
10:15 PM - 10:20 PM	50.9	47.6	3.3	3.0	-	50.9	-	38.4
10:20 PM - 10:25 PM	51.5	47.9	3.6	2.0	-	52.5	-	39.5
10:25 PM - 10:30 PM	52.6	50.5	2.1	4.5	-	51.1	-	39.8
10:30 PM - 10:35 PM	54.8	47.8	7.0	1.0	-	56.8	-	38.7
10:35 PM - 10:40 PM	54.4	50.6	3.8	2.0	-	55.4	-	39.3
10:40 PM - 10:45 PM	55.8	45.3	10.5	0.5	-	58.3	-	38.3
10:45 PM - 10:50 PM	49.3	44.8	4.5	1.5	-	50.8	-	38.4
10:50 PM - 10:55 PM	52.4	46.3	6.1	1.5	-	53.9	-	38.6
10:55 PM - 11:00 PM	57.4	46.7	10.7	0.5	-	59.9	-	38.8
11:00 PM - 11:05 PM	53.4	58.1	-4.7	7.0	-	49.4	-	38.6
11:05 PM - 11:10 PM	53.7	46.3	7.4	1.0	-	55.7	-	38.1
11:10 PM - 11:15 PM	51.6	48.6	3.0	2.0	-	51.6	-	38.9
11:15 PM - 11:20 PM	53.5	51.9	1.6	4.5	-	52.0	-	37.6
11:20 PM - 11:25 PM	53.2	44.2	8.9	0.5	-	57.7	-	37.9
11:25 PM - 11:30 PM	50.5	49.6	0.9	7.0	-	46.5	-	38.3
11:30 PM - 11:35 PM	53.2	49.0	4.2	2.0	-	54.2	-	43.6
11:35 PM - 11:40 PM	54.6	47.5	7.1	1.0	-	56.8	-	38.8
11:40 PM - 11:45 PM	52.7	45.4	7.3	1.0	-	54.7	-	38.1
11:45 PM - 11:50 PM	53.1	50.9	2.2	4.5	-	51.6	-	37.7
11:50 PM - 11:55 PM	53.0	45.4	7.6	0.5	-	55.5	-	38.0
11:55 PM - 12:00 AM	53.4	43.6	9.8	0.5	-	55.9	-	37.6
12:00 AM - 12:05 AM	52.4	47.6	4.8	1.5	-	53.9	-	38.5
12:05 AM - 12:10 AM	53.7	42.8	10.9	0.5	-	56.2	-	38.1
12:10 AM - 12:15 AM	52.7	47.0	5.7	1.5	-	54.2	-	37.9
12:15 AM - 12:20 AM	53.1	43.2	9.9	0.5	-	55.6	-	37.1

The above results are valid only for the equipment and conditions as stated in the report. The report is valid only for the equipment and conditions as stated in the report. The report is valid only for the equipment and conditions as stated in the report.

Approved by

Dej Changchong
Senior Manager

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

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RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : ผู้จัดการโรงงาน
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270113-1

Page 3 of 3

Sample No. Parameter : 2212110-2
Location : โรงบรรจุภัณฑ์ (N1) (หน่วยบรรจุภัณฑ์) (GPS 47P 0726474,1407389)
Measurement Date : Mar 16 - 17, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัดการจราจร	ผลรวม	ค่าปรับ	ปรับตามเสียงจากแหล่งกำเนิด		เสียงที่ตรวจพบ	ค่าระดับการจราจร
					ค่าปรับ	ค่าปรับ		
03:40 AM - 03:45 AM	65.7	55.6	10.1	0.5	-	68.2	35.7	32.5
03:45 AM - 03:50 AM	63.0	52.8	10.2	0.5	-	65.5	36.1	29.4
03:50 AM - 03:55 AM	64.0	43.2	20.8	0.0	-	67.9	35.9	31.1
03:55 AM - 04:00 AM	55.7	43.7	12.0	0.5	-	58.2	37.0	21.2
04:00 AM - 04:05 AM	67.5	39.8	27.7	0.0	-	70.5	36.1	34.4
04:05 AM - 04:10 AM	60.0	43.2	16.8	0.0	-	63.0	36.4	26.6
04:10 AM - 04:15 AM	57.8	46.0	11.8	0.5	-	60.3	37.7	22.6
04:15 AM - 04:20 AM	59.4	44.3	15.1	0.0	-	62.4	36.8	25.6
04:20 AM - 04:25 AM	55.7	58.6	-2.9	7.0	-	51.7	37.3	14.4
04:25 AM - 04:30 AM	56.7	46.2	10.5	0.5	-	61.2	38.2	23.0
04:30 AM - 04:35 AM	57.7	45.4	12.3	0.5	-	60.2	37.4	22.8
04:35 AM - 04:40 AM	66.4	46.2	20.2	0.0	-	69.4	37.2	32.2
04:40 AM - 04:45 AM	61.5	44.9	16.6	0.0	-	64.5	37.0	27.5
04:45 AM - 04:50 AM	59.5	51.1	8.4	0.5	-	62.0	37.9	24.1
04:50 AM - 04:55 AM	58.7	47.0	11.7	0.5	-	61.2	38.5	22.7
04:55 AM - 05:00 AM	59.9	47.3	12.6	0.0	-	62.9	39.2	23.7
05:00 AM - 05:05 AM	54.7	47.9	6.8	1.0	-	56.7	38.5	18.2
05:05 AM - 05:10 AM	55.0	50.8	4.2	2.0	-	56.0	38.7	17.3
05:10 AM - 05:15 AM	54.5	54.0	0.5	7.0	-	50.5	40.0	10.5
05:15 AM - 05:20 AM	56.1	54.9	1.2	7.0	-	52.1	40.6	12.1
05:20 AM - 05:25 AM	58.1	51.3	6.8	1.5	-	59.6	42.2	17.4
05:25 AM - 05:30 AM	56.3	59.0	-2.7	7.0	-	52.3	44.1	8.2
05:30 AM - 05:35 AM	53.3	53.0	0.3	7.0	-	49.3	43.1	6.2
05:35 AM - 05:40 AM	55.4	55.8	-0.4	7.0	-	51.4	46.3	5.1
05:40 AM - 05:45 AM	56.7	65.8	-9.1	7.0	-	52.8	49.8	4.3
05:45 AM - 05:50 AM	56.6	60.4	-3.6	7.0	-	52.8	49.8	3.0
05:50 AM - 05:55 AM	56.8	55.8	0.8	7.0	-	52.8	46.2	6.4
05:55 AM - 06:00 AM	55.6	53.3	2.3	4.5	-	54.1	45.6	8.5
06:00 AM - 07:00 AM	58.8	53.6	5.2	7.0	-	51.8	46.0	6.8
07:00 AM - 08:00 AM	58.5	53.3	2.2	4.5	54.0	-	48.0	8.2
08:00 AM - 09:00 AM	57.4	53.8	1.6	4.5	52.9	-	44.8	8.1
09:00 AM - 10:00 AM	59.2	53.1	6.1	1.5	57.7	-	42.9	14.8



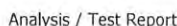
TESTING
No.0042
Lot ID: 2211210
Date Received :Mar 23, 2022
Date Reported :Mar 24, 2022
Report Number : 2270116-1

Page 1 of 3

Approved by

Dej Changchon
Senior Manager

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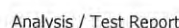
TESTING
No.0042
Lot ID: 2211210
Date Received :Mar 23, 2022
Date Reported :Mar 24, 2022
Report Number : 2270116-1

Page 3 of 3

Approved by _____

Dej Changchon
Senior Manager

Journal of Management Inquiry 20(4) 409-424



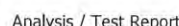
TESTING
No.0042
Lot ID: 2211210
Date Received :Mar 23, 2022
Date Reported :Mar 24, 2022
Report Number : 2270116-1

Page 7 of 7

Approved by _____

Dej Changchorn
Series Manager

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TESTING
No. 0042
Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270117-1

Page 3 of 9

Approved by

Dej Changchorn
Senior Manager

GROUP (THAILAND) CO. LTD. AN ALA



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Raying
Project Location :

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270117-1

TESTING
No. 0042

Page 2 of 3

Sample No. 2211210-6
Parameter เลื่อนฐาน
Location N1 (เหนือเขื่อน) (GPS 47P 0726474, 1407389)
Measurement Date Mar 20 - 21, 2022
Measurement by Nontchai Uppathamp
Sound Level Meter 0122273

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
12:30 AM - 12:35 AM	66.1	46.9	19.2	0.0	-	61.1	37.4	23.7
12:35 AM - 12:40 AM	53.3	41.9	11.4	0.5	-	53.8	37.6	16.2
12:40 AM - 12:45 AM	52.2	43.4	8.8	0.5	-	54.7	37.9	16.8
12:45 AM - 12:50 AM	55.5	42.7	12.8	0.0	-	56.5	37.1	19.4
12:50 AM - 12:55 AM	53.1	41.2	11.9	0.5	-	53.6	37.0	16.6
12:55 AM - 1:00 AM	58.2	45.4	12.8	0.0	-	61.2	36.4	24.8
1:00 AM - 1:05 AM	59.9	42.4	17.5	0.0	-	62.9	36.8	26.1
1:05 AM - 1:10 AM	44.6	43.0	1.6	0.0	-	47.6	36.5	11.1
1:10 AM - 1:15 AM	43.3	41.2	2.1	0.5	-	45.9	37.0	8.9
1:15 AM - 1:20 AM	55.0	45.2	9.8	0.5	-	57.5	36.9	20.6
1:20 AM - 1:25 AM	56.5	47.6	8.9	0.5	-	59.0	37.6	21.4
1:25 AM - 1:30 AM	53.6	50.8	2.8	0.0	-	52.6	37.4	15.2
1:30 AM - 1:35 AM	55.0	37.9	17.1	0.0	-	58.0	35.8	22.2
1:35 AM - 1:40 AM	55.7	43.7	12.0	0.5	-	58.2	36.0	22.2
1:40 AM - 1:45 AM	51.6	40.6	11.0	0.5	-	54.1	36.3	17.8
1:45 AM - 1:50 AM	53.4	43.8	9.6	0.5	-	55.8	36.4	19.5
1:50 AM - 1:55 AM	54.9	37.6	17.3	0.0	-	57.9	35.5	22.4
1:55 AM - 2:00 AM	54.8	41.6	13.2	0.0	-	57.8	35.8	22.0
2:00 AM - 2:05 AM	53.2	42.5	10.7	0.5	-	55.7	35.8	19.9
2:05 AM - 2:10 AM	58.2	41.7	16.5	0.0	-	61.2	36.1	25.1
2:10 AM - 2:15 AM	54.6	43.5	11.1	0.5	-	57.1	36.1	21.0
2:15 AM - 2:20 AM	54.1	39.4	14.7	0.0	-	57.1	35.9	21.2
2:20 AM - 2:25 AM	53.9	41.1	12.8	0.5	-	55.4	35.8	19.6
2:25 AM - 2:30 AM	52.7	42.8	9.9	0.5	-	55.2	35.9	19.3
2:30 AM - 2:35 AM	55.5	43.1	12.4	0.5	-	58.0	36.2	21.8
2:35 AM - 2:40 AM	54.6	55.2	-0.6	7.0	-	50.6	36.5	14.1
2:40 AM - 2:45 AM	54.1	52.8	1.3	7.0	-	50.1	37.2	12.9
2:45 AM - 2:50 AM	55.0	37.6	17.4	0.0	-	58.0	36.2	21.8
2:50 AM - 2:55 AM	56.2	41.9	14.3	0.0	-	59.2	35.6	23.6
2:55 AM - 3:00 AM	51.3	41.5	9.8	0.5	-	51.8	37.6	14.2
3:00 AM - 3:05 AM	61.3	42.3	19.0	0.0	-	64.3	36.5	27.8
3:05 AM - 3:10 AM	62.4	41.8	20.6	0.0	-	65.4	36.1	29.3
3:10 AM - 3:15 AM	57.3	42.5	14.8	0.0	-	60.3	36.6	23.7
3:15 AM - 3:20 AM	43.8	44.1	-0.3	0.5	-	55.3	37.4	17.9
3:20 AM - 3:25 AM	50.7	46.7	4.0	2.0	-	51.7	37.6	14.1
3:25 AM - 3:30 AM	52.5	41.8	10.7	0.5	-	55.0	36.3	18.7
3:30 AM - 3:35 AM	53.3	45.8	7.5	0.5	-	55.8	36.7	19.1
3:35 AM - 3:40 AM	62.2	38.6	23.6	0.0	-	65.2	35.5	29.7
3:40 AM - 3:45 AM	59.7	43.2	16.5	0.0	-	62.7	36.0	26.7
3:45 AM - 3:50 AM	51.6	49.8	1.8	4.5	-	50.1	36.3	13.8

The above report is valid only for the equipment specified in the report. No other equipment or method may be used without the written consent of the laboratory. All laboratory tests are performed under the supervision of a qualified technician.

Approved by

Dej Changnon
Senior Manager

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

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Raying
Project Location :

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270118-1

TESTING
No. 0042

Page 1 of 3

Sample No. 2211210-7
Parameter เลื่อนฐาน
Location N1 (เหนือเขื่อน) (GPS 47P 0726474, 1407389)
Measurement Date Mar 21 - 22, 2022
Measurement by Nontchai Uppathamp
Sound Level Meter 0122273

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
10:00 AM - 10:05 AM	59.3	57.3	2.0	4.5	54.8	-	45.9	8.9
10:05 AM - 10:10 AM	59.9	56.1	3.8	2.0	57.9	-	46.2	11.7
10:10 AM - 10:15 AM	54.1	53.2	0.9	7.0	47.1	-	44.4	2.7
10:15 AM - 10:20 AM	55.0	51.8	3.2	3.0	52.0	-	43.6	8.4
10:20 AM - 10:25 AM	55.5	52.4	3.1	3.0	52.5	-	43.9	8.6
10:25 AM - 10:30 AM	54.7	53.0	1.7	2.0	54.7	-	44.7	10.0
10:30 AM - 10:35 AM	59.8	56.4	3.4	3.0	56.8	-	47.4	9.2
10:35 AM - 10:40 AM	56.1	56.1	0.0	7.0	49.1	-	47.8	1.3
10:40 AM - 10:45 AM	55.5	58.8	-3.3	7.0	48.5	-	46.8	-0.7
10:45 AM - 10:50 AM	57.6	51.5	6.1	1.5	57.6	-	47.2	10.4
10:50 AM - 10:55 AM	54.7	53.4	1.3	7.0	47.7	-	47.2	0.5
10:55 AM - 11:00 AM	56.3	51.1	5.2	1.5	54.8	-	40.5	14.3
11:00 AM - 11:05 AM	54.3	46.1	8.2	2.0	55.3	-	38.9	16.4
11:05 AM - 11:10 AM	52.0	47.6	4.4	2.0	-	53.0	39.4	13.6
11:10 AM - 11:15 AM	53.6	46.0	7.6	0.5	-	56.1	39.2	16.9
11:15 AM - 11:20 AM	51.6	47.6	4.0	2.0	-	52.6	39.6	13.0
11:20 AM - 11:25 AM	53.8	47.9	5.9	1.5	-	53.3	39.5	13.8
11:25 AM - 11:30 AM	49.5	50.5	-1.0	7.0	-	45.5	39.8	5.7
11:30 AM - 11:35 PM	55.6	47.8	7.8	0.5	-	58.1	38.7	19.4
11:35 PM - 11:40 PM	55.5	50.6	4.9	1.5	-	57.0	39.3	17.7
11:40 PM - 11:45 PM	51.7	45.1	6.6	1.5	-	53.2	38.1	15.0
11:45 PM - 11:50 PM	51.6	44.8	6.8	1.0	-	53.6	38.4	15.2
11:50 PM - 11:55 PM	56.2	46.3	9.9	0.5	-	58.7	38.6	20.1
11:55 PM - 12:00 AM	55.8	46.5	9.3	0.5	-	58.1	38.0	20.1
12:00 AM - 12:05 AM	54.2	58.1	-3.9	7.0	-	50.2	38.6	11.6
12:05 AM - 12:10 AM	53.9	46.3	7.6	0.5	-	56.4	38.1	18.3
12:10 AM - 12:15 AM	49.2	48.6	0.6	7.0	-	45.2	39.2	6.3
12:15 AM - 12:20 AM	52.6	52.9	-0.3	2.0	-	56.8	37.9	18.9
12:20 AM - 12:25 PM	52.6	44.2	8.4	1.5	-	55.1	37.9	17.2
12:25 PM - 12:30 PM	54.3	49.6	4.7	0.5	-	55.8	38.2	17.5
12:30 PM - 12:35 PM	47.6	47.6	0.0	6.5	-	50.6	38.0	12.6
12:35 PM - 12:40 PM	53.9	47.5	6.4	1.5	-	55.4	38.8	16.6
12:40 PM - 12:45 PM	57.5	45.4	12.1	0.5	-	60.0	37.4	22.6
12:45 PM - 12:50 PM	52.5	50.9	1.6	4.5	-	51.0	37.2	13.8
12:50 PM - 12:55 PM	52.6	45.9	6.7	0.5	-	56.1	38.0	18.1
12:55 PM - 1:00 AM	58.3	41.6	16.7	0.0	-	61.3	37.6	23.7
1:00 AM - 1:05 AM	58.5	47.6	10.9	0.5	-	61.0	38.5	22.5
1:05 AM - 1:10 AM	61.6	49.1	12.5	0.0	-	64.0	38.0	26.0
1:10 AM - 1:15 AM	61.8	47.0	14.8	0.0	-	64.6	37.9	26.7
1:15 AM - 1:20 AM	61.8	43.2	18.6	0.0	-	64.8	37.1	27.7

The above report is valid only for the equipment specified in the report. No other equipment or method may be used without the written consent of the laboratory. All laboratory tests are performed under the supervision of a qualified technician.

Approved by

Dej Changnon
Senior Manager

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Raying
Project Location :

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270117-1

TESTING
No. 0042

Page 2 of 3

Sample No. 2211210-6
Parameter เลื่อนฐาน
Location N1 (เหนือเขื่อน) (GPS 47P 0726474, 1407389)
Measurement Date Mar 20 - 21, 2022
Measurement by Nontchai Uppathamp
Sound Level Meter 0122273

ตารางเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ฐาน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
03:40 AM - 03:45 AM	51.2	55.6	-4.4	7.0	-	47.2	35.7	11.5
03:45 AM - 03:50 AM	49.5	53.8	-4.3	7.0	-	45.5	36.1	9.4
03:50 AM - 03:55 AM	51.6	43.2	8.4	0.5	-	54.1	35.9	18.2
03:55 AM - 04:00 AM	54.0	43.7	10.3	0.5	-	56.5	37.0	19.5
04:00 AM - 04:05 AM	56.1	39.8	16.3	0.5	-	57.6	36.1	21.5
04:05 AM - 04:10 AM	55.1	41.2	13.9	0.0	-	58.1	36.4	21.7
04:10 AM - 04:15 AM	52.6	46.6	6.0	1.0	-	54.6	37.7	16.9
04:15 AM - 04:20 AM	54.4	44.3	10.1	0.5	-	56.9	36.8	20.1
04:20 AM - 04:25 AM	54.6	43.6	11.0	7.0	-	56.0	37.3	18.7
04:25 AM - 04:30 AM	52.8	50.4	2.4	4.5	-	51.3	38.2	13.1
04:30 AM - 04:35 AM	53.5	45.4	8.1	0.5	-	56.0	37.4	18.6
04:35 AM - 04:40 AM	52.9	46.2	6.7	1.0	-	54.9	37.2	17.7
04:40 AM - 04:45 AM	51.7	44.9	6.8	0.5	-	57.2	37.0	20.2
04:45 AM - 04:50 AM	58.8	51.1	7.7	0.5	-	61.3	37.9	23.4
04:50 AM - 04:55 AM	51.5	47.0	4.5	1.5	-	53.0	38.5	14.5
04:55 AM - 05:00 AM	50.4	47.2	3.1	3.0	-	50.4	39.2	11.2
05:00 AM - 05:05 AM	53.9	47.9	6.0	1.5	-	55.4	38.9	16.5
05:05 AM - 05:10 AM	56.1	50.8	5.3	1.5	-	57.6	38.7	18.9
05:10 AM - 05:15 AM	56.5	54.0	2.5	3.0	-	58.3	40.0	18.3
05:15 AM - 05:20 AM	52.4	54.9	-2.5	7.0	-	48.4	40.0	8.4
05:20 AM - 05:25 AM	60.4	53.1	7.1	1.0	-	62.4	42.2	20.2
05:25 AM - 05:30 AM	60.6	50.0	1.6	4.5	-	59.1	44.1	15.0
05:30 AM - 05:35 AM	61.5	53.0	8.5	0.5	-	58.7	43.1	15.6
05:35 AM - 05:40 AM	55.0	55.8	-0.8	7.0	-	51.0	46.3	4.7
05:40 AM - 05:45 AM	59.5	65.8	-6.3	7.0	-	55.5	59.0	-3.5
05:45 AM - 05:50 AM	66.8	68.4	-1.6	4.5	-	68.8	49.8	7.0
05:50 AM - 05:55 AM	51.8	55.8	-2.0	7.0	-	49.8	46.2	-3.6
05:55 AM - 06:00 AM	61.5	53.1	8.2	0.5	-	64.0	45.8	18.2
06:00 AM - 06:05 AM	59.8	57.6	2.2	7.0	48.8	47.8	51.0	-2.2
06:05 AM - 06:00 AM	54.8	56.3	-1.5	7.0	-	-	48.8	-1.0
06:00 AM - 06:00 AM	58.1	55.8	2.3	4.5	57.6	-	44.8	8.8
06:00 AM - 10:00 AM	56.2	53.1	3.1	3.0	53.2	-	42.9	10.3
ค่ารวมทั้งหมด								5.10

Reference Method : Based on ISO 1996-1 and ISO 1996-2

หมายเหตุ

1. มีเหตุการณ์เสียงดังผิดปกติ (เช่น รถบรรทุกวิ่งใกล้หรือบรรทุกเต็ม) ซึ่งมีเสียงดังกว่าค่าเฉลี่ยที่วัดได้ประมาณ 20 น.ก. 2548

2. มีเหตุการณ์เสียงดังผิดปกติโดยไม่มีเหตุ (เช่น การเคลื่อนย้ายของวัตถุ) ประมาณ 20 น.ก. 2550

3. มีเหตุการณ์เสียงดังผิดปกติโดยไม่มีเหตุ (เช่น รถบรรทุกวิ่งใกล้หรือบรรทุกเต็ม) ซึ่งมีเสียงดังกว่าค่าเฉลี่ยที่วัดได้ประมาณ 20 น.ก. 2550

4. มีเหตุการณ์เสียงดังผิดปกติโดยไม่มีเหตุ (เช่น รถบรรทุกวิ่งใกล้หรือบรรทุกเต็ม) ซึ่งมีเสียงดังกว่าค่าเฉลี่ยที่วัดได้ประมาณ 20 น.ก. 2550

5. มีเหตุการณ์เสียงดังผิดปกติโดยไม่มีเหตุ (เช่น รถบรรทุกวิ่งใกล้หรือบรรทุกเต็ม) ซึ่งมีเสียงดังกว่าค่าเฉลี่ยที่วัดได้ประมาณ 20 น.ก. 2550



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : ๔๙๑๙๙๙๙๙
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

TESTING
No.0042
Lot ID: 2212110-7
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270119-1

Page 3 of 3

Sample No. : 2212110-7
Parameter : เสียงรบกวน
Location : N2 (หมู่บ้าน/อาคาร) (GPS 47P 0726474,1407309)
Measurement Date : Mar 21 - 22, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222723

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ตรวจ	ค่ารวม
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ตรวจ	ค่ารวม
03:40 AM - 03:45 AM	61.6	55.6	6.0	1.5	63.1	35.7	27.4
03:45 AM - 03:50 AM	61.3	52.8	8.5	0.5	61.8	36.1	27.7
03:50 AM - 03:55 AM	57.0	43.2	13.8	0.0	57.0	35.9	24.1
03:55 AM - 04:00 AM	51.3	43.7	7.6	0.5	51.8	37.0	18.8
04:00 AM - 04:05 AM	56.6	39.8	16.8	0.0	56.6	36.1	23.5
04:05 AM - 04:10 AM	57.0	41.2	15.8	0.0	57.0	36.4	22.6
04:10 AM - 04:15 AM	55.4	46.0	9.4	0.5	55.9	37.7	20.2
04:15 AM - 04:20 AM	52.5	44.3	8.2	0.5	53.0	36.8	18.2
04:20 AM - 04:25 AM	57.6	50.6	7.0	0.0	57.6	37.3	16.3
04:25 AM - 04:30 AM	56.8	50.4	6.4	1.5	58.3	38.2	20.1
04:30 AM - 04:35 AM	54.7	45.4	9.3	0.5	55.2	37.4	19.8
04:35 AM - 04:40 AM	58.5	46.2	12.3	0.5	61.0	37.2	23.8
04:40 AM - 04:45 AM	60.2	44.9	15.3	0.0	60.2	37.0	26.2
04:45 AM - 04:50 AM	62.6	51.1	11.5	0.5	63.1	37.9	27.2
04:50 AM - 04:55 AM	53.3	47.0	6.3	1.5	54.8	38.5	16.3
04:55 AM - 05:00 AM	54.8	47.3	7.5	0.5	55.3	39.2	16.1
05:00 AM - 05:05 AM	53.8	47.9	5.9	0.5	54.3	38.5	19.8
05:05 AM - 05:10 AM	58.5	50.8	7.7	0.5	61.0	38.7	22.3
05:10 AM - 05:15 AM	55.5	54.0	1.5	4.5	54.0	40.0	14.0
05:15 AM - 05:20 AM	54.0	54.9	-0.9	7.0	50.0	40.0	10.0
05:20 AM - 05:25 AM	55.3	53.3	2.0	4.5	53.8	41.2	11.6
05:25 AM - 05:30 AM	53.4	59.0	-5.6	7.0	49.4	44.1	5.3
05:30 AM - 05:35 AM	52.9	53.0	-0.1	7.0	48.9	43.1	5.8
05:35 AM - 05:40 AM	52.4	53.8	-1.2	7.0	48.6	40.0	8.6
05:40 AM - 05:45 AM	60.2	65.8	-5.6	7.0	56.2	50.0	-3.8
05:45 AM - 05:50 AM	57.2	60.4	-3.2	7.0	53.2	49.8	3.4
05:50 AM - 05:55 AM	54.9	55.8	-0.9	7.0	50.9	48.2	4.7
05:55 AM - 06:00 AM	52.2	53.3	-1.1	7.0	48.2	45.6	2.6
06:00 AM - 06:05 AM	55.8	57.6	-1.8	7.0	47.0	51.0	-2.2
06:05 AM - 06:10 AM	56.6	56.3	0.3	7.0	49.6	48.8	0.8
06:10 AM - 06:15 AM	56.9	53.8	3.1	7.0	49.9	47.9	2.0
06:15 AM - 06:20 AM	57.1	53.1	4.0	2.0	55.1	42.9	12.2

Reference Method : Based on ISO 1996-1 and ISO 1996-2
หมายเหตุ

1. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
2. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
3. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
4. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519

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Approved by

D. Chongchon

Dej Chongchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phukdang Rayong 21140 Thailand. PHONE 466 0 3304 8555 FAX 466 0 3304 8556
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E-MAIL: info@alsglobal.com

www.alsglobal.com

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : ๔๙๑๙๙๙๙๙
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

TESTING
No.0042
Lot ID: 2212110-8
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270119-1

Page 2 of 3

Sample No. : 2212110-8
Parameter : เสียงรบกวน
Location : N2 (หมู่บ้าน/อาคาร) (GPS 47P 0726181,1406270)
Measurement Date : Mar 15 - 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ตรวจ	ค่ารวม
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ตรวจ	ค่ารวม
12:15 AM - 12:20 AM	64.9	48.5	16.4	0.0	64.9	38.1	29.8
12:20 AM - 12:25 AM	58.3	46.9	11.4	0.5	60.8	38.2	22.6
12:25 AM - 12:30 AM	59.5	45.5	14.0	2.0	60.5	41.3	19.2
12:30 AM - 12:35 AM	57.0	50.7	6.3	1.5	58.5	41.0	17.5
12:35 AM - 12:40 AM	63.3	44.2	19.1	0.5	63.8	40.6	23.2
12:40 AM - 12:45 AM	60.1	43.7	16.4	0.0	60.1	40.0	20.1
12:45 AM - 12:50 AM	58.9	48.9	10.0	0.5	59.4	43.3	16.1
12:50 AM - 12:55 AM	61.5	49.6	11.9	0.5	62.0	43.2	18.8
12:55 AM - 01:00 AM	59.4	46.6	12.8	0.0	59.4	42.1	17.3
01:00 AM - 01:05 AM	62.4	45.9	16.5	0.0	62.4	41.3	21.1
01:05 AM - 01:10 AM	58.4	47.3	11.1	0.5	58.9	41.1	17.8
01:10 AM - 01:15 AM	57.0	43.9	13.1	0.0	57.0	40.2	16.8
01:15 AM - 01:20 AM	59.7	43.1	16.6	0.0	59.7	40.4	19.3
01:20 AM - 01:25 AM	58.8	45.4	13.4	0.0	58.8	39.8	19.0
01:25 AM - 01:30 AM	56.4	49.1	7.3	1.0	57.4	39.1	18.3
01:30 AM - 01:35 AM	60.7	49.8	10.9	0.5	61.2	38.6	22.6
01:35 AM - 01:40 AM	61.6	48.4	13.2	0.0	61.6	40.4	21.2
01:40 AM - 01:45 AM	60.3	42.3	18.0	0.0	60.3	40.2	20.1
01:45 AM - 01:50 AM	60.0	41.9	18.1	0.0	60.0	39.0	21.0
01:50 AM - 01:55 AM	63.4	43.9	19.5	0.0	63.4	38.8	24.6
01:55 AM - 02:00 AM	63.0	48.6	14.4	0.0	63.0	38.7	24.3
02:00 AM - 02:05 AM	63.4	44.5	18.9	0.0	63.4	38.6	24.8
02:05 AM - 02:10 AM	68.8	43.3	25.5	0.0	68.8	39.1	29.7
02:10 AM - 02:15 AM	60.8	44.5	16.3	0.0	60.8	38.4	22.4
02:15 AM - 02:20 AM	61.0	47.3	13.7	0.0	61.0	38.7	22.3
02:20 AM - 02:25 AM	62.8	48.2	14.6	0.0	62.8	38.5	24.3
02:25 AM - 02:30 AM	60.6	45.3	15.3	0.0	60.6	39.0	21.6
02:30 AM - 02:35 AM	62.1	48.4	13.7	0.0	62.1	39.2	22.9
02:35 AM - 02:40 AM	61.2	50.8	10.4	0.5	61.7	38.7	23.0
02:40 AM - 02:45 AM	58.1	44.3	13.8	0.0	58.1	37.8	20.3
02:45 AM - 02:50 AM	62.0	43.0	19.0	0.0	62.0	37.1	24.9
02:50 AM - 02:55 AM	61.1	45.1	16.0	0.0	61.1	36.0	25.1
02:55 AM - 03:00 AM	60.3	37.4	22.9	0.0	60.3	35.5	24.8
03:00 AM - 03:05 AM	63.2	43.1	20.1	0.0	63.2	36.2	27.0
03:05 AM - 03:10 AM	59.5	48.1	11.4	0.5	60.0	36.8	23.2
03:10 AM - 03:15 AM	60.1	41.4	18.7	0.0	60.1	38.1	22.0
03:15 AM - 03:20 AM	60.2	40.5	19.7	0.0	60.2	38.9	21.3
03:20 AM - 03:25 AM	61.5	45.3	16.2	0.0	61.5	38.9	22.6
03:25 AM - 03:30 AM	66.3	47.3	19.0	0.0	66.3	38.2	28.1
03:30 AM - 03:35 AM	59.9	48.6	11.3	0.5	60.4	37.8	22.6

Reference Method : Based on ISO 1996-1 and ISO 1996-2
หมายเหตุ

1. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
2. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
3. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519
4. ผู้ตรวจราชการสาธารณสุข หรือ กำนันตำบลเป็นผู้ตรวจและประเมินผลเสียงที่ตรวจจากประเภทการจราจรตาม พ.ร.บ. 2519

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Approved by

D. Chongchon

Dej Chongchon
Senior Manager

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phukdang Rayong 21140 Thailand. PHONE 466 0 3304 8555 FAX 466 0 3304 8556
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : ๔๙๑๙๙๙๙๙
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

TESTING
No.0042
Lot ID: 2212110-8
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270119-1

Page 1 of 3

Sample No. : 2212110-8
Parameter : เสียงรบกวน
Location : N2 (หมู่บ้าน/อาคาร) (GPS 47P 0726181,1406270)
Measurement Date : Mar 15 - 16, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่ตรวจ	ค่ารวมการรบกวน
					ค่าจากเสียง	ค่าจากตัว		
09:00 AM - 10:00 AM	57.0	56.5	0.5	7.0	59.0	-	42.6	7.4
09:00 AM - 11:00 AM	58.2	56.7	1.5	4.5	53.7	-	43.8	9.9
11:00 AM - 12:00 PM	59.4	56.5	2.9	3.0	56.4	-	43.5	12.9
12:00 PM - 01:00 PM	56.6	55.5	1.1	7.0	49.6	-	42.8	6.8
01:00 PM - 02:00 PM	59.6	57.5	2.1	4.5	55.1	-	43.1	12.6
02:00 PM - 03:00 PM	63.2	57.0	6.2	1.5	61.7	-	42.9	18.8
03:00 PM - 04:00 PM	60.1	58.0	2.1	4.5	55.6	-	44.9	10.7
04:00 PM - 05:00 PM	61.0	59.7	1.3	7.0	54.0	-	49.8	4.2
05:00 PM - 06:00 PM	57.7	59.3	-1.6	7.0	50.7	-	49.4	-
06:00 PM - 07:00 PM	64.0	57.6	6.4	1.5	62.5	-	48.2	14.3
07:00 PM - 08:00 PM	66.7	57.8	8.9	0.5	66.2	-	45.6	20.6
08:00 PM - 09:00 PM	60.9	56.6	4.3	2.0	58.9	-	42.9	19.0
09:00 PM - 10:00 PM	61.2	53.3	7.9	0.5	60.7	-	41.7	-
10:00 PM - 10:05 PM	57.8	50.1	7.7	0.5	-	60.3	40.8	19.5
10:05 PM - 10:10 PM	63.2	51.2	12.0	0.5	-	65.7	40.0	25.7
10:10 PM - 10:15 PM	59.6	50.5	9.1	0.5	-	62.1	40.6	20.5
10:15 PM - 10:20 PM	57.9	52.7	5.2	1.5	-	59.4	40.2	19.2
10:20 PM - 10:25 PM	60.4	51.8	8.6	0.5	-	62.9	41.7	21.2
10:25 PM - 10:30 PM	58.5	57.1	1.4	7.0	-	54.5	44.3	10.7
10:30 PM - 10:35 PM	63.8	52.4	11.4	0.5	-	66.3	42.6	22.7
10:35 PM - 10:40 PM	57.1	50.8	6.3	1.5	-	58.6	41.7	16.9
10:40 PM - 10:45 PM	61.8	52.2	9.6	0.5	-	64.3	41.8	22.5
10:45 PM - 10:50 PM	60.7	51.2	9.5	0.5	-	62.4	41.9	20.5
10:50 PM - 10:55 PM	56.5	50.1	6.4	1.5	-	58.0	41.5	16.5
10:55 PM - 11:00 PM	52.9	53.4	-0.5	7.0	-	48.9	41.7	7.2
11:00 PM - 11:05 PM	54.0	46.5	7.5	0.5	-	56.5	41.2	15.3
11:05 PM - 11:10 PM	59.2	45.5	13.7	0.5	-	62.9	41.9	20.3
11:10 PM - 11:15 PM	56.0	48.1	7.9	0.5	-	58.5	40.9	17.6
11:15 PM - 11:20 PM	59.2	50.2	9.0	0.5	-	61.7	41.7	20.0
11:20 PM - 11:25 PM	56.8	48.1	8.7	0.5	-	59.3	41.1	18.2
11:25 PM - 11:30 PM	56.5	51.6	-5.1	0.5	-	56.0	41.4	18.6
11:30 PM - 11:35 PM	54.6	46.5	8.1	0.5	-	57.1	40.8	16.3
11:35 PM - 11:40 PM	59.8	47.5	12.3	0.5	-	62.3	40.1	22.2
11:40 PM - 11:45 PM	56.2	42.7	13.5	0.5	-	59.2	40.0	20.0
11:45 PM - 11:50 PM	58.1	50.2	7.9	0.5	-	61.0	40.3	19.7



Analysis / Test Report



TESTING
No 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermji Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2212120
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270120-1

Page 1 of 3

Sample No. : 2212120-9
Parameter : N2 (ไนโตรเจน) (GPS 47P 0726181,1406270)
Location : Nontachai Uppathamp
Measurement Date : Mar 16 - 17, 2022
Measurement by : Sound Level Meter 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับแก้	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่รับรู้	ค่าระดับการรบกวน
09:00 AM - 10:00 AM	59.0	56.5	2.5	3.0	56.0	-	43.6
10:00 AM - 11:00 AM	56.6	56.7	1.9	4.5	54.1	-	43.8
11:00 AM - 12:00 PM	60.6	56.5	4.1	2.0	58.6	-	43.5
12:00 PM - 01:00 PM	59.5	55.5	4.0	2.0	57.5	-	42.8
01:00 PM - 02:00 PM	60.0	57.5	2.5	3.0	57.0	-	43.1
02:00 PM - 03:00 PM	60.5	57.0	3.5	2.0	58.5	-	42.9
03:00 PM - 04:00 PM	59.2	58.0	1.2	7.0	52.7	-	44.9
04:00 PM - 05:00 PM	59.7	59.7	0.0	7.0	52.7	-	45.8
05:00 PM - 06:00 PM	59.8	59.3	0.5	7.0	52.9	-	49.4
06:00 PM - 07:00 PM	62.3	57.5	4.7	1.5	60.8	-	48.2
07:00 PM - 08:00 PM	59.8	57.8	2.0	4.5	55.3	-	45.6
08:00 PM - 09:00 PM	61.4	56.6	4.8	1.5	59.9	-	42.9
09:00 PM - 10:00 PM	62.5	53.3	9.2	0.0	67.5	-	41.7
10:00 PM - 10:05 PM	60.9	50.1	10.8	0.5	-	63.4	40.8
10:05 PM - 10:10 PM	60.5	51.2	9.3	0.5	-	63.0	40.0
10:10 PM - 10:15 PM	60.5	50.5	10.0	0.5	-	63.0	40.6
10:15 PM - 10:20 PM	60.8	52.7	8.1	0.5	-	63.3	40.7
10:20 PM - 10:25 PM	61.1	51.8	9.3	0.5	-	63.6	41.7
10:25 PM - 10:30 PM	62.0	57.1	4.9	1.5	-	63.5	44.3
10:30 PM - 10:35 PM	60.5	52.4	8.1	0.5	-	63.0	42.6
10:35 PM - 10:40 PM	61.7	50.8	10.9	0.5	-	63.7	41.7
10:40 PM - 10:45 PM	63.7	52.2	11.5	0.5	-	66.2	41.8
10:45 PM - 10:50 PM	61.1	50.7	10.4	0.5	-	63.6	41.9
10:50 PM - 10:55 PM	59.5	50.1	9.4	0.5	-	62.0	41.5
10:55 PM - 11:00 PM	60.3	53.4	6.9	1.0	-	62.3	41.7
11:00 PM - 11:05 PM	60.0	46.5	13.5	0.0	-	63.0	41.2
11:05 PM - 11:10 PM	62.1	49.5	12.6	0.0	-	65.1	41.9
11:10 PM - 11:15 PM	60.5	48.1	12.4	0.5	-	63.0	40.9
11:15 PM - 11:20 PM	63.8	50.2	13.6	0.0	-	66.8	41.7
11:20 PM - 11:25 PM	61.4	48.1	13.3	0.0	-	65.1	41.9
11:25 PM - 11:30 PM	59.5	52.6	6.9	1.0	-	61.5	41.4
11:30 PM - 11:35 PM	58.1	46.5	11.6	0.5	-	60.6	40.8
11:35 PM - 11:40 PM	64.8	47.5	17.3	0.0	-	67.8	40.1
11:40 PM - 11:45 PM	61.6	43.7	17.9	0.0	-	64.6	40.0
11:45 PM - 11:50 PM	59.5	50.2	9.3	0.5	-	62.0	39.2
11:50 PM - 11:55 PM	59.7	48.0	11.7	0.5	-	62.7	38.3
11:55 PM - 12:00 AM	63.0	48.5	14.5	0.0	-	66.5	38.9
12:00 AM - 12:05 AM	61.0	44.0	17.0	0.0	-	64.0	38.7
12:05 AM - 12:10 AM	61.5	50.9	10.6	0.5	-	64.0	39.3
12:10 AM - 12:15 AM	61.8	48.0	13.8	0.0	-	64.8	39.0

Approved by

Dej Changnon
Senior Manager

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



TESTING
No 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermji Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 22121210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270121-1

Page 1 of 3

Sample No. : 22121210-9
Parameter : N2 (ไนโตรเจน) (GPS 47P 0726181,1406270)
Location : Nontachai Uppathamp
Measurement Date : Mar 16 - 17, 2022
Measurement by : Sound Level Meter 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับแก้	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่รับรู้	ค่าระดับการรบกวน
09:00 AM - 10:00 AM	60.2	45.5	14.7	0.0	-	63.2	37.0
09:00 AM - 09:05 AM	62.8	52.6	10.2	0.5	-	65.3	37.9
09:05 AM - 09:10 AM	63.9	48.6	15.3	0.0	-	66.9	38.2
09:10 AM - 09:15 AM	64.5	47.6	16.9	0.0	-	67.5	37.6
09:15 AM - 09:20 AM	60.3	39.8	20.5	0.0	-	63.3	37.7
09:20 AM - 09:25 AM	60.0	50.0	10.0	0.0	-	71.0	37.6
09:25 AM - 09:30 AM	64.1	48.5	15.6	0.0	-	67.1	36.4
09:30 AM - 09:35 AM	65.2	51.2	14.0	0.0	-	68.2	37.8
09:35 AM - 09:40 AM	59.2	47.3	11.9	0.5	-	61.7	37.9
09:40 AM - 09:45 AM	60.8	50.8	10.0	0.5	-	63.3	40.5
09:45 AM - 09:50 AM	60.9	52.4	8.5	1.0	-	62.0	38.8
09:50 AM - 09:55 AM	67.2	56.9	10.3	0.5	-	69.7	39.0
09:55 AM - 10:00 AM	60.4	55.4	5.0	1.5	-	61.9	39.2
09:55 AM - 10:00 AM	61.0	52.7	8.3	0.5	-	63.5	40.6
10:00 AM - 10:05 AM	58.7	56.7	2.0	4.5	-	57.2	49.9
10:05 AM - 10:10 AM	60.8	56.4	4.4	2.0	-	61.8	44.6
10:10 AM - 10:15 PM	60.6	56.2	4.4	2.0	-	61.6	41.8
10:15 PM - 10:20 PM	70.3	57.6	12.7	0.0	-	73.3	46.2
10:20 PM - 10:25 PM	62.7	57.3	5.4	1.5	-	64.2	43.2
10:25 PM - 10:30 PM	59.6	57.5	2.1	4.5	-	64.1	43.4
10:30 AM - 10:35 PM	63.2	58.5	4.7	1.5	-	66.7	48.6
10:35 PM - 10:40 PM	56.3	59.2	-2.9	7.0	-	52.3	48.5
10:40 PM - 10:45 PM	57.7	58.2	-0.5	7.0	-	54.7	47.1
10:45 PM - 10:50 AM	58.3	56.7	1.6	4.5	-	54.5	48.5
10:50 AM - 10:55 PM	60.9	59.5	1.4	7.0	-	56.9	49.4
10:55 AM - 10:55 PM	58.7	59.8	-1.1	7.0	-	54.7	49.3
10:55 AM - 10:55 PM	60.8	59.5	1.3	7.0	-	56.9	48.1
10:55 AM - 10:55 PM	61.6	60.5	1.0	7.0	-	54.6	49.4
10:55 AM - 10:55 PM	59.7	57.8	1.9	4.5	-	55.2	43.2
10:55 AM - 10:55 PM	58.2	57.2	1.0	7.0	-	51.2	43.3

Reference Method : Based on ISO 1996-1 and ISO 1996-2

1. ผู้ตรวจวัดและผู้รายงานผล : ทีมงานการตรวจวัดและรายงานผลระดับเสียงจากแหล่งกำเนิดการจราจร ณ 258
2. มาตรฐานที่ใช้ : มาตรฐานระดับเสียงจากแหล่งกำเนิดการจราจร ณ 258
3. วัตถุประสงค์ของการตรวจวัด : เพื่อตรวจสอบระดับเสียงจากแหล่งกำเนิดการจราจร ณ 258 และเพื่อใช้ในการประเมินผลกระทบต่อชุมชนโดยรอบ
4. มาตรฐานที่ใช้ : มาตรฐานระดับเสียงจากแหล่งกำเนิดการจราจร ณ 258 และเพื่อใช้ในการประเมินผลกระทบต่อชุมชนโดยรอบ

Approved by

Dej Changnon
Senior Manager

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



TESTING
No 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermji Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 22121210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270120-1

Page 2 of 3

Sample No. : 22121210-9
Parameter : N2 (ไนโตรเจน) (GPS 47P 0726181,1406270)
Location : Nontachai Uppathamp
Measurement Date : Mar 16 - 17, 2022
Measurement by : Sound Level Meter 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ค่าปรับแก้	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่รับรู้	ค่าระดับการรบกวน
12:15 AM - 12:20 AM	59.1	48.5	10.6	0.5	-	61.6	38.1
12:20 AM - 12:25 AM	60.0	46.9	13.1	0.0	-	63.0	38.2
12:25 AM - 12:30 AM	59.6	55.5	4.1	2.0	-	60.6	41.3
12:30 AM - 12:35 AM	61.2	50.7	10.5	0.5	-	63.7	41.0
12:35 AM - 12:40 AM	59.3	44.2	15.1	0.0	-	62.3	40.6
12:40 AM - 12:45 AM	59.7	43.7	16.0	0.0	-	62.7	40.0
12:45 AM - 12:50 AM	59.4	48.9	10.5	0.5	-	61.9	43.3
12:50 AM - 12:55 AM	59.8	49.6	10.2	0.5	-	62.3	43.2
12:55 AM - 01:00 AM	58.4	48.6	9.8	0.5	-	60.9	42.1
01:00 AM - 01:05 AM	60.5	45.9	14.6	0.0	-	63.5	41.3
01:05 AM - 01:10 AM	62.7	47.3	15.4	0.0	-	65.2	41.1
01:10 AM - 01:15 AM	58.5	43.8	14.6	0.0	-	61.5	40.2
01:15 AM - 01:20 AM	59.1	43.1	16.0	0.0	-	62.1	40.4
01:20 AM - 01:25 AM	61.2	45.4	15.8	0.0	-	64.2	39.8
01:25 AM - 01:30 AM	63.3	49.1	14.2	0.0	-	66.3	39.0
01:30 AM - 01:35 AM	60.8	49.8	11.0	0.5	-	63.3	38.6
01:35 AM - 01:40 AM	60.9	48.4	12.5	0.0	-	63.9	39.8
01:40 AM - 01:45 AM	60.5	42.3	18.2	0.0	-	63.5	40.2
01:45 AM - 01:50 AM	62.0	43.9	18.1	0.0	-	65.0	39.0
01:50 AM - 01:55 AM	60.9	43.9	17.0	0.0	-	63.9	39.8
01:55 AM - 02:00 AM	61.3	48.6	12.7	0.0	-	64.3	38.7
02:00 AM - 02:05 AM	61.6	44.5	17.1	0.0	-	64.8	38.6
02:05 AM - 02:10 AM	60.4	46.3	14.1	0.0	-	63.4	39.1
02:10 AM - 02:15 AM	60.7	44.5	16.2	0.0	-	63.7	38.4
02:15 AM - 02:20 AM	60.1	47.3	12.8	0.0	-	63.1	39.8
02:20 AM - 02:25 AM	62.2	48.7	13.5	0.0	-	65.2	38.5
02:25 AM - 02:30 AM	59.7	45.3	14.4	0.0	-	62.7	39.0
02:30 AM - 02:35 AM	60.2	40.4	19.8	0.0	-	63.2	39.2
02:35 AM - 02:40 AM	65.3	50.8	14.5	0.0	-	68.3	38.7
02:40 AM - 02:45 AM	62.9	41.1	21.8	0.0	-	65.9	37.8
02:45 AM - 02:50 AM	65.5	43.0	22.5	0.0	-	68.5	37.1
02:50 AM - 02:55 AM	61.2	45.1	16.1	0.0	-	66.2	36.6
02:55 AM - 03:00 AM	63.7	47.4	16.3	0.0	-	66.7	36.5
03:00 AM - 03:05 AM	59.6	41.1	18.5	0.0	-	62.6	36.2
03:05 AM - 03:10 AM	62.9	48.1	14.8	0.0	-	65.9	36.8
03:10 AM - 03:15 AM	62.5	41.4	21.1	0.0	-	65.5	36.1
03:15 AM - 03:20 AM	63.6	40.5	23.1	0.0	-	66.6	35.8
03:20 AM - 03:25 AM	58.4	45.3	13.1	0.0	-	61.4	38.9
03:25 AM - 03:30 AM	58.9	47.3	11.6	0.5	-	61.4	38.3
03:30 AM - 03:35 AM	59.6	46.6	13.0	0.5	-	62.1	37.8

Approved by

Dej Changnon
Senior Manager

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

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermjij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270123-1P/O : ศาสตราจารย์
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Page 3 of 3

Sample No. : 2212110-11
Parameter : เลื่อนทวน
Location : N2 (หมู่บ้านตลาด) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 19 - 20, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รับรู้	ค่ารวม
					ค่าจริง	ค่าปรับ		
03:35 AM - 03:40 AM	51.4	45.5	5.9	1.5	-	52.9	37.0	15.9
03:40 AM - 03:45 AM	47.5	52.6	-5.1	7.0	-	43.5	37.9	5.6
03:45 AM - 03:50 AM	45.2	48.6	-3.4	7.0	-	41.2	38.2	3.0
03:50 AM - 03:55 AM	47.0	47.6	-0.6	7.0	-	43.0	37.6	5.4
03:55 AM - 04:00 AM	46.3	39.8	6.5	1.0	-	48.3	37.7	10.6
04:00 AM - 04:05 AM	46.3	50.0	-3.7	7.0	-	42.3	37.6	4.7
04:05 AM - 04:10 AM	46.3	46.5	-0.2	7.0	-	42.3	38.4	3.9
04:10 AM - 04:15 AM	46.2	51.2	-5.0	7.0	-	42.2	37.8	4.4
04:15 AM - 04:20 AM	45.8	47.3	-1.5	7.0	-	41.8	37.9	3.9
04:20 AM - 04:25 AM	45.8	54.4	-8.6	7.0	-	41.4	40.5	0.9
04:25 AM - 04:30 AM	45.3	52.9	-7.6	7.0	-	41.5	38.8	2.7
04:30 AM - 04:35 AM	45.4	53.4	-8.0	7.0	-	41.4	39.0	2.4
04:35 AM - 04:40 AM	45.5	56.9	-11.4	7.0	-	41.5	37.3	4.2
04:40 AM - 04:45 AM	45.8	55.4	-9.6	7.0	-	41.8	39.2	2.6
04:45 AM - 04:50 AM	49.9	52.7	-2.8	7.0	-	45.9	40.6	5.3
04:50 AM - 04:55 AM	46.1	56.7	-10.6	7.0	-	42.1	49.9	-7.8
04:55 AM - 05:00 AM	46.3	56.4	-10.1	7.0	-	42.3	45.6	-3.3
05:00 AM - 05:05 AM	49.8	56.2	-6.4	7.0	-	45.8	41.8	4.0
05:05 AM - 05:10 AM	47.3	57.6	-10.3	7.0	-	43.3	46.2	-2.9
05:10 AM - 05:15 AM	53.0	57.3	-4.3	7.0	-	49.0	43.2	5.8
05:15 AM - 05:20 AM	47.0	57.5	-10.5	7.0	-	43.0	41.4	1.6
05:20 AM - 05:25 AM	47.5	58.5	-11.0	7.0	-	43.5	48.6	-5.1
05:25 AM - 05:30 AM	46.1	59.2	-13.1	7.0	-	44.1	48.5	-4.4
05:30 AM - 05:35 AM	54.5	56.2	-1.7	7.0	-	50.5	47.1	3.4
05:35 AM - 05:40 AM	47.8	57.7	-10.0	7.0	-	47.8	46.5	1.3
05:40 AM - 05:45 AM	52.4	58.7	-6.3	7.0	-	48.4	49.9	-1.5
05:45 AM - 05:50 AM	51.1	59.5	-8.4	7.0	-	47.1	49.4	-2.3
05:50 AM - 05:55 AM	47.8	59.8	-12.0	7.0	-	43.8	49.3	-5.5
05:55 AM - 06:00 AM	47.2	59.6	-12.4	7.0	-	43.2	48.1	-4.9
06:00 AM - 07:00 AM	51.6	60.6	-9.0	7.0	44.6	-	49.4	-4.8
07:00 AM - 08:00 AM	52.9	57.8	-4.9	7.0	45.5	-	43.2	2.3
08:00 AM - 09:00 AM	50.5	57.2	-6.7	7.0	33.9	-	43.3	0.6
ค่าเฉลี่ย								5.10

Reference Method : Based on ISO 1996-1 and ISO 1996-2

- หมายเหตุ :
1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจกระทบการพักผ่อน พ.ศ. 2558
 2. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวน พ.ศ. 2550
 3. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวน พ.ศ. 2550 และประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวน พ.ศ. 2553
 4. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวน พ.ศ. 2550 และประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวน พ.ศ. 2553

Approved by

Dej Changchon
Senior ManagerADDRESS 616/10 Moo 5, T. Manam Khru A. Phukdang Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
ALS LABORATORY GROUP (THAILAND) CO., LTD. AN ALS LIMITED COMPANY

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RIGHT SOLUTIONS PRECISE & PRACTICAL



Analysis / Test Report

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermjij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270123-1P/O : ศาสตราจารย์
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Page 2 of 3

Sample No. : 2212110-12
Parameter : เลื่อนทวน
Location : N2 (หมู่บ้านตลาด) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 19 - 20, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รับรู้	ค่ารวม
					ค่าจริง	ค่าปรับ		
09:00 AM - 09:05 AM	52.4	56.5	-4.1	7.0	45.4	-	42.6	2.8
09:05 AM - 09:10 AM	53.6	56.7	-3.1	7.0	46.6	-	43.8	2.8
09:10 AM - 09:15 AM	56.2	56.5	-0.3	7.0	49.2	-	43.5	5.7
09:15 AM - 09:20 AM	56.1	55.5	0.6	7.0	49.1	-	42.8	6.3
09:20 AM - 09:25 AM	60.5	57.5	3.0	3.0	57.5	-	43.1	14.4
09:25 AM - 09:30 AM	60.1	57.0	3.1	3.0	57.1	-	42.9	14.2
09:30 AM - 09:35 AM	60.4	58.0	2.4	4.5	55.9	-	44.9	11.0
09:35 AM - 09:40 AM	59.6	58.7	-0.9	7.0	52.6	-	45.8	2.8
09:40 AM - 09:45 AM	60.5	59.3	1.2	7.0	53.5	-	46.4	7.1
09:45 AM - 09:50 AM	62.6	57.6	5.0	1.5	61.1	-	48.2	12.9
09:50 AM - 09:55 AM	61.7	57.8	3.9	2.0	59.7	-	45.6	14.1
09:55 AM - 10:00 AM	61.3	56.6	4.7	1.5	59.8	-	42.9	16.9
10:00 AM - 10:05 AM	61.4	53.3	8.1	0.5	60.9	-	41.7	19.2
10:05 AM - 10:10 AM	62.4	50.1	12.3	0.5	-	64.9	40.8	24.1
10:10 AM - 10:15 PM	61.0	51.2	9.8	0.5	-	63.5	40.0	23.5
10:15 PM - 10:20 PM	58.1	50.5	7.6	0.5	-	60.6	40.6	20.0
10:20 PM - 10:25 PM	54.3	52.7	1.6	4.5	-	52.8	40.2	12.6
10:25 PM - 10:30 PM	58.8	51.8	7.0	1.0	-	60.8	41.7	19.1
10:30 PM - 10:35 PM	63.6	57.1	6.5	1.0	-	65.6	44.3	21.3
10:35 PM - 10:40 PM	61.9	52.4	9.5	0.5	-	64.4	42.8	21.6
10:40 PM - 10:45 PM	63.1	50.8	12.3	0.5	-	65.6	41.7	23.9
10:45 PM - 10:50 PM	60.1	52.2	7.9	0.5	-	62.6	41.8	20.8
10:50 PM - 10:55 PM	58.5	50.7	7.8	0.5	-	61.0	41.5	19.5
10:55 PM - 11:00 PM	63.3	50.1	13.2	0.0	-	66.3	41.5	24.8
11:00 PM - 11:05 PM	59.4	48.5	10.9	0.0	-	62.4	41.2	21.2
11:05 PM - 11:10 PM	57.1	49.5	7.6	0.0	-	59.6	41.8	17.7
11:10 PM - 11:15 PM	62.3	48.1	14.2	0.0	-	63.3	40.9	22.4
11:15 PM - 11:20 PM	60.6	50.2	10.4	0.5	-	63.1	41.7	21.4
11:20 PM - 11:25 PM	59.6	48.1	11.5	0.5	-	62.1	41.1	21.0
11:25 PM - 11:30 PM	57.5	52.6	-5.1	0.5	-	59.0	41.4	17.6
11:30 PM - 11:35 PM	62.4	46.5	15.9	0.5	-	59.9	40.8	19.1
11:35 PM - 11:40 PM	57.7	47.5	10.2	0.0	-	66.7	40.1	26.6
11:40 PM - 11:45 PM	62.8	47.2	15.6	0.0	-	65.8	40.6	25.2
11:45 PM - 11:50 PM	67.0	50.2	16.8	0.0	-	70.0	39.2	30.8
11:50 PM - 11:55 PM	60.5	48.0	12.5	0.0	-	63.5	38.3	25.2
11:55 PM - 12:00 AM	59.3	48.5	10.8	0.0	-	61.8	38.2	23.6
12:00 AM - 12:05 AM	56.9	44.0	12.9	0.0	-	59.9	38.7	21.2
12:05 AM - 12:10 AM	60.4	50.9	9.5	0.5	-	62.9	39.3	23.6
12:10 AM - 12:15 AM	61.5	48.0	13.5	0.0	-	64.5	39.0	25.5

Approved by

Dej Changchon
Senior ManagerADDRESS 616/10 Moo 5, T. Manam Khru A. Phukdang Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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RIGHT SOLUTIONS PRECISE & PRACTICAL



Analysis / Test Report

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermjij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500Lot ID: 2212110
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270123-1P/O : ศาสตราจารย์
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Page 3 of 3

Sample No. : 2212110-12
Parameter : เลื่อนทวน
Location : N2 (หมู่บ้านตลาด) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 19 - 20, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

ระดับเสียง (dB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	ค่าปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รับรู้	ค่ารวมการรบกวน
					ค่าจริง	ค่าปรับ		
12:15 AM - 12:20 AM	57.7	48.5	9.2	0.5	-	60.2	38.1	22.1
12:20 AM - 12:25 AM	60.3	48.9	11.4	0.0	-	63.3	38.2	25.1
12:25 AM - 12:30 AM	63.6	50.5	13.1	0.5	-	66.1	41.3	24.8
12:30 AM - 12:35 AM	59.8	50.7	7.2	1.0	-	59.9	41.0	18.9
12:35 AM - 12:40 AM	63.3	44.2	19.1	0.0	-	66.3	40.6	25.7
12:40 AM - 12:45 AM	57.9	43.7	16.1	0.0	-	62.8	40.0	22.8
12:45 AM - 12:50 AM	65.2	48.6	16.6	0.0	-	68.2	41.3	26.9
12:50 AM - 12:55 AM	55.8	49.6	6.2	1.5	-	57.3	43.2	14.1
12:55 AM - 01:00 AM	59.0	46.6	12.4	0.5	-	61.5	42.1	19.4
01:00 AM - 01:05 AM	59.6	45.9	13.7	0.0	-	62.6	41.3	21.3
01:05 AM - 01:10 AM	57.5	47.2	10.2	0.5	-	60.0	41.1	18.9
01:10 AM - 01:15 AM	57.9	43.9	14.0	0.0	-	60.9	40.2	20.7
01:15 AM - 01:20 AM	61.2	43.1	18.1	0.0	-	64.2	40.4	23.8
01:20 AM - 01:25 AM	57.7	45.4	12.3	0.5	-	60.2	39.8	20.4
01:25 AM - 01:30 AM	61.0	49.1	11.9	0.5	-	63.5	39.3	24.2
01:30 AM - 01:35 AM	52.8	49.8	3.0	3.0	-	52.8	38.6	14.2
01:35 AM - 01:40 AM	58.9	48.4	10.5	0.5	-	61.4	40.4	21.0
01:40 AM - 01:45 AM	62.1	42.3	19.8	0.0	-	65.1	40.2	24.9
01:45 AM - 01:50 AM	55.8	41.9	13.9	0.0	-	58.8	39.0	19.8
01:50 AM - 01:55 AM	56.4	43.9	12.5	0.0	-	59.4	39.8	19.6
01:55 AM - 02:00 AM	57.8	48.6	9.2	0.5	-	60.3	38.7	21.6
02:00 AM - 02:05 AM	60.1	54.0	-6.0	0.5	-	63.1	38.4	24.7
02:05 AM - 02:10 AM	60.0	43.3	16.7	0.0	-	63.0	39.1	23.9
02:10 AM - 02:15 AM	61.1	44.5	16.6	0.0	-	64.1	38.4	25.7
02:15 AM - 02:20 AM	65.3	46.3	19.0	0.5	-	68.8	41.2	27.6
02:20 AM - 02:25 AM	55.5	48.2	7.3	1.0	-	57.5	38.5	19.0
02:25 AM - 02:30 AM	61.5	45.3	16.2	0.0	-	64.5	39.0	25.5
02:30 AM - 02:35 AM	60.9	40.4	20.5	0.0	-	63.9	39.2	24.7
02:35 AM - 02:40 AM	61.2	54.2	-7.0	0.5	-	62.7	39.7	24.0
02:40 AM - 02:45 AM	64.6	44.3	20.3	0.0	-	67.6	37.8	29.8
02:45 AM - 02:50 AM	59.8	43.0	15.9	0.0	-	61.9	37.1	24.8
02:50 AM - 02:55 AM	57.9	45.1	12.8	0.0	-	60.6	36.6	24.1
02:55 AM - 03:00 AM	56.6	39.2	17.4	0.5	-	57.5	35.2	23.1
03:00 AM - 03:05 AM	55.6	43.1	12.5	0.0	-	58.6	36.2	22.4
03:05 AM - 03:10 AM	63.0	48.1	14.9	0.0	-	66.0	36.8	25.2
03:10 AM - 03:15 AM	60.8	41.4	19.4	0.0	-	63.8	38.1	25.7
03:15 AM - 03:20 AM	64.2	40.5	23.7	0.0	-	67.2	38.9	28.3
03:20 AM - 03:25 AM	57.8	45.3	12.5	0.0	-	60.8	38.9	21.9
03:25 AM - 03:30 AM	62.9	47.2	15.6	0.0	-	65.9	38.3	27.6
03:30 AM - 03:35 AM	56.7	46.8	9.9	0.0	-	58.8	38.0	21.0



Analysis / Test Report



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270124-1

Page 1 of 3

Sample No. : 2211210-13
Parameter : เสียงรบกวน
Location : N2 (หน้าบ้าน) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รบกวน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
09:00 AM - 10:00 AM	59.8	56.5	3.3	3.0	56.8	-	42.6	14.2
10:00 AM - 11:00 AM	59.8	56.7	3.1	3.0	56.8	-	43.8	15.8
11:00 AM - 12:00 PM	58.3	56.5	1.8	4.5	53.8	-	43.5	10.3
12:00 PM - 01:00 PM	60.0	55.5	4.5	1.5	58.5	-	42.8	15.7
01:00 PM - 02:00 PM	58.8	57.5	1.3	7.0	51.8	-	43.1	8.7
02:00 PM - 03:00 PM	62.6	57.0	5.6	1.5	61.1	-	42.9	18.2
03:00 PM - 04:00 PM	58.8	58.0	0.8	7.0	51.8	-	44.9	6.9
04:00 PM - 05:00 PM	61.5	59.7	1.8	4.5	57.0	-	49.8	7.2
05:00 PM - 06:00 PM	60.5	59.3	1.2	7.0	53.5	-	49.4	4.1
06:00 PM - 07:00 PM	61.9	57.6	4.3	2.0	59.9	-	48.2	11.7
07:00 PM - 08:00 PM	61.2	57.8	3.4	3.0	58.2	-	45.6	12.8
08:00 PM - 09:00 PM	59.0	56.6	2.4	4.5	54.5	-	42.9	11.6
09:00 PM - 10:00 PM	59.2	53.3	5.9	1.5	57.7	-	41.7	16.0
10:00 PM - 10:05 PM	59.1	50.1	9.0	0.5	-	61.6	40.8	20.8
10:05 PM - 10:10 PM	59.9	51.2	8.7	0.5	-	62.4	40.0	22.4
10:10 PM - 10:15 PM	58.3	50.5	7.8	0.5	-	60.8	40.6	20.2
10:15 PM - 10:20 PM	60.3	52.7	7.6	0.5	-	62.8	40.2	22.6
10:20 PM - 10:25 PM	63.7	51.8	11.9	0.5	-	66.2	41.7	24.5
10:25 PM - 10:30 PM	57.5	57.1	0.4	7.0	-	53.5	44.3	9.2
10:30 PM - 10:35 PM	62.9	52.4	10.5	0.5	-	65.4	42.6	22.8
10:35 PM - 10:40 PM	58.2	50.8	7.4	1.0	-	60.2	41.7	18.5
10:40 PM - 10:45 PM	59.2	52.2	7.0	1.0	-	61.2	41.8	19.4
10:45 PM - 10:50 PM	56.5	50.7	5.8	1.5	-	58.0	41.9	16.1
10:50 PM - 10:55 PM	59.7	50.1	8.9	0.5	-	61.5	40.8	20.8
10:55 PM - 11:00 PM	60.3	53.4	6.9	1.0	-	62.3	41.7	20.6
11:00 PM - 11:05 PM	54.2	46.5	7.7	0.5	-	56.7	41.2	15.5
11:05 PM - 11:10 PM	59.4	49.5	10.0	0.5	-	61.4	41.9	20.5
11:10 PM - 11:15 PM	59.0	48.1	10.9	0.5	-	60.9	40.6	20.6
11:15 PM - 11:20 PM	53.6	50.2	3.4	3.0	-	53.6	41.7	11.9
11:20 PM - 11:25 PM	58.5	48.1	10.4	0.5	-	61.0	41.1	19.9
11:25 PM - 11:30 PM	59.5	52.6	6.9	1.0	-	61.5	39.2	20.1
11:30 PM - 11:35 PM	52.9	49.5	3.4	0.0	-	62.9	40.8	22.1
11:35 PM - 11:40 PM	58.4	47.5	10.9	0.5	-	60.9	40.1	20.8
11:40 PM - 11:45 PM	61.9	47.2	14.7	0.0	-	64.9	40.0	24.9
11:45 PM - 11:50 PM	57.3	49.0	8.3	0.0	-	59.3	39.2	20.1
11:50 PM - 11:55 PM	54.6	48.0	6.6	1.0	-	56.6	38.3	18.3
11:55 PM - 12:00 AM	58.3	48.5	9.8	0.5	-	60.8	38.2	22.6
12:00 AM - 12:05 AM	58.3	48.0	10.3	0.0	-	61.3	38.7	22.6
12:05 AM - 12:10 AM	56.1	50.9	5.4	1.5	-	57.8	39.3	18.5
12:10 AM - 12:15 AM	58.1	48.0	10.1	0.5	-	60.6	39.0	21.6

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Approved by

DeJ Changchon
Senior Manager

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



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270124-1

Page 2 of 3

Sample No. : 2211210-13
Parameter : เสียงรบกวน
Location : N2 (หน้าบ้าน) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รบกวน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
12:15 AM - 12:20 AM	54.8	48.5	6.3	1.5	-	56.3	38.1	18.2
12:20 AM - 12:25 AM	61.1	48.9	12.2	0.0	-	64.1	39.2	25.9
12:25 AM - 12:30 AM	54.6	55.5	-0.9	7.0	-	50.6	41.3	9.3
12:30 AM - 12:35 AM	59.1	50.7	8.4	0.5	-	61.6	41.0	20.6
12:35 AM - 12:40 AM	59.5	44.2	15.3	0.0	-	62.5	40.6	21.9
12:40 AM - 12:45 AM	60.6	43.7	16.9	0.0	-	63.6	40.0	23.6
12:45 AM - 12:50 AM	59.1	48.9	10.2	0.5	-	61.6	43.3	18.3
12:50 AM - 12:55 AM	59.0	49.6	9.4	0.5	-	61.5	43.2	18.3
12:55 AM - 01:00 AM	62.7	46.6	16.6	0.0	-	65.2	42.3	23.1
01:00 AM - 01:05 AM	56.0	45.9	10.1	0.5	-	62.0	40.1	21.9
01:05 AM - 01:10 AM	60.0	47.3	12.7	0.0	-	62.9	41.1	21.9
01:10 AM - 01:15 AM	59.3	43.9	15.4	0.0	-	62.3	40.2	22.1
01:15 AM - 01:20 AM	58.1	43.1	15.0	0.0	-	61.1	40.4	20.7
01:20 AM - 01:25 AM	60.7	45.4	15.3	0.0	-	63.7	39.8	23.9
01:25 AM - 01:30 AM	61.7	49.1	12.6	0.0	-	64.7	39.3	25.4
01:30 AM - 01:35 AM	55.8	49.8	6.0	1.5	-	57.3	38.6	18.7
01:35 AM - 01:40 AM	57.1	48.4	8.7	0.5	-	59.6	40.4	19.2
01:40 AM - 01:45 AM	60.7	42.3	18.4	0.0	-	63.7	40.2	23.5
01:45 AM - 01:50 AM	58.8	41.9	16.9	0.0	-	61.8	39.0	22.8
01:50 AM - 01:55 AM	58.6	43.9	14.7	0.0	-	61.6	39.8	21.8
01:55 AM - 02:00 AM	59.3	48.6	10.7	0.5	-	61.8	38.7	23.1
02:00 AM - 02:05 AM	59.2	44.5	14.7	0.0	-	62.2	38.6	23.6
02:05 AM - 02:10 AM	59.4	43.3	16.1	0.0	-	62.4	39.1	23.3
02:10 AM - 02:15 AM	58.8	44.5	14.3	0.0	-	61.8	38.4	23.4
02:15 AM - 02:20 AM	65.5	47.1	18.2	0.0	-	66.5	39.8	26.7
02:20 AM - 02:25 AM	59.7	48.2	11.5	0.5	-	62.3	38.5	23.7
02:25 AM - 02:30 AM	58.9	45.3	13.6	0.0	-	61.9	39.0	22.9
02:30 AM - 02:35 AM	58.7	40.4	18.3	0.0	-	61.7	39.2	22.5
02:35 AM - 02:40 AM	61.1	50.8	10.3	0.5	-	63.6	38.7	24.9
02:40 AM - 02:45 AM	58.7	44.3	14.4	0.0	-	61.7	37.8	23.9
02:45 AM - 02:50 AM	60.7	43.0	17.7	0.0	-	63.7	37.1	26.6
02:50 AM - 02:55 AM	54.7	45.1	9.3	1.5	-	56.2	36.6	20.1
02:55 AM - 03:00 AM	55.5	37.4	18.1	0.0	-	58.5	36.5	22.0
03:00 AM - 03:05 AM	56.1	43.1	13.0	0.0	-	59.1	36.2	22.9
03:05 AM - 03:10 AM	55.6	48.1	7.5	0.5	-	58.1	36.8	21.3
03:10 AM - 03:15 AM	57.5	41.4	16.1	0.0	-	60.5	36.1	22.4
03:15 AM - 03:20 AM	59.5	40.5	18.5	0.0	-	62.0	38.9	23.1
03:20 AM - 03:25 AM	53.3	45.3	8.0	0.5	-	55.8	38.9	16.9
03:25 AM - 03:30 AM	51.2	47.3	3.9	2.0	-	52.3	38.3	13.9
03:30 AM - 03:35 AM	56.7	48.6	8.1	0.5	-	59.2	37.8	21.4

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Approved by

DeJ Changchon
Senior Manager

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



TESTING
No. 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (S103) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location : Project AIE Rayong

Lot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270124-1

Page 3 of 3

Sample No. : 2211210-13
Parameter : เสียงรบกวน
Location : N2 (หน้าบ้าน) (GPS 47P 0726181, 1406270)
Measurement Date : Mar 20 - 21, 2022
Measurement by : Nontachai Uppathamp
Sound Level Meter : 01222722

รพช.ต.เมือง (DB(A))								
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ผลต่างระดับเสียง	ตัวปรับค่า	ปรับค่าเสียงจากแหล่งกำเนิด		เสียงที่รบกวน	ค่าระดับการรบกวน
					ค่าจริง	ค่าปรับ		
02:35 AM - 03:40 AM	56.9	45.5	11.4	0.5	-	59.4	37.0	22.4
03:40 AM - 03:45 AM	59.7	52.3	6.1	1.5	-	59.7	37.9	22.3
03:45 AM - 03:50 AM	55.8	48.6	7.2	1.0	-	57.8	38.2	19.6
03:50 AM - 03:55 AM	59.1	47.6	11.5	0.5	-	61.6	37.6	24.0
03:55 AM - 04:00 AM	60.4	39.8	20.6	0.0	-	63.4	37.7	25.7
04:00 AM - 04:05 AM	51.3	51.3	0.0	4.5	-	55.3	37.6	17.7
04:05 AM - 04:10 AM	56.7	48.5	8.2	0.5	-	59.2	36.4	22.8
04:10 AM - 04:15 AM	59.6	51.2	8.4	0.5	-	62.1	37.8	24.3
04:15 AM - 04:20 AM	52.7	47.3	10.4	0.5	-	60.2	37.0	23.2
04:20 AM - 04:25 AM	58.2	50.8	7.4	1.0	-	60.2	40.5	19.7
04:25 AM - 04:30 AM	58.2	52.9	5.3	1.5	-	59.7	38.8	20.9
04:30 AM - 04:35 AM	56.8	51.4	5.4	3.0	-	56.8	39.0	17.8
04:35 AM - 04:40 AM	55.8	50.9	4.9	1.0	-	51.8	37.3	14.5
04:40 AM - 04:45 AM	54.7	55.4	-0.7	7.0	-	50.7	39.2	11.5
04:45 AM - 04:50 AM	65.0	52.7	12.3	0.5	-	67.5	40.6	26.9
04:50 AM - 04:55 AM	58.7	56.7	2.0	4.5	-	57.2	40.9	7.3
04:55 AM - 05:00 AM	57.0	56.4	0.6	7.0	-	53.0	44.6	8.4
05:00 AM - 05:05 AM	57.7	56.2	1.5	4.5	-	56.2	41.8	14.4
05:05 AM - 05:10 AM	57.0	57.6	-0.6	7.0	-	53.0	46.2	6.8
05:10 AM - 05:15 AM	58.6	57.3	1.3	7.0	-	54.6	43.2	11.4
05:15 AM - 05:20 AM	59.1	57.5	1.6	4.5	-	57.6	47.4	14.2
05:20 AM - 05:25 AM	56.4	56.5	-0.1	7.0	-	52.4	46.2	7.8
05:25 AM - 05:30 AM	56.0	59.2	-3.2	7.0	-	52.8	48.5	3.5
05:30 AM - 05:35 AM	64.8	58.2	6.6	1.0	-	66.8	47.1	19.7
05:35 AM - 05:40 AM	57.4	58.8	-1.4	7.0	-	51.4	48.5	4.9
05:40 AM - 05:45 AM	57.8	58.7	-0.9	7.0	-	51.8	49.9	4.9
05:45 AM - 05:50 AM	60.5	59.5	1.0	7.0	-	56.5	49.4	7.1
05:50 AM - 05:55 AM	59.3	59.9	-0.6	7.0	-	55.3	49.3	6.0
05:55 AM - 06:00 AM	59.5	59.5	0.0	7.0	-	52.5	48.1	5.4
06:00 AM - 06:05 AM	60.0	60.6	-0.6	7.0	53.0	49.4	3.6	
06:00 AM - 08:00 AM	59.6	57.8	1.8	4.5	55.1	-	43.2	11.9
08:00 AM - 09:00 AM	57.8	57.2	0.6	7.0	50.8	-	43.3	7.5



Analysis / Test Report

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O : 0000000000
Project Name : Project AIE Rayong
Project Location : Project AIE RayongLot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270128-1

Page 1 of 3

Sample No. 2211210-17
Parameter (เสียงรบกวน)
Location N3 (สวนสาธารณะ) (GPS 47P 0730757,1407391)
Measurement Date Mar 17 - 18, 2022
Measurement by Nontachai Uppathamp
Sound Level Meter 01222716

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัด	ผลต่าง	ค่าปรับ	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ฐาน	ค่าปรับ
					ค่าความถี่	ค่าความถี่	การรบกวน
08:00 AM - 09:00 AM	57.8	60.6	-2.8	7.0	50.8	-	55.2
09:00 AM - 10:00 AM	59.6	56.7	2.9	3.0	56.6	-	54.4
10:00 AM - 11:00 AM	55.1	50.9	4.2	2.0	53.1	-	49.9
11:00 AM - 12:00 PM	50.4	56.3	-5.9	7.0	43.4	-	48.2
12:00 PM - 01:00 PM	49.7	47.2	2.5	3.0	46.7	-	46.1
01:00 PM - 02:00 PM	52.2	49.2	3.0	3.0	49.2	-	47.1
02:00 PM - 03:00 PM	50.5	52.2	-1.7	7.0	43.5	-	49.2
03:00 PM - 04:00 PM	50.8	52.2	-1.4	7.0	43.8	-	51.5
04:00 PM - 05:00 PM	46.9	50.5	-3.6	7.0	39.9	-	51.5
05:00 PM - 06:00 PM	68.7	52.1	16.6	0.0	68.7	-	51.4
06:00 PM - 07:00 PM	54.1	51.8	2.3	4.5	49.6	-	50.8
07:00 PM - 08:00 PM	53.4	51.8	1.6	4.5	48.9	-	51.0
08:00 PM - 09:00 PM	47.6	51.6	-4.0	7.0	40.6	-	50.8
09:00 PM - 10:00 PM	45.5	52.2	-6.7	7.0	38.5	-	51.4
10:00 PM - 10:05 PM	50.1	52.2	-2.1	7.0	-	46.1	51.6
10:05 PM - 10:10 PM	56.5	53.0	3.5	2.0	-	57.5	51.9
10:10 PM - 10:15 PM	57.0	52.2	4.8	1.5	-	58.5	51.4
10:15 PM - 10:20 PM	55.7	52.1	3.6	2.0	-	56.7	51.5
10:20 PM - 10:25 PM	39.6	52.0	-12.4	7.0	-	35.6	51.4
10:25 PM - 10:30 PM	39.8	52.3	-12.5	7.0	-	34.8	51.7
10:30 PM - 10:35 PM	39.4	52.2	-12.8	7.0	-	35.4	51.4
10:35 PM - 10:40 PM	38.3	51.6	-13.3	7.0	-	34.3	50.6
10:40 PM - 10:45 PM	39.6	51.8	-12.2	7.0	-	35.6	51.0
10:45 PM - 10:50 PM	39.9	52.1	-12.2	7.0	-	34.9	51.1
10:50 PM - 10:55 PM	39.2	51.8	-12.6	7.0	-	35.2	51.0
10:55 PM - 11:00 PM	40.3	52.2	-11.9	7.0	-	36.3	51.2
11:00 PM - 11:05 PM	40.4	52.0	-11.6	7.0	-	36.5	51.3
11:05 PM - 11:10 PM	41.2	48.5	2.7	7.0	-	37.2	47.0
11:10 PM - 11:15 PM	43.8	49.7	-5.9	7.0	-	39.8	46.5
11:15 PM - 11:20 PM	46.0	49.0	-3.0	7.0	-	42.0	46.0
11:20 PM - 11:25 PM	45.8	47.6	-1.8	7.0	-	41.8	46.5
11:25 PM - 11:30 PM	45.6	47.7	-2.1	7.0	-	41.6	46.9
11:30 PM - 11:35 PM	41.1	48.4	-7.3	7.0	-	37.1	47.0
11:35 PM - 11:40 PM	41.5	46.5	-5.0	7.0	-	39.5	47.4
11:40 PM - 11:45 PM	44.4	47.9	-3.5	7.0	-	40.4	46.9
11:45 PM - 11:50 PM	45.4	47.4	-2.0	7.0	-	41.4	46.2
11:50 PM - 11:55 PM	42.9	47.3	-4.4	7.0	-	38.9	46.1
11:55 PM - 12:00 AM	45.6	47.8	-2.2	7.0	-	41.6	46.5
12:00 AM - 12:05 AM	45.2	48.2	-3.0	7.0	-	41.2	47.1
12:05 AM - 12:10 AM	47.0	48.4	-1.4	7.0	-	43.0	47.2

We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief. We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief.

Approved by

Dej Chanchong
Manager

Senior

ADDRESS 616/10 Moo 5, T. Maekhan Khru A. Phrakong Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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Analysis / Test Report

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O : 0000000000
Project Name : Project AIE Rayong
Project Location : Project AIE RayongLot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270128-1

Page 3 of 3

Sample No. 2211210-17
Parameter (เสียงรบกวน)
Location N3 (สวนสาธารณะ) (GPS 47P 0730757,1407391)
Measurement Date Mar 17 - 18, 2022
Measurement by Nontachai Uppathamp
Sound Level Meter 01222716

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัด	ผลต่าง	ค่าปรับ	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ฐาน	ค่าปรับ
					ค่าความถี่	ค่าความถี่	การรบกวน
08:30 AM - 09:35 AM	41.9	48.8	-6.9	7.0	37.9	46.2	-8.3
09:35 AM - 10:40 AM	43.0	50.7	-7.7	7.0	39.0	49.6	-10.6
10:40 AM - 03:45 AM	42.6	51.3	-8.7	7.0	38.6	50.6	-12.0
03:45 AM - 03:50 AM	44.6	51.2	-6.6	7.0	40.6	50.6	-10.0
03:50 AM - 03:55 AM	43.4	51.2	-7.8	7.0	39.4	50.4	-11.0
03:55 AM - 04:00 AM	43.4	51.4	-8.0	7.0	39.4	50.8	-11.4
04:00 AM - 04:05 AM	43.2	51.6	-8.4	7.0	39.2	51.1	-11.9
04:05 AM - 04:10 AM	43.3	51.7	-8.4	7.0	39.3	51.1	-11.8
04:10 AM - 04:15 AM	43.7	51.5	-7.8	7.0	39.7	50.9	-11.2
04:15 AM - 04:20 AM	45.4	51.5	-6.1	7.0	41.4	50.9	-9.5
04:20 AM - 04:25 AM	47.5	52.0	-4.5	7.0	43.5	51.0	-7.5
04:25 AM - 04:30 AM	45.9	52.1	-6.2	7.0	41.9	50.5	-8.6
04:30 AM - 04:35 AM	45.9	51.8	-5.9	7.0	41.9	51.2	-9.3
04:35 AM - 04:40 AM	49.9	51.7	-1.8	7.0	45.9	51.1	-5.2
04:40 AM - 04:45 AM	64.7	51.7	13.0	0.0	67.7	50.7	17.0
04:45 AM - 04:50 AM	73.7	52.5	21.2	0.0	76.7	50.8	25.9
04:50 AM - 04:55 AM	70.3	50.8	19.5	0.0	73.3	50.0	23.3
04:55 AM - 05:00 AM	63.1	50.9	12.2	0.5	65.6	50.3	15.3
05:00 AM - 05:05 AM	51.7	50.9	0.8	7.0	47.7	50.2	-2.5
05:05 AM - 05:10 AM	55.0	51.0	4.0	2.0	56.0	50.1	5.9
05:10 AM - 05:15 AM	55.9	51.4	4.5	1.5	57.4	50.6	6.8
05:15 AM - 05:20 AM	53.0	52.4	0.6	7.0	49.0	50.7	-1.7
05:20 AM - 05:25 AM	49.8	50.9	-1.0	7.0	45.9	50.4	-4.5
05:25 AM - 05:30 AM	46.4	51.4	-5.0	7.0	42.4	50.9	-8.5
05:30 AM - 05:35 AM	47.2	51.6	-4.4	7.0	43.2	51.0	-7.8
05:35 AM - 05:40 AM	45.8	51.5	-5.7	7.0	41.8	50.9	-9.1
05:40 AM - 05:45 AM	53.4	51.9	1.5	4.5	51.9	51.4	0.5
05:45 AM - 05:50 AM	45.6	52.1	-6.5	7.0	41.6	51.4	-9.8
05:50 AM - 05:55 AM	43.9	51.6	-7.7	7.0	39.9	51.0	-11.1
05:55 AM - 06:00 AM	48.5	51.7	-3.2	7.0	44.5	51.2	-6.7
06:00 AM - 07:00 AM	47.9	52.1	-4.2	7.0	40.9	51.4	-10.5
07:00 AM - 08:00 AM	51.2	50.3	0.9	7.0	44.2	51.4	-7.2

Reference Method : Based on ISO 1996-1 and ISO 1996-2

- หมายเหตุ :
1. การตรวจวัดค่าเสียงรบกวน ณ ที่ว่าการดำเนินการตรวจวัดเสียงรบกวนและประเมินเสียงจากแหล่งกำเนิดจากข้อมูลการตรวจวัด ณ วันที่ 29 มี.ค. 2565
 2. การตรวจวัดค่าเสียงรบกวน ณ ที่ว่าการดำเนินการตรวจวัดเสียงรบกวนและประเมินเสียงจากแหล่งกำเนิดจากข้อมูลการตรวจวัด ณ วันที่ 29 มี.ค. 2565
 3. การตรวจวัดค่าเสียงรบกวน ณ ที่ว่าการดำเนินการตรวจวัดเสียงรบกวนและประเมินเสียงจากแหล่งกำเนิดจากข้อมูลการตรวจวัด ณ วันที่ 29 มี.ค. 2565
 4. การตรวจวัดค่าเสียงรบกวน ณ ที่ว่าการดำเนินการตรวจวัดเสียงรบกวนและประเมินเสียงจากแหล่งกำเนิดจากข้อมูลการตรวจวัด ณ วันที่ 29 มี.ค. 2565

We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief. We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief.

Approved by

Dej Chanchong
Senior ManagerADDRESS 616/10 Moo 5, T. Maekhan Khru A. Phrakong Rayong 21140 Thailand. PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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Analysis / Test Report

TESTING
No. 0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O : 0000000000
Project Name : Project AIE Rayong
Project Location : Project AIE RayongLot ID: 2211210
Date Received : Mar 23, 2022
Date Reported : Mar 24, 2022
Report Number : 2270128-1

Page 2 of 3

Sample No. 2211210-17
Parameter (เสียงรบกวน)
Location N3 (สวนสาธารณะ) (GPS 47P 0730757,1407391)
Measurement Date Mar 17 - 18, 2022
Measurement by Nontachai Uppathamp
Sound Level Meter 01222716

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัด	ผลต่าง	ค่าปรับ	ปรับค่าเสียงจากแหล่งกำเนิด	เสียงที่ฐาน	ค่าปรับ
					ค่าความถี่	ค่าความถี่	การรบกวน
12:10 AM - 12:15 AM	49.1	48.8	0.3	7.0	-	45.1	47.5
12:15 AM - 12:20 AM	47.3	48.8	-1.5	7.0	-	43.3	47.8
12:20 AM - 12:25 AM	45.1	48.6	-3.5	7.0	-	41.1	47.8
12:25 AM - 12:30 AM	42.1	48.6	-6.5	7.0	-	38.1	47.2
12:30 AM - 12:35 AM	42.9	48.7	-5.8	7.0	-	38.9	46.4
12:35 AM - 12:40 AM	56.0	48.3	7.7	0.5	-	58.5	47.1
12:40 AM - 12:45 AM	66.2	49.2	17.0	0.0	-	69.2	47.4
12:45 AM - 12:50 AM	69.2	48.2	21.0	0.0	-	72.2	46.4
12:50 AM - 12:55 AM	62.8	47.6	15.2	0.0	-	65.8	46.4
12:55 AM - 01:00 AM	38.0	46.6	-8.6	7.0	-	34.0	44.7
01:00 AM - 01:05 AM	38.5	47.8	-9.3	7.0	-	34.5	47.1
01:05 AM - 01:10 AM	37.9	47.7	-9.8	7.0	-	33.9	46.3
01:10 AM - 01:15 AM	39.1	47.2	-8.1	7.0	-	35.1	45.8
01:15 AM - 01:20 AM	37.9	46.6	-8.7	7.0	-	33.9	45.6
01:20 AM - 01:25 AM	38.0	47.0	-9.0	7.0	-	34.0	45.8
01:25 AM - 01:30 AM	38.4	47.1	-8.7	7.0	-	34.4	46.2
01:30 AM - 01:35 AM	39.0	49.8	-10.8	7.0	-	35.0	45.7
01:35 AM - 01:40 AM	40.0	48.8	-8.8	7.0	-	36.0	46.3
01:40 AM - 01:45 AM	39.0	46.1	-7.1	7.0	-	35.0	47.3
01:45 AM - 01:50 AM	39.0	46.5	-7.5	7.0	-	35.0	47.2
01:50 AM - 01:55 AM	39.4	49.1	-9.7	7.0	-	35.4	47.8
01:55 AM - 02:00 AM	39.3	51.2	-11.9	7.0	-	35.3	48.3
02:00 AM - 02:05 AM	38.4	49.3	-10.9	7.0	-	34.4	47.8
02:05 AM - 02:10 AM	39.0	51.0	-12.0	7.0	-	35.0	48.4
02:10 AM - 02:15 AM	44.8	50.5	-5.7	7.0	-	40.8	47.4
02:15 AM - 02:20 AM	42.0	49.0	-7.0	7.0	-	38.0	46.3
02:20 AM - 02:25 AM	40.2	48.5	-8.3	7.0	-	36.2	46.1
02:25 AM - 02:30 AM	40.6	47.6	-7.0	7.0	-	36.6	45.6
02:30 AM - 02:35 AM	41.2	47.0	-5.8	7.0	-	37.2	45.7
02:35 AM - 02:40 AM	42.3	47.0	-4.7	7.0	-	38.3	47.4
02:40 AM - 02:45 AM	46.6	47.0	-0.4	7.0	-	36.6	45.5
02:45 AM - 02:50 AM	40.8	46.5	-5.7	7.0	-	36.8	46.5
02:50 AM - 02:55 AM	41.8	46.8	-5.0	7.0	-	37.8	45.4
02:55 AM - 03:00 AM	40.4	47.1	-6.7	7.0	-	36.4	46.2
03:00 AM - 03:05 AM	41.0	48.2	-7.2	7.0	-	37.0	46.6
03:05 AM - 03:10 AM	43.5	46.7	-3.2	7.0	-	39.5	45.0
03:10 AM - 03:15 AM	42.5	47.6	-5.1	7.0	-	38.5	46.2
03:15 AM - 03:20 AM	41.5	47.2	-5.7	7.0	-	37.5	46.3
03:20 AM - 03:25 AM	42.0	46.4	-4.4	7.0	-	38.0	44.2
03:25 AM - 03:30 AM	43.2	46.5	-3.3	7.0	-	39.2	45.4

We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief. We warrant that the data and information provided in this report are true and correct to the best of our knowledge and belief.

Approved by

ค-4

คุณภาพน้ำผิวดิน



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สกยพจาง

Project Name : Project AIE Rayong

Project Location:

TESTING
No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276074-1

Page 1 of 2

Sample Number	2214017-1
Sampled Date	Mar 14, 2022 10:20 AM
Sample Description	Surface Water
Location	W1 (คลองสามกอนไหลผ่านจุดระบายน้ำทิ้งของโครงการ 500 เมตร)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.010	≤0.01	Based on APHA (2017), 3125	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Copper	mg/L	0.0003	0.0005	Not Detected	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.64	≤1	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.0008	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.02	≤1	Based on APHA (2017), 3125	Bangkok

Microbiological Testing

[A] Total Coliform	MPN/100mL	-	-	240.0	No Standard	APHA (2017), 9221 B	Bangkok
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Water Testing

Ammonia Nitrogen *	mg/L	0.02	0.05	0.23	≤0.5	Based on APHA (2017), 4500-NH3 F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	3	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.8	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.048	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.23	≤5	Based on APHA (2017), 4500-NO3(E)	Rayong
pH (on site) *	-	-	-	6.6	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong

The above results are valid only for the analysis/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. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สกยพจาง

Project Name : Project AIE Rayong

Project Location:



TESTING
No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276074-1

Page 2 of 2

Sample Number	2214017-1
Sampled Date	Mar 14, 2022 10:20 AM
Sample Description	Surface Water
Location	W1 (คลองสามกอนไหลผ่านจุดระบายน้ำทิ้งของโครงการ 500 เมตร)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	178	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	20.8	No Standard	Based on APHA (2017), 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 4)
n: Change from Natural condition not more than 3 degree C

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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.

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สัตยกร รุ่งเรือง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2237073
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2267814-1

Page 1 of 3

Sample Number 2237073-1
Sampled Date Mar 23, 2022 2:30 PM
Sample Description Surface Water
Location W1 (คลองสามก้นไหลผ่านจุดระบายน้ำทิ้งของโครงการ 500 เมตร)
Date Analysis Commenced Mar 23, 2022
Condition of Sample data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Temperature	Degree C	-	-	27.8	Based on APHA (2017), 2550 B	Rayong

Sampled By : Paramet Sattayakun

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



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สัตยกร รุ่งเรือง
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276075-1

Page 1 of 2

Sample Number 2214017-2
Sampled Date Mar 14, 2022 10:33 AM
Sample Description Surface Water
Location W2 (คลองสามก้นไหลผ่านจุดระบายน้ำทิ้งของโครงการ)
Date Analysis Commenced Mar 14, 2022
Condition of Sample Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	Based on APHA (2017), 3125	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
[A] Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.34	≤1	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.004	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.08	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	330.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.09	≤0.5	Based on APHA (2017), 4500-NH ₃ F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	4	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.2	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m ³ /s	-	-	0.060	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.94	≤5	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site) *		-	-	8.4	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	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.

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ๖-225-๖-5283

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สัตตยาจาง
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276075-1

Page 2 of 2

Sample Number	2214017-2					
Sampled Date	Mar 14, 2022 10:33 AM					
Sample Description	Surface Water					
Location	W2 (คลองสามบริเวณจุดระบายน้ำทิ้งของโครงการ)					
Date Analysis Commenced	Mar 14, 2022					
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing						
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1150	No Standard	APHA (2017), 2540 C
Turbidity *	NTU	-	0.1	11.2	No Standard	Based on APHA (2017), 2130 B

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

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.

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สัตตยาจาง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2237073
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2267814-1

Page 2 of 3

Sample Number	2237073-2					
Sampled Date	Mar 23, 2022 2:35 PM					
Sample Description	Surface Water					
Location	W2 (คลองสามบริเวณจุดระบายน้ำทิ้งของโครงการ)					
Date Analysis Commenced	Mar 23, 2022					
Condition of Sample	data sheet					
Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Temperature	Degree C	-	-	28.3	Based on APHA (2017), 2550 B	Rayong

Sampled By : Paramet Sattayakun

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

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 7-323-9-9445

Approved by

D. Chongchon

Dej Changchon
Manager
ทะเบียนเลขที่ 7-225-8-5283

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตฤกษ์

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276076-1

Page 1 of 2

Sample Number	2214017-3
Sampled Date	Mar 14, 2022 10:54 AM
Sample Description	Surface Water
Location	W3 (คลองสามหลังไหลผ่านจุดระบายน้ำทั้งโครงการ 500 เมตร)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Arsenic	mg/L	0.0003	0.0005	0.007	≤0.01	Based on APHA (2017), 3125	Bangkok
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Copper	mg/L	0.0003	0.0005	0.002	≤0.1	Based on APHA (2017), 3125	Bangkok
^[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Manganese	mg/L	0.0003	0.0005	0.60	≤1	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
^[A] Nickel	mg/L	0.0003	0.0005	0.005	≤0.1	Based on APHA (2017), 3125	Bangkok
^[A] Zinc	mg/L	0.003	0.005	0.10	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
^[A] Total Coliform	MPN/100mL	-	-	33000.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.34	≤0.5	Based on APHA (2017), 4500-NH ₃ F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	3	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.5	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m ³ /s	-	-	1.095	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.95	≤5	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site) *	-	-	-	8.5	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตฤกษ์

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276076-1

Page 2 of 2

Sample Number	2214017-3
Sampled Date	Mar 14, 2022 10:54 AM
Sample Description	Surface Water
Location	W3 (คลองสามหลังไหลผ่านจุดระบายน้ำทั้งโครงการ 500 เมตร)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1210	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	29.1	No Standard	Based on APHA (2017), 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 4)
n: Change from Natural condition not more than 3 degree C

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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.

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Thailand 10500
P/O : สัตยการ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2237073
Date Received : Mar 23, 2022
Date Reported : Mar 25, 2022
Report Number : 2267814-1

Page 3 of 3

Sample Number	2237073-3
Sampled Date	Mar 23, 2022 2:50 PM
Sample Description	Surface Water
Location	W3 (คลองสามหลังไหลผ่านจุดระบายน้ำทั้งโครงการ 500 เมตร)
Date Analysis Commenced	Mar 23, 2022
Condition of Sample	data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Temperature	Degree C	-	-	29.3	Based on APHA (2017), 2550 B	Rayong

Sampled By : Paramet Sattayakun

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

Technical Management

N. Banngkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Manager
ทะเบียนเลขที่ ๖-225-๖-5283

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P/O : สัตยการ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276077-1

Page 1 of 2

Sample Number	2214017-4
Sampled Date	Mar 14, 2022 11:05 AM
Sample Description	Surface Water
Location	W5.2 (คลองบางกระบือบริเวณจุดระบายน้ำทั้งนิคม)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Based on APHA (2017), 3125	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.0009	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.84	≤1	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.001	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.03	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	3300.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.12	≤0.5	Based on APHA (2017), 4500-NH ₃ F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	2	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.4	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.004	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.45	≤5	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site) *		-	-	7.5	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong

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Thailand 10500
P/O : สดุดดาจาง
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276077-1

Page 2 of 2

Sample Number	2214017-4
Sampled Date	Mar 14, 2022 11:05 AM
Sample Description	Surface Water
Location	WS.2 (คลองบางกระบือบริเวณประตูระบายน้ำฝั่งเดิม)
Date Analysis Commenced	Mar 14, 2022
Condition of Sample	Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.4	n'	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	182	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	12.9	No Standard	Based on APHA (2017), 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 4)
n': Change from Natural condition not more than 3 degree C
Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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

N. Banchongkit

Narumon Banchongkit
Supervisor

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Thailand 10500
P/O : สดุดดาจาง
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276078-1

Page 1 of 1

Sample Number	2214017-5
Sampled Date	Mar 14, 2022 2:14 PM
Sample Description	Surface Water
Location	W4 (คลองคลองบริเวณสะพานข้ามแม่น้ำบางปะกง)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0008	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	210	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	8	No Standard	APHA (2017), 2540 D	Rayong

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

Remark :
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Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Thailand 10500
P/O : ชัยฤกษ์
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276079-1

Sample Number 2214017-6
Sampled Date Mar 14, 2022 2:31 PM
Sample Description Surface Water
Location W5.1 (คลองบางกระทึก บริเวณสะพานข้ามถนนมิตรภาพ)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	105	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	11	No Standard	APHA (2017), 2540 D	Rayong

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

Remark :
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N. Banchongkit

Narumon Banchongkit
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Thailand 10500
P/O : ชัยฤกษ์
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2214017
Date Received : Mar 14, 2022
Date Reported : Apr 01, 2022
Report Number : 2276080-1

Sample Number 2214017-7
Sampled Date Mar 14, 2022 1:54 PM
Sample Description Surface Water
Location W6 (บริเวณที่คลองสอง คลองสามและคลองบางกระทึกในเขตรวมกัน)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	972	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	15	No Standard	APHA (2017), 2540 D	Rayong

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

Remark :
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Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Thailand 10500

P/O : สหพัฒนพิบูล

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214017-8
Sampled Date	Mar 14, 2022 1:59 PM
Sample Description	Surface Water
Location	W7.1 (บริเวณท่ารถคลองเตย)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0007	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	208	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	7	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

Remark :

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Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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

No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276081-1

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สหพัฒนพิบูล

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214017-9
Sampled Date	Mar 14, 2022 11:36 AM
Sample Description	Surface Water
Location	W7.2 (คลองบางกระพูน)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Cadmium	mg/L	0.0003	0.0005	0.0005	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0005	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	11700	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	16	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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.

Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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TESTING

No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276082-1

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตฤกษ์

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214017-10
Sampled Date	Mar 14, 2022 1:44 PM
Sample Description	Surface Water
Location	W7.3 (คลองบางเบิด)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.001	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1050	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	20	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

Remark :

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

No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276083-1

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตฤกษ์

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214017-11
Sampled Date	Mar 14, 2022 11:25 AM
Sample Description	Surface Water
Location	W7.4 (เหนือจุดปล่อยน้ำทิ้งประมาณ 100 เมตรในรางระบายน้ำถนนฯ ทางแดง)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	0.0005	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	7820	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	16	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

Remark :

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TESTING

No.0042

Lot ID: 2214017

Date Received : Mar 14, 2022

Date Reported : Apr 01, 2022

Report Number : 2276084-1

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Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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N. Banchongkit

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สกฤตจารัง

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

Page 1 of 15

Sample Number	2263073-1
Sampled Date	Jun 20, 2022 9:30 AM
Sample Description	Surface Water
Location	W1 (คลองสามก่อก่อนโหล่งน้ำจระเขยน้ำทิ้งของโครงการ 500 เมตร)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.010	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.72	≤1	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	0.0008	≤0.1	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.006	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	790.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.44	≤0.5	Based on APHA (2017), 4500-NH3 F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	<2	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	6.7	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.010	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.19	≤5	Based on APHA (2017), 4500-NO3(E)	Rayong
pH (on site) *	-	-	-	7.2	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong

Approved by

D. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สกฤตจารัง

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

Page 2 of 15

Sample Number	2263073-1
Sampled Date	Jun 20, 2022 9:30 AM
Sample Description	Surface Water
Location	W1 (คลองสามก่อก่อนโหล่งน้ำจระเขยน้ำทิ้งของโครงการ 500 เมตร)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	28.7	n'	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	158	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	23.4	No Standard	Based on APHA (2017), 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 4)

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

Sampled By : Sayan Yatbamrung

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. Changchon

Dej Changchon
Senior Manager

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Thailand 10500
P/O : สหฤทัย
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2263073
Date Received : Jun 20, 2022
Date Reported : Jul 07, 2022
Report Number : 2323140-1

Page 3 of 15

Sample Number	2263073-2
Sampled Date	Jun 20, 2022 9:40 AM
Sample Description	Surface Water
Location	W2 (คลองสามบริเวณจุดระบายน้ำทิ้งของโครงการ)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Copper	mg/L	0.0003	0.0005	0.0008	≤0.1	Based on APHA (2017), 3125	Bangkok
^[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Manganese	mg/L	0.0003	0.0005	0.35	≤1	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
^[A] Nickel	mg/L	0.0003	0.0005	0.005	≤0.1	Based on APHA (2017), 3125	Bangkok
^[A] Zinc	mg/L	0.003	0.005	0.16	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
^[A] Total Coliform	MPN/100mL	-	-	33.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.07	≤0.5	Based on APHA (2017), 4500-NH ₃ F	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	7.0	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m ³ /s	-	-	0.050	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.87	≤5	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site) *	-	-	-	8.6	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong
Temperature *	Degree C	-	-	31.0	n'	Based on APHA (2017), 2550 B	Rayong

Approved by

D. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สหฤทัย
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2263073
Date Received : Jun 20, 2022
Date Reported : Jul 07, 2022
Report Number : 2323140-1

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Sample Number	2263073-2
Sampled Date	Jun 20, 2022 9:40 AM
Sample Description	Surface Water
Location	W2 (คลองสามบริเวณจุดระบายน้ำทิ้งของโครงการ)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1350	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	10.6	No Standard	Based on APHA (2017), 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 4)
n': Change from Natural condition not more than 3 degree C

Sampled By : Sayan Yatbamrung

Remark :

- LOD : Limit of Detection
- "LQ" : 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

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2280161
Date Received : Jun 29, 2022
Date Reported : Jul 05, 2022
Report Number : 2359543-1

Page 1 of 2

Sample Number	2280161-1
Sampled Date	Jun 29, 2022 2:40 PM
Sample Description	Surface Water
Location	W2 (คลองสามกษัตริย์พระบาทสมเด็จพระปกเกล้าเจ้าอยู่หัว)
Date Analysis Commenced	Jun 30, 2022
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤4	APHA (2017), 5210 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 4)
n: Change from Natural condition not more than 3 degree C
Sampled By : Narunat thammassaro

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

Approved by

N. Banachit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : ศุภฤกษ์
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042
Lot ID: 2263073
Date Received : Jun 20, 2022
Date Reported : Jul 07, 2022
Report Number : 2323140-1

Page 5 of 15

Sample Number	2263073-3
Sampled Date	Jun 20, 2022 10:13 AM
Sample Description	Surface Water
Location	W3 (คลองสามกษัตริย์พระบาทสมเด็จพระปกเกล้าเจ้าอยู่หัว 500 เมตร)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.006	≤0.01	Based on APHA (2017), 3125	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.001	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	<0.01	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
[A] Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.37	≤1	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.005	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.12	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	7900.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.34	≤0.5	Based on APHA (2017), 4500-NH3 F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	3	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.9	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.140	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	1.00	≤5	Based on APHA (2017), 4500-NO3(E)	Rayong
pH (on site) *		-	-	8.5	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong

Approved by

D. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สหฤทัย

Project Name : Project AIE Rayong

Project Location :

Sample Number	2263073-3
Sampled Date	Jun 20, 2022 10:13 AM
Sample Description	Surface Water
Location	W3 (คลองบางหลวงเหนือหน้าประตูระบายน้ำทั้งโครงการ 500 เมตร)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	32.3	n ¹	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1360	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	21.1	No Standard	Based on APHA (2017), 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 4)

n¹: Change from Natural condition not more than 3 degree C

Sampled By : Sayan Yatbamrung

Remark :

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

No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สหฤทัย

Project Name : Project AIE Rayong

Project Location :

Sample Number	2263073-4
Sampled Date	Jun 20, 2022 10:25 AM
Sample Description	Surface Water
Location	W5.2 (คลองบางกระพรวนบริเวณจุดระบายน้ำทั้งนิคม)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
[A] Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Based on APHA (2017), 3125	Bangkok
[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
[A] Copper	mg/L	0.0003	0.0005	0.0007	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
[A] Lead	mg/L	0.0003	0.0005	Not Detected	≤0.05	Based on APHA (2017), 3125	Bangkok
[A] Manganese	mg/L	0.0003	0.0005	0.77	≤1	Based on APHA (2017), 3125	Bangkok
[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
[A] Nickel	mg/L	0.0003	0.0005	0.001	≤0.1	Based on APHA (2017), 3125	Bangkok
[A] Zinc	mg/L	0.003	0.005	0.03	≤1	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
[A] Total Coliform	MPN/100mL	-	-	1300.0	No Standard	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen *	mg/L	0.02	0.05	0.17	≤0.5	Based on APHA (2017), 4500-NH ₃ F	Rayong
BOD (5 days at 20 Degree C) *	mg/L	-	2	<2	≤4	APHA (2017), 5210 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.005	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen *	mg/L	-	0.1	5.8	≥2	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.000	No Standard	Flow meter	Rayong
Nitrate as N *	mg/L	0.015	0.05	0.43	≤5	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site) *		-	-	6.9	No Standard	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.0005	0.001	Not Detected	≤0.005	APHA (2017), 5530 D	Rayong



TESTING

No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

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Dej Changchon

Dej Changchon
Senior Manager

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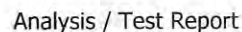
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P/O : สภานายก
Project Name : Project AIE Rayong
Project Location:



Lot ID: 2263073
Date Received : Jun 20, 2022
Date Reported : Jul 07, 2022
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Sample Number	2263073-4
Sampled Date	Jun 20, 2022 10:25 AM
Sample Description	Surface Water
Location	W5.2 (คลองบางกระทึกหน้าบริเวณจุดระบายน้ำทั้งปริม)
Date Analysis Commenced	Jun 20, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Temperature *	Degree C	-	-	30.8	n'	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	238	No Standard	APHA (2017), 2540 C	Rayong
Turbidity *	NTU	-	0.1	10.6	No Standard	Based on APHA (2017), 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 4)

Sampled By : Sayan Yatbamrung

Remark :

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Approved by


Dej Changchon
Senior Manager

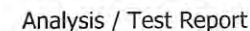
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P/O : สัญญาจ้าง
Project Name : Project AIE Rayong
Project Location:



Lot ID: 2263073
Date Received : Jun 20, 2022
Date Reported : Jul 07, 2022
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Sample Number	2263073-5
Sampled Date	Jun 20, 2022 2:10 PM
Sample Description	Surface Water
Location	W4 (คลองสองบริเวณสะพานบ้านเนินโป่ง)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0007	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok

Water Testing

Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	230	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	9	No Standard	APHA (2017), 2540 D	Rayong

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

Sampled By : Sayan Yatbamrung

Remark :

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Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตภากร

Project Name : Project AIE Rayong

Project Location :

TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

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Sample Number	2263073-6						
Sampled Date	Jun 20, 2022 2:42 PM						
Sample Description	Surface Water						
Location	W5.1 (คลองบางกระทึก บริเวณสะพานข้ามถนนมิตรภาพ)						
Date Analysis Commenced	Jun 21, 2022						
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	108	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	16	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yabamrungs

Remark :

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Approved by

Dej Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตภากร

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

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Sample Number	2263073-7						
Sampled Date	Jun 20, 2022 11:24 AM						
Sample Description	Surface Water						
Location	W6 (บริเวณที่คลองสอง คลองสามและคลองบางกระทึกไหลมารวมกัน)						
Date Analysis Commenced	Jun 21, 2022						
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0009	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	936	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	9	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yabamrungs

Remark :

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Approved by

Dej Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

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Thailand 10500

P/O : สฤตญา รัง

Project Name : Project AIE Rayong

Project Location :

TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

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Sample Number	2263073-8
Sampled Date	Jun 20, 2022 1:52 PM
Sample Description	Surface Water
Location	W7.1 (บริเวณท่ารถคลองหนึ่ง)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0006	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	156	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	6	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yatbamrung

Remark :

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Approved by

D. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500

P/O : สฤตญา รัง

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

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Sample Number	2263073-9
Sampled Date	Jun 20, 2022 11:14 AM
Sample Description	Surface Water
Location	W7.2 (คลองบางกรวยใหญ่)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0008	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1150	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	9	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yatbamrung

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. Changchon

Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สัตยากรัง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

Page 14 of 15

Sample Number	2263073-10
Sampled Date	Jun 20, 2022 10:55 AM
Sample Description	Surface Water
Location	W7.3 (คลองบางมด)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	0.0009	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	0.0008	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	7800	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	94	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yatbamrung

Remark :

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Approved by

D. Changchon

Dej Changchon
Senior Manager

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Client : Asia Industrial Estate Co., Ltd.

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Thailand 10500

P/O : สัตยากรัง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0042

Lot ID: 2263073

Date Received : Jun 20, 2022

Date Reported : Jul 07, 2022

Report Number : 2323140-1

Page 15 of 15

Sample Number	2263073-11
Sampled Date	Jun 20, 2022 10:45 AM
Sample Description	Surface Water
Location	W7.4 (เหนือจุดปล่อยน้ำทิ้งประมาณ 100 เมตรในรางระบายน้ำนิคมฯ ผาแดง)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
^[A] Cadmium	mg/L	0.0003	0.0005	0.0008	≤0.005	Based on APHA (2017), 3125	Bangkok
^[A] Lead	mg/L	0.0003	0.0005	<0.0005	≤0.05	Based on APHA (2017), 3125	Bangkok
^[A] Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.002	Based on US EPA, Method 1631 Revision E	Bangkok
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5180	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C *	mg/L	-	5	23	No Standard	APHA (2017), 2540 D	Rayong

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

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

Sampled By : Sayan Yatbamrung

Remark :

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Dej Changchon
Senior Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : ชัยฤทธิชัย
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 1 of 8

Sample Number 2214234-1
Sampled Date Mar 15, 2022 10:40 AM
Sample Description Seawater
Location CW1/CW5-100 (ปากคลองบางกระทึก ห่างจากชายฝั่ง 100 เมตร)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Chromium	mg/L	0.001	0.003	Not Detected	≤0.1	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.001	0.003	<0.003	≤0.008	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Iron	mg/L	0.001	0.003	0.30	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.001	0.003	0.02	≤0.1	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Zinc	mg/L	0.001	0.003	0.01	≤0.05	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	79.0	≤1000	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	<0.05	≤0.95	Based on APHA (2017), 4500-NH ₃ -F	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.007	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
Fluoride	mg/L	0.05	0.2	0.8	≤1	APHA (2017), 4500-F(C)	Rayong
Nitrate as N	mg/L	0.015	0.05	Not Detected	≤0.06	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site)	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.0005	0.001	Not Detected	≤0.03	APHA (2017), 5530 D	Rayong
Phosphate as P	mg/L	0.002	0.005	0.029	≤0.045	Based on APHA (2017), 4500-P(E)	Rayong

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Sawitree N.

Sawitree Noisangiam
Assistant Manager

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Thailand 10500
P/O : ชัยฤทธิชัย
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 2 of 8

Sample Number 2214234-1
Sampled Date Mar 15, 2022 10:40 AM
Sample Description Seawater
Location CW1/CW5-100 (ปากคลองบางกระทึก ห่างจากชายฝั่ง 100 เมตร)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.6	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Sulfide as H ₂ S	mg/L	-	0.01	0.01	≤0.01	Based on APHA (2017), 4500-S ₂ (D)	Bangkok
Temperature	Degree C	-	-	28.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	0.5	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

Remark :

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

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Sawitree Noisangiam
Assistant Manager

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Thailand 10500
P/O : สัตยากร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 3 of 8

Sample Number 2214234-2
Sampled Date Mar 15, 2022 10:32 AM
Sample Description Seawater
Location CW2/CW5-500 (ปากคลองบางกรุพูนห่างจากชายฝั่ง 500 เมตร)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Chromium	mg/L	0.001	0.003	Not Detected	≤0.1	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Iron	mg/L	0.001	0.003	0.06	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.001	0.003	0.03	≤0.1	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Zinc	mg/L	0.001	0.003	0.30	≤0.05	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	<1.8	≤1000	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	<0.05	≤0.95	Based on APHA (2017), 4500-NH ₃ F	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.007	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.2	>4	Based on APHA (2017), 4500-O(C)	Rayong
Fluoride	mg/L	0.05	0.2	0.8	≤1	APHA (2017), 4500-F(C)	Rayong
Nitrate as N	mg/L	0.015	0.05	Not Detected	≤0.06	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site)	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.0005	0.001	Not Detected	≤0.03	APHA (2017), 5530 D	Rayong
Phosphate as P	mg/L	0.002	0.005	<0.005	≤0.045	Based on APHA (2017), 4500-P(E)	Rayong

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Sawitree N.

Sawitree Naisangiam
Assistant Manager

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Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : สัตยากร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 4 of 8

Sample Number 2214234-2
Sampled Date Mar 15, 2022 10:32 AM
Sample Description Seawater
Location CW2/CW5-500 (ปากคลองบางกรุพูนห่างจากชายฝั่ง 500 เมตร)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Sulfide as H ₂ S	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-S ₂ (D)	Bangkok
Temperature	Degree C	-	-	28.1	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	2.1	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnathakunchai, Panupong Manit

Remark :

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

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Sawitree N.

Sawitree Naisangiam
Assistant Manager

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Thailand 10500
P/O : สัตยจุฑา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

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Sample Number 2214234-3
Sampled Date Mar 15, 2022 10:56 AM
Sample Description Seawater
Location CW4-100 (พื้นที่ 100 เมตร จาหน้าคลองน้ำ)
Date Analysis Commenced Mar 16, 2022
Condition of Sample Contained in one plastic bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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Thailand 10500
P/O : สัตยจุฑา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 6 of 8

Sample Number 2214234-4
Sampled Date Mar 15, 2022 10:52 AM
Sample Description Seawater
Location CW4-500 (พื้นที่ 500 เมตร จาหน้าคลองน้ำ)
Date Analysis Commenced Mar 16, 2022
Condition of Sample Contained in one plastic bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	0.004	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : สหุณจ่าง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

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Sample Number 2214234-5
Sampled Date Mar 15, 2022 10:12 AM
Sample Description Seawater
Location CW6-100 (ระยะ 100 เมตร จากปากคลองบางเบ็ด)
Date Analysis Commenced Mar 16, 2022
Condition of Sample Contained in one plastic bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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Analysis / Test Report

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Thailand 10500
P/O : สหุณจ่าง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214234
Date Received : Mar 15, 2022
Date Reported : Mar 22, 2022
Report Number : 2220100-1

Page 8 of 8

Sample Number 2214234-6
Sampled Date Mar 15, 2022 10:17 AM
Sample Description Seawater
Location CW6-500 (ระยะ 500 เมตร จากปากคลองบางเบ็ด)
Date Analysis Commenced Mar 16, 2022
Condition of Sample Contained in one plastic bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2560 : Coastal Water Quality Standard (Class 5)

Sampled By : Chainusorn Lertnanthakunchai, Panupong Manit

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

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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Thailand 10500
P/O : ศัญญาจาง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263080
Date Received : Jun 21, 2022
Date Reported : Jun 28, 2022
Report Number : 2323180-1

Page 1 of 8

Sample Number 2263080-1
Sampled Date Jun 21, 2022 10:35 AM
Sample Description Seawater
Location CW1/CW5-100 (ปากคลองบางกรุพูน ห่างจากชายฝั่ง 100 เมตร)
Date Analysis Commenced Jun 21, 2022
Condition of Sample Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Chromium	mg/L	0.001	0.003	Not Detected	≤0.1	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Iron	mg/L	0.001	0.003	0.17	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.001	0.003	0.05	≤0.1	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Zinc	mg/L	0.001	0.003	0.010	≤0.05	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	49.0	≤1000	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	0.06	≤0.95	Based on APHA (2017), 4500-NH ₃ F	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.007	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
Fluoride	mg/L	0.05	0.2	0.8	≤1	APHA (2017), 4500-F(C)	Rayong
Nitrate as N	mg/L	0.015	0.05	<0.05	≤0.06	Based on APHA (2017), 4500-NO ₃ (E)	Rayong
pH (on site)	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.0005	0.001	Not Detected	≤0.03	APHA (2017), 5530 D	Rayong
Phosphate as P	mg/L	0.002	0.005	0.134	≤0.045	Based on APHA (2017), 4500-P(E)	Rayong

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Tuanjai Thangklang
Manager

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Thailand 10500
P/O : ศัญญาจาง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263080
Date Received : Jun 21, 2022
Date Reported : Jun 28, 2022
Report Number : 2323180-1

Page 2 of 8

Sample Number 2263080-1
Sampled Date Jun 21, 2022 10:35 AM
Sample Description Seawater
Location CW1/CW5-100 (ปากคลองบางกรุพูน ห่างจากชายฝั่ง 100 เมตร)
Date Analysis Commenced Jun 21, 2022
Condition of Sample Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	26.9	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Sulfide as H ₂ S	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-S ₂ (D)	Bangkok
Temperature	Degree C	-	-	31.6	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	1.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yattamrungs

Remark :

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

Approved by

Tuanjai Thangklang
Manager

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Thailand 10500

P/O : สฤญกร รุ่งเรือง

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2263080

Date Received : Jun 21, 2022

Date Reported : Jun 28, 2022

Report Number : 2323180-1

Page 3 of 8

Sample Number	2263080-2
Sampled Date	Jun 21, 2022 10:25 AM
Sample Description	Seawater
Location	CW2/CW5-500 (ปากคลองบางกรวยทางจากท่าเรือฝั่ง 500 เมตร)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Chromium	mg/L	0.001	0.003	Not Detected	≤0.1	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.001	0.003	Not Detected	≤0.008	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Iron	mg/L	0.001	0.003	0.02	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.001	0.003	0.008	≤0.1	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Zinc	mg/L	0.001	0.003	<0.003	≤0.05	Based on APHA (2017), 3125	Bangkok
Microbiological Testing							
Total Coliform	MPN/100mL	-	-	<1.8	≤1000	APHA (2017), 9221 B	Bangkok
Water Testing							
Ammonia Nitrogen	mg/L	0.02	0.05	<0.05	≤0.95	Based on APHA (2017), 4500-NH3 F	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.007	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.7	>4	Based on APHA (2017), 4500-O(C)	Rayong
Fluoride	mg/L	0.05	0.2	0.8	≤1	APHA (2017), 4500-F(C)	Rayong
Nitrate as N	mg/L	0.015	0.05	<0.05	≤0.06	Based on APHA (2017), 4500-NO3(E)	Rayong
pH (on site)	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.0005	0.001	Not Detected	≤0.03	APHA (2017), 5530 D	Rayong
Phosphate as P	mg/L	0.002	0.005	0.005	≤0.045	Based on APHA (2017), 4500-P(E)	Rayong

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Tuanjai Thangklang
Manager

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Thailand 10500

P/O : สฤญกร รุ่งเรือง

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2263080

Date Received : Jun 21, 2022

Date Reported : Jun 28, 2022

Report Number : 2323180-1

Page 4 of 8

Sample Number	2263080-2
Sampled Date	Jun 21, 2022 10:25 AM
Sample Description	Seawater
Location	CW2/CW5-500 (ปากคลองบางกรวยทางจากท่าเรือฝั่ง 500 เมตร)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in two glass vials, seven plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.2	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Sulfide as H2S	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-S2 (D)	Bangkok
Temperature	Degree C	-	-	31.8	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	3.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yattamrungs

Remark :

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

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Tuanjai Thangklang
Manager

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Thailand 10500

P/O : สฤตกร จ้าง

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2263080

Date Received : Jun 21, 2022

Date Reported : Jun 28, 2022

Report Number : 2323180-1

Page 5 of 8

Sample Number 2263080-3
Sampled Date Jun 21, 2022 10:49 AM
Sample Description Seawater
Location CW4-100 (พื้นที่ 100 เมตร จากปากคลองบางกอกใหญ่)
Date Analysis Commenced Jun 22, 2022
Condition of Sample Contained in two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yatbamrung

Remark :

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

Approved by

Tuanjai Thangklang
Manager

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Thailand 10500

P/O : สฤตกร จ้าง

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2263080

Date Received : Jun 21, 2022

Date Reported : Jun 28, 2022

Report Number : 2323180-1

Page 6 of 8

Sample Number 2263080-4
Sampled Date Jun 21, 2022 10:45 AM
Sample Description Seawater
Location CW4-500 (พื้นที่ 500 เมตร จากปากคลองบางกอกใหญ่)
Date Analysis Commenced Jun 22, 2022
Condition of Sample Contained in two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yatbamrung

Remark :

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

Approved by

Tuanjai Thangklang
Manager

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Thailand 10500
P/O : สัตยกรำจ่าง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263080
Date Received : Jun 21, 2022
Date Reported : Jun 28, 2022
Report Number : 2323180-1

Page 7 of 8

Sample Number 2263080-5
Sampled Date Jun 21, 2022 10:13 AM
Sample Description Seawater
Location CW6-100 (พื้นที่ 100 เมตร จากท่าเรือคลองบางนา)
Date Analysis Commenced Jun 22, 2022
Condition of Sample Contained in two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yattamrungs

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

Approved by

Tuanjai Thangklang
Manager

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Thailand 10500
P/O : สัตยกรำจ่าง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263080
Date Received : Jun 21, 2022
Date Reported : Jun 28, 2022
Report Number : 2323180-1

Page 8 of 8

Sample Number 2263080-6
Sampled Date Jun 21, 2022 10:18 AM
Sample Description Seawater
Location CW6-500 (พื้นที่ 500 เมตร จากท่าเรือคลองบางนา)
Date Analysis Commenced Jun 22, 2022
Condition of Sample Contained in two glass vials and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Sayan Yattamrungs

Remark :
- LOD : Limit of Detection
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Approved by

Tuanjai Thangklang
Manager

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1337-32/ EMAIL

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Analysis / Test Report



TESTING

No.0042

Lot ID: 21152584
Date Received : Jan 12, 2022
Date Reported : Jan 20, 2022
Report Number : 2210895-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	21152584-1						
Sampled Date	Jan 12, 2022 2:00 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in four 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	77	≤120	Based on APHA (2017), 5220 C	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-ClO ₂ (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-SO ₃ (F)	Rayong
Temperature *	Degree C	-	-	32.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	20120	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.5	≤100	APHA (2017), 4500-Norg (C), NH ₃ (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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.

Technical Management

N. Banthit

Narumon Banthongkit
Supervisor
โทรศัพท์ ๐-๒-๒๓๓-๙๙๔๕

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรศัพท์ ๐-๒-๒๓๓-๙๙๔๕

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1337-30 0186
RIGHT SOLUTIONS FIGHTER FIGHTER FIGHTER
1337-30 0186



Analysis / Test Report



TESTING

No.0009

Lot ID: 21152584
Date Received : Jan 12, 2022
Date Reported : Jan 20, 2022
Report Number : 2210895-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Page 1 of 2

Sample Number	21152584-1							Page 1 of 4
Sample Date	Jan 12, 2022 2:00 PM							
Sample Description	Wastewater							
Location	Holding Pond 1							
Date Analysis Commenced	Jan 12, 2022							
Condition of Sample	Contained in four 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	
Volatile Organics Compounds								
1,1,1-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
1,1,2-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
1,1-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
1,2-Dichloroethane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
1,3-Dichloropropane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Benzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Carbon tetrachloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
cis-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Ethylbenzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Hexachlorobutadiene *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Methyl Chloride *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Methylene Chloride (Dichloromethane)	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Styrene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Tetrachloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Toluene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
Total Xylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	
trans-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok	

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Approved by

Siriluk P.

Siriluk Puengsang
Supervisor

ADDRESS 104 Phatthanakan 40 Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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1337-30 0186
RIGHT SOLUTIONS FIGHTER FIGHTER FIGHTER
1337-30 0186



Analysis / Test Report



TESTING

No.0009

Lot ID: 21152584
Date Received : Jan 12, 2022
Date Reported : Jan 20, 2022
Report Number : 2210895-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	21152584-1							Page 1 of 1
Sample Date	Jan 12, 2022 2:00 PM							
Sample Description	Wastewater							
Location	Holding Pond 1							
Date Analysis Commenced	Jan 12, 2022							
Condition of Sample	Contained in four 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	
Metals Testing								
Arsenic	mg/L	0.0003	0.0005	0.007	≤0.25	Based on APHA (2017), 3125	Bangkok	
Barium	mg/L	0.0003	0.0005	0.10	≤1.0	Based on APHA (2017), 3125	Bangkok	
Copper	mg/L	0.0003	0.0005	0.007	≤2.0	Based on APHA (2017), 3125	Bangkok	
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok	
Manganese	mg/L	0.0003	0.0005	0.23	≤5.0	Based on APHA (2017), 3125	Bangkok	
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok	
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok	
Zinc	mg/L	0.003	0.005	0.06	≤5.0	Based on APHA (2017), 3125	Bangkok	

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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.

Technical Management

Savitree N.

Savitree Naisrangam
Assistant Manager
โทรศัพท์ ๐-๒-๒๓๓-๙๙๔๕

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ ๐-๒-๒๓๓-๙๙๔๕

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1337-30 0186
RIGHT SOLUTIONS FIGHTER FIGHTER FIGHTER
1337-30 0186



Analysis / Test Report



TESTING

No.0009

Lot ID: 21152584
Date Received : Jan 12, 2022
Date Reported : Jan 20, 2022
Report Number : 2210895-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Page 2 of 2

Page 2 of 2

Sample Number	21152584-1						
Sample Date	Jan 12, 2022 2:00 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in four 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
Volatile Organics Compounds							
Trichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok
Vinyl chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	6.9	No Standard	Based on APHA (2017), 4500-O ₂ (C)	Rayong
Flow rate *	m3/s	-	-	0.003	No Standard	Flow meter	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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.

Approved by

Siriluk P.

Siriluk Puengsang
Supervisor

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

1337-30 0186
RIGHT SOLUTIONS FIGHTER FIGHTER FIGHTER
1337-30 0186



Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #49/1514
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238351-1

Page 1 of 1

Sample Number	221010-1						
Sampled Date	Feb 09, 2022 2:15 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	84	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease	mg/L	-	3	4	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine: *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	0.6	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	20700	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	22	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narurat thammassaro, Jakkarn Manwicha

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

Technical Management

N. Banchohkit

Narurat Banchohkit
Supervisor
โทร: 02-264-3-9445

Approved by

D. Chongchon

Daj Chongchon
Senior Manager
โทร: 02-264-3-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #49/1514
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238351-2

Page 1 of 1

Sample Number	221010-1						
Sampled Date	Feb 09, 2022 2:15 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Based on APHA (2017), 3125	Bangkok
Barium	mg/L	0.0003	0.0005	0.08	≤1.0	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.008	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Manganese	mg/L	0.0003	0.0005	0.10	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.03	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narurat thammassaro, Jakkarn Manwicha

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

Technical Management

Savitree N.

Savitree Noisangam
Assistant Manager
โทร: 02-264-3-4709

Approved by

K. Anek

Kasorn Anek
Senior Manager
โทร: 02-264-3-6111

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #49/1514
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238351-3

Page 1 of 2

Sample Number	221010-1						
Sampled Date	Feb 09, 2022 2:15 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Hexachlorobutadiene *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	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

Nant Sorn

Nanthawadee Sornboon
Specialist 1

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #49/1514
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238351-3

Page 2 of 2

Sample Number	221010-1						
Sampled Date	Feb 09, 2022 2:15 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
Trichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	5.6	No Standard	Based on APHA (2017), 4500-C(C)	Rayong
Flow rate *	m3/s	-	-	0.099	No Standard	Flow meter	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narurat thammassaro, Jakkarn Manwicha

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.

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Approved by

Nant Sorn

Nanthawadee Sornboon
Specialist 1

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



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท อียเอ จำกัด
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263517-1

Page 1 of 1

Sample Number	2214247-1						
Sampled Date	Mar 09, 2022 1:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and four glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	94	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	23400	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.9	≤100	APHA (2017), 4500-Norg (C), N-H3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Nanut thammassaro, Jakkarn Manwicha

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

Technical Management

N. Ban-panit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 02-232-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 02-323-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท อียเอ จำกัด
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263517-3

Page 1 of 2

Sample Number	2214247-1						
Sampled Date	Mar 09, 2022 1:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and four glass vials; sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Hexachlorobutadiene *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Siriluk P.

Siriluk Pongpanang
Supervisor

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท อียเอ จำกัด
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263517-2

Page 1 of 1

Sample Number	2214247-1						
Sampled Date	Mar 09, 2022 1:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and four glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.007	≤0.25	Based on APHA (2017), 3125	Bangkok
Barium	mg/L	0.0003	0.0005	0.10	≤1.0	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.04	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Manganese	mg/L	0.0003	0.0005	0.26	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Nanut thammassaro, Jakkarn Manwicha

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

Technical Management

Savitree N.

Savitree Nongsangam
Assistant Manager
โทรศัพท์ 02-204-94709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 02-204-94111

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท อียเอ จำกัด
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263517-3

Page 2 of 2

Page 2 of 2

Sample Number	2214247-1						
Sampled Date	Mar 09, 2022 1:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle, six plastic bottles, one BOD bottle and four glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
Trichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	4.2	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate *	m3/s	-	-	0.098	No Standard	Flow meter	Rayong
Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017). (1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L. Sampled by : Niranet Thammassaro , Jakkarin Mannicha							
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.							

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Nanut thammassaro, Jakkarn Manwicha

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

Approved by

Siriluk P.

Siriluk Pongpanang
Supervisor

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Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2225860
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2292595-1

Page 1 of 1

Sample Number	2225860-1						
Sampled Date	Apr 12, 2022 12:20 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in four 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	76	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-ClO ₂ (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S ₂ (C), (F)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	21840	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norp (C), NH ₃ (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pitthaya Thongtaeng , Nantawat Sarin

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

Technical Management

Nannorn Banchongkit
Supervisor
โทรศัพท์ 02-323-4-9445

Approved by

Dei Changchon
Senior Manager
โทรศัพท์ 02-323-4-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2225860
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2292595-2

Page 1 of 1

Sample Number	2225860-1						
Sampled Date	Apr 12, 2022 12:20 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Apr 18, 2022						
Condition of Sample	Contained in four 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Based on APHA (2017), 3125	Bangkok
Barium	mg/L	0.0003	0.0005	0.08	≤1.0	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.005	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Manganese	mg/L	0.0003	0.0005	0.21	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.05	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pitthaya Thongtaeng , Nantawat Sarin

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

Technical Management

Chanattagorn Imchom
Supervisor
โทรศัพท์ 02-323-4-4710

Approved by

Kanokorn Anek
Senior Manager
โทรศัพท์ 02-323-4-6111

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2225860
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2292595-3

Page 1 of 2

Sample Number	2225860-1						
Sampled Date	Apr 12, 2022 12:20 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in four 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
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Hexachlorobutadiene *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Sararat Mongkornjarum
Scientist (4)

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2225860
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2292595-3

Page 2 of 2

Sample Number	2225860-1						
Sampled Date	Apr 12, 2022 12:20 PM						
Sample Description	Wastewater						
Location	Holding Pond 1						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in four 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
Volatile Organics Compounds							
Trichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	5.0	No Standard	Based on APHA (2017), 4500-Cl(C)	Rayong
Flow rate *	m ³ /s	-	-	0.0702	No Standard	Flow meter	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pitthaya Thongtaeng , Nantawat Sarin

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

Approved by

Sararat Mongkornjarum
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
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Analysis / Test Report



TESTING

No. 0042

Lot ID: 2226348

Date Received : May 11, 2022

Date Reported : May 20, 2022

Report Number : 2319283-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number 2226348-1
Sample Date May 11, 2022 1:50 PM
Sample Description Wastewater
Location Holding Pond 1
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in four 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Based on APHA (2017), 4500-ClO ₂ (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S ₂ (C), (F)	Rayong
Temperature *	Degree C	-	-	33.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	20260	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.8	≤100	APHA (2017), 4500-Norp (C), NH ₃ (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	39	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled 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.

Technical Management

N. Banjongkiet

Narumon Banjongkiet
Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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Analysis / Test Report



TESTING

No. 0009

Lot ID: 2226348

Date Received : May 11, 2022

Date Reported : May 20, 2022

Report Number : 2319283-3

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number 2226348-1
Sample Date May 11, 2022 1:50 PM
Sample Description Wastewater
Location Holding Pond 1
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in four 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
Volatiles Organics Compounds							
1,1,1-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Hexachlorobutadiene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Siriruk P.

Siriruk Puangpong
Supervisor

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Analysis / Test Report



TESTING

No. 0009

Lot ID: 2226348

Date Received : May 11, 2022

Date Reported : May 20, 2022

Report Number : 2319283-2

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number 2226348-1
Sample Date May 11, 2022 1:50 PM
Sample Description Wastewater
Location Holding Pond 1
Date Analysis Commenced May 12, 2022
Condition of Sample Contained in four 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.008	≤0.25	Based on APHA (2017), 3125	Bangkok
Barium	mg/L	0.0003	0.0005	0.08	≤1.0	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.006	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Manganese	mg/L	0.0003	0.0005	0.28	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.04	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled 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.

Technical Management

Sawitree N.

Sawitree Nonsangiam
Manager
โทรศัพท์ 0-204-4-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 0-204-4-6111

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Analysis / Test Report



TESTING

No. 0009

Lot ID: 2226348

Date Received : May 11, 2022

Date Reported : May 20, 2022

Report Number : 2319283-3

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number 2226348-1
Sample Date May 11, 2022 1:50 PM
Sample Description Wastewater
Location Holding Pond 1
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in four 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
Volatiles Organics Compounds							
Trichloroethylene	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	1.5	5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	4.6	No Standard	Based on APHA (2017), 4500-ClO ₂ (F)	Rayong
Flow rate *	m ³ /s	-	-	0.104	No Standard	Flow meter	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled 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.

Approved by

Siriruk P.

Siriruk Puangpong
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	21152584-2						
Sampled Date	Jan 12, 2022 2:30 PM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in two glass vials, 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	61	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
pH (on site) *		-	-	8.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1300	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.3	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	27	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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.

Technical Management

N. Banchoi

Nanum Banchoi
Supervisor
โทรศัพท์ ๐-๒๒๒-๔๔๔๔

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ ๐-๒๒๒-๔๔๔๔

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	21152584-2							Page 1 of 1
Sampled Date	Jan 12, 2022 2:30 PM							
Sample Description	Wastewater							
Location	Holding Pond 2							
Date Analysis Commenced	Jan 12, 2022							
Condition of Sample	Contained in two glass vials, 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	11.9	No Standard	Based on APHA (2017), 4500-OC	Rayong	
Flow rate	m3/s	-	-	0.007	No Standard	Flow meter	Rayong	

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Approved by

N. Banchoi

Nanum Banchoi
Supervisor
โทรศัพท์ ๐-๒๒๒-๔๔๔๔

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

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1327-02 (ENH)

1327-02 (ENH)



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	21152584-2							Page 1 of 1
Sampled Date	Jan 12, 2022 2:30 PM							
Sample Description	Wastewater							
Location	Holding Pond 2							
Date Analysis Commenced	Jan 13, 2022							
Condition of Sample	Contained in two glass vials, 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	
Metals Testing								
Arsenic	mg/L	0.0003	0.0005	0.004	≤0.25	Based on APHA (2017), 3125	Bangkok	
Copper	mg/L	0.0003	0.0005	0.002	≤2.0	Based on APHA (2017), 3125	Bangkok	
Manganese	mg/L	0.0003	0.0005	0.60	≤5.0	Based on APHA (2017), 3125	Bangkok	
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok	
Selenium	mg/L	0.0003	0.0005	0.0007	≤0.02	Based on APHA (2017), 3125	Bangkok	
Zinc	mg/L	0.003	0.005	0.10	≤5.0	Based on APHA (2017), 3125	Bangkok	

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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.

Technical Management

Sawitree N.

Sawitree Naisangam
Assistant Manager
โทรศัพท์ ๐-๒๐๔-๔-๔๐๐

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ ๐-๒๐๔-๔-๔๐๐

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1327-02 (ENH)



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	221010-2						
Sampled Date	Feb 09, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle, five plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	56	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
pH (on site) *	-	-	-	8.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1330	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Nanat Thamasaro, Jakkarn Manwicha

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.

Technical Management

N. Banchoi

Nanum Banchoi
Supervisor
โทรศัพท์ ๐-๒๒๒-๔๔๔๔

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ ๐-๒๒๒-๔๔๔๔

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1327-02 (ENH)

1327-02 (ENH)



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 849/1914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238352-2

Page 1 of 1

Sample Number	221010-2						
Sampled Date	Feb 09, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle, five plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.25	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.001	≤2.0	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.54	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.08	≤5.0	Based on APHA (2017), 3125	Bangkok

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

Sampled By : Narunat thammassaro, Jakkarin Manwicha

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

Technical Management

Savitree N.
Savitree Nonsangiam
Assistant Manager
โทร: 02-264-4709

Approved by

Kanokkorn Anik
Senior Manager
โทร: 02-264-4711

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Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 849/1914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263518-1

Page 1 of 1

Sample Number	2214247-2						
Sampled Date	Mar 09, 2022 9:30 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle, seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1370	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.0	≤100	APHA (2017), 4500-Norg (C), N#3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Narunat thammassaro, Jakkarin Manwicha

Remark :
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* "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchoit
Narunat thammassaro
Supervisor
โทร: 02-264-4945

Approved by

Dej Changchon
Senior Manager
โทร: 02-264-4942

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 849/1914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221010
Date Received : Feb 09, 2022
Date Reported : Feb 18, 2022
Report Number : 2238352-3

Page 1 of 1

Sample Number	221010-2						
Sampled Date	Feb 09, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle, five plastic bottles, one BOD bottle and two glass vials, 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	8.5	No Standard	Based on APHA (2017), 4500-DO(C)	Rayong
Flow rate	m3/s	-	-	0.077	No Standard	Flow meter	Rayong

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

Sampled By : Narunat thammassaro, Jakkarin Manwicha

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

Approved by

N. Banchoit
Narunat thammassaro
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Kha A. Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556
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Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 849/1914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214247
Date Received : Mar 09, 2022
Date Reported : Mar 17, 2022
Report Number : 2263518-2

Page 1 of 1

page 1 of 1

Sample Number	2214247-2						
Sampled Date	Mar 09, 2022 9:30 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in one amber glass bottle, seven plastic bottles, one BOD bottle and two glass vials, sample containers comply to pretreatment – preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.002	≤2.0	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.45	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.11	≤5.0	Based on APHA (2017), 3125	Bangkok

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

Sampled By : Narunat thammassaro, Jakkarin Manwicha

Remark :
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Technical Management

Savitree N.
Savitree Nonsangiam
Assistant Manager
โทร: 02-264-4709

Approved by

Kanokkorn Anik
Senior Manager
โทร: 02-264-4711

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Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2214247

Date Received : Mar 09, 2022

Date Reported : Mar 17, 2022

Report Number : 2263518-3

Page 1 of 1

Sample Number	2214247-2						
Sampled Date	Mar 09, 2022 9:30 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle, seven plastic bottles, one BOD bottle and two glass vials, 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	4.1	No Standard	Based on APHA (2017), 4500-O/C	Rayong
Flow rate	m3/s	-	-	0.048	No Standard	Flow meter	Rayong

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

Sampled By : Nantat thannasano, Jekkarn Manwicha

Remark :
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

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Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

TESTING
No. 0042

Lot ID: 2225860

Date Received : Apr 12, 2022

Date Reported : Apr 22, 2022

Report Number : 2292596-1

Page 1 of 1

Sample Number	2225860-2						
Sample Date	Apr 12, 2022 9:25 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in two glass vials, 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	50	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
pH (on site) *	-	-	-	8.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S4(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1440	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Pithaya Thongtaeng, Nantawat Sani

Remark :
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Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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

N. Banphit

Narumon Banchongkit
Supervisor
โทรศัพท์ 323-9945

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรศัพท์ 323-9942

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

TESTING
No. 0009

Lot ID: 2225860

Date Received : Apr 12, 2022

Date Reported : Apr 22, 2022

Report Number : 2292596-2

Page 1 of 1

Sample Number	2225860-2						
Sample Date	Apr 12, 2022 9:25 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Apr 18, 2022						
Condition of Sample	Contained in two glass vials, 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.007	≤0.25	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.002	≤2.0	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.43	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.15	≤5.0	Based on APHA (2017), 3125	Bangkok

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

Sampled By : Pithaya Thongtaeng, Nantawat Sani

Remark :
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Lot ID: 2225860

Date Received : Apr 12, 2022

Date Reported : Apr 22, 2022

Report Number : 2292596-3

Page 1 of 1

Page 1 of 1

Sample Number	2225860-2						
Sampled Date	Apr 12, 2022 9:25 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in two glass vials, 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	4.8	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate	m3/s	-	-	0.1847	No Standard	Flow meter	Rayong

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

Sampled By : Pithaya Thongtaeng, Nantawat Sani

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

Technical Management

Chanatt L.

Chanattagarn Jindom
Supervisor
โทรศัพท์ 204-94710

Approved by

K. Anik

Karolkorn Anik
Senior Manager
โทรศัพท์ 204-94111

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2226348
Date Received : May 11, 2022
Date Reported : May 20, 2022
Report Number : 2319284-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2226348-2						
Sampled Date	May 11, 2022 2:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in two glass vials, 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	12	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	65	≤120	APHA (2017), 5220 C	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
pH (on site) *	-	-	-	8.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1540	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Bangnit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9145

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2226348
Date Received : May 11, 2022
Date Reported : May 20, 2022
Report Number : 2319284-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2226348-2						
Sampled Date	May 11, 2022 2:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	May 12, 2022						
Condition of Sample	Contained in two glass vials, 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
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.006	≤0.25	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.004	≤2.0	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.47	≤5.0	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.24	≤5.0	Based on APHA (2017), 3125	Bangkok

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

Sampled By : Tanasit Wongsachai

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

Savitree N.

Savitree Nossangam
Manager
โทรศัพท์ 0-204-4-7009

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 0-204-4-6111

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Analysis / Test Report

Lot ID: 22263082

Date Received : Jun 08, 2022
Date Reported : Jun 16, 2022
Report Number : 2346156-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	22263082-2						
Sampled Date	May 11, 2022 2:40 PM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in two glass vials, 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	7.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Flow rate	m3/s	-	-	0.167	No Standard	Flow meter	Rayong

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

Remark :
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Approved by

N. Bangnit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9145

Technical Management

N. Bangnit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9145

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 22263082
Date Received : Jun 08, 2022
Date Reported : Jun 16, 2022
Report Number : 2346156-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263082-2						
Sampled Date	Jun 08, 2022 9:40 AM						
Sample Description	Wastewater						
Location	Holding Pond 2						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in two glass vials, one BOD bottle, one BOD bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	49	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1640	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.4	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤50	APHA (2017), 2540 D	Rayong

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

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

Technical Management

N. Bangnit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9145

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรยวง
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0009
Lot ID: 2263082
Date Received : Jun 08, 2022
Date Reported : Jun 16, 2022
Report Number : 2346156-2

Sample Number	2263082-2							Page 1 of 1
Sample Date	Jun 08, 2022 9:40 AM							
Sample Description	Wastewater							
Location	Holding Pond 2							
Date Analysis Commenced	Jun 09, 2022							
Condition of Sample	Contained in two glass vials, one BOD 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	
Metals Testing								
Arsenic	mg/L	0.0003	0.0005	0.095	≤0.25	Based on APHA (2017), 3125	Bangkok	
Copper	mg/L	0.0003	0.0005	0.05	≤2.0	Based on APHA (2017), 3125	Bangkok	
Manganese	mg/L	0.0003	0.0005	0.23	≤5.0	Based on APHA (2017), 3125	Bangkok	
Mercury *	mg/L	0.0001	0.0005	<0.0005	≤0.005	Based on APHA (2017), 3112	Bangkok	
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok	
Zinc	mg/L	0.003	0.005	0.07	≤5.0	Based on APHA (2017), 3125	Bangkok	

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

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

Technical Management

Savitree N.
Savitree Naisangiam
Manager
โทรสาร 02-264-44709

Approved by

Kanokorn Anok
Kanokorn Anok
Senior Manager
โทรสาร 02-264-46111

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Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรยวง
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0042
Lot ID: 21152599
Date Received : Jan 05, 2022
Date Reported : Jan 12, 2022
Report Number : 2191476-1

Sample Number	21152599-1							Page 1 of 2
Sample Date	Jan 05, 2022 9:30 AM							
Sample Description	Wastewater							
Location	Equalization Tank (Lift Station)							
Date Analysis Commenced	Jan 05, 2022							
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2	8	≤500	APHA (2017), 5210 B	Rayong	
COD	mg/L	1.5	5	45	≤750	APHA (2017), 5220 D	Rayong	
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong	
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong	
Temperature *	Degree C	-	-	30.0	≤45	Based on APHA (2017), 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1280	≤3000	APHA (2017), 2540 C	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	APHA (2017), 2540 D	Rayong	

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

Remark :
LOD : Limit of Detection
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(127-32) (PMS)

Approved by

N. Banngnit
Narumon Banngnit
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรยวง
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263082
Date Received : Jun 08, 2022
Date Reported : Jun 16, 2022
Report Number : 2346156-3

Sample Number	2263082-2							Page 1 of 1
Sample Date	Jun 08, 2022 9:40 AM							
Sample Description	Wastewater							
Location	Holding Pond 2							
Date Analysis Commenced	Jun 08, 2022							
Condition of Sample	Contained in two glass vials, one BOD 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	6.5	No Standard	Based on APHA (2017), 4500-O(C)	Rayong	
Flow rate	m3/s	-	-	0.156	No Standard	Flow meter	Rayong	

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

Remark :
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(127-32) (PMS)

Approved by

N. Banngnit
Narumon Banngnit
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรยวง
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0042
Lot ID: 21152599
Date Received : Jan 05, 2022
Date Reported : Jan 12, 2022
Report Number : 2191476-1

Page 2 of 2

Sample Number	21152599-2						
Sample Date	Jan 05, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Facultative Pond #4)						
Date Analysis Commenced	Jan 05, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	27.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1880	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	18	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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(127-32) (PMS)

Approved by

N. Banngnit
Narumon Banngnit
Supervisor

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. Part of the ALS Group
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 21152602
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191490-1

Page 1 of 2

Sample Number : 21152602-1
Sampled Date : Jan 12, 2022 9:30 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	6	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	60	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2260	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai

Remark :
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* "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banngnit

Narumon Banngnit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 21152602
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191490-1

Page 2 of 2

Sample Number : 21152602-2
Sampled Date : Jan 12, 2022 9:35 AM
Sample Description : Wastewater
Location : Inspection Pond (Facultative Pond #4)
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	45	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1940	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤50	APHA (2017), 2540 D	Rayong

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

Sampled 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.

Technical Management

N. Banngnit

Narumon Banngnit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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3-REPORT_ALS_L01 (1-4PP)



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 21152603
Date Received : Jan 19, 2022
Date Reported : Jan 26, 2022
Report Number : 2191495-1

Page 1 of 2

Sample Number : 21152603-1
Sampled Date : Jan 19, 2022 9:13 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : Jan 19, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	10	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	53	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.6	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2110	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

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

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

N. Banngnit

Narumon Banngnit
Supervisor

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3-REPORT_ALS_L01 (2-5PP)



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 21152603
Date Received : Jan 19, 2022
Date Reported : Jan 26, 2022
Report Number : 2191495-1

Page 2 of 2

Sample Number : 21152603-2
Sampled Date : Jan 19, 2022 9:17 AM
Sample Description : Wastewater
Location : Inspection Pond (Facultative Pond #4)
Date Analysis Commenced : Jan 19, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	4	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1880	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤50	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banngnit

Narumon Banngnit
Supervisor

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3-REPORT_ALS_L01 (2-5PP)



Analysis / Test Report



Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 21152604
Date Received : Jan 26, 2022
Date Reported : Feb 02, 2022
Report Number : 2191499-1

Page 1 of 2

Sample Number	21152604-1						
Sampled Date	Jan 26, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Jan 26, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	8	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	49	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2080	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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



Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 21152604
Date Received : Jan 26, 2022
Date Reported : Feb 02, 2022
Report Number : 2191499-1

Page 2 of 2

Sample Number	21152604-2						
Sample Date	Jan 26, 2022 9:40 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Faculative Pond#4)						
Date Analysis Commenced	Jan 26, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	8	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1840	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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



Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 221012
Date Received : Feb 02, 2022
Date Reported : Feb 08, 2022
Report Number : 2194016-1

Page 1 of 2

Sample Number	221012-1							Page 1 of 1
Sample Date	Feb 02, 2022 9:20 AM							
Sample Description	Wastewater							
Location	Equalization Tank (Lift Station)							
Date Analysis Commenced	Feb 02, 2022							
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2	6	≤500	APHA (2017), 5210 B	Rayong	
COD	mg/L	1.5	5	56	≤750	APHA (2017), 5220 D	Rayong	
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong	
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong	
Temperature *	Degree C	-	-	33.2	≤45	Based on APHA (2017), 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1940	≤3000	APHA (2017), 2540 C	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤200	APHA (2017), 2540 D	Rayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narumon thannasaro
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0323-9-9442

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Analysis / Test Report



Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 221012
Date Received : Feb 02, 2022
Date Reported : Feb 08, 2022
Report Number : 2194016-1

Page 2 of 2

Page 2 of 2

Sample Number	221012-2						
Sampled Date	Feb 02, 2022 9:22 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Faculative Pond#4)						
Date Analysis Commenced	Feb 02, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	4	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1950	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
Sampled By : Narumon thannasaro
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0323-9-9442

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Analysis / Test Report



TESTING
No 0042

Lot ID: 221013

Date Received : Feb 09, 2022
Date Reported : Feb 15, 2022
Report Number : 2194018-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

Sample Number	221013-1						
Sampled Date	Feb 09, 2022 9:15 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2020	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Narunat Thammasaro

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

Technical Management

N. Banngkit

Narunat Banngkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No 0042

Lot ID: 221013

Date Received : Feb 09, 2022
Date Reported : Feb 15, 2022
Report Number : 2194018-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

Sample Number	221013-2						
Sampled Date	Feb 09, 2022 9:25 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Facultative Pond#4)						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	61	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1940	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	15	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Narunat Thammasaro

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

Technical Management

N. Banngkit

Narunat Banngkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No 0042

Lot ID: 221014

Date Received : Feb 17, 2022
Date Reported : Feb 24, 2022
Report Number : 2194019-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

Sample Number	221014-1						
Sampled Date	Feb 17, 2022 9:34 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Feb 17, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	37	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	356	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.6	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2380	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	258	≤200	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banngkit

Narunat Banngkit
Supervisor

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



TESTING
No 0042

Lot ID: 221014

Date Received : Feb 17, 2022
Date Reported : Feb 24, 2022
Report Number : 2194019-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

Sample Number	221014-2						
Sampled Date	Feb 17, 2022 9:10 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Facultative Pond#4)						
Date Analysis Commenced	Feb 17, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	4	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	50	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1900	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 221015
Date Received : Feb 23, 2022
Date Reported : Mar 01, 2022
Report Number : 2194020-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	11	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	68	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2010	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	37	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2214252
Date Received : Mar 02, 2022
Date Reported : Mar 09, 2022
Report Number : 2220131-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	22	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	110	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.9	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1420	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

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Dej Changchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 221015
Date Received : Feb 23, 2022
Date Reported : Mar 01, 2022
Report Number : 2194020-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	10	≤200	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1850	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

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Dej Changchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2214252
Date Received : Mar 02, 2022
Date Reported : Mar 09, 2022
Report Number : 2220131-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤200	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	45	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2000	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214254

Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220124-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4999191
Project Name : Project AIE Rayong
Project Location :

Sample Number	2214254-1						
Sampled Date	Mar 09, 2022 9:20 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	12	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	130	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1860	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	64	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Narunat Thammasaro

Remark :
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Technical Management

N. Banngkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chuan

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214255

Date Received : Mar 16, 2022
Date Reported : Mar 25, 2022
Report Number : 2220119-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4999191
Project Name : Project AIE Rayong
Project Location :

Sample Number	2214255-1						
Sampled Date	Mar 16, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Mar 16, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	25	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	175	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.3	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1910	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	40	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214256

Date Received : Mar 23, 2022
Date Reported : Mar 31, 2022
Report Number : 2220114-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4999191
Project Name : Project AIE Rayong
Project Location :

Sample Number	2214256-1						
Sampled Date	Mar 23, 2022 9:55 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Mar 23, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	11	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	121	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.3	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1840	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	44	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214257

Date Received : Mar 30, 2022
Date Reported : Apr 06, 2022
Report Number : 2220111-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4999191
Project Name : Project AIE Rayong
Project Location :

Sample Number	2214257-1						
Sampled Date	Mar 30, 2022 9:55 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Mar 30, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	--	2	16	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	107	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	--	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	--	--	--	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	--	--	33.2	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	--	5	1960	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	--	5	38	≤200	APHA (2017), 2540 D	Rayong

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

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Supervisor

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2222309
Date Received : Apr 07, 2022
Date Reported : Apr 18, 2022
Report Number : 2236771-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	30	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	158	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.2	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1890	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	51	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Remark :
LOD : Limit of Detection
"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.

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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



TESTING
No.0042

Lot ID: 2222310
Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236775-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	17	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	127	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	5	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.6	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2100	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	47	≤200	APHA (2017), 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์มือถือ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์มือถือ 0-323-9-9442

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



Analysis / Test Report



TESTING
No.0042

Lot ID: 2222309
Date Received : Apr 07, 2022
Date Reported : Apr 18, 2022
Report Number : 2236771-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 2 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	4	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	20	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1000	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

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

N. Banchongkit

Narumon Banchongkit
Supervisor

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



Analysis / Test Report



TESTING
No.0042

Lot ID: 2222310
Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236775-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 2 of 2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	28	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1290	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์มือถือ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์มือถือ 0-323-9-9442

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 89991919

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2222311

Date Received : Apr 20, 2022

Date Reported : Apr 27, 2022

Report Number : 2236782-1

Page 1 of 2

Sample Number : 2222311-1
Sampled Date : Apr 20, 2022 9:10 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : Apr 20, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	48	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	181	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.6	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1770	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	111	≤200	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banongkit

Narumon Banongkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 6 3304 8555 FAX +66 6 3304 8556
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 89991919

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2222311

Date Received : Apr 20, 2022

Date Reported : Apr 27, 2022

Report Number : 2236782-1

Page 2 of 2

Sample Number : 2222311-2
Sampled Date : Apr 20, 2022 9:04 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : Apr 20, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	19	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	716	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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N. Banongkit

Narumon Banongkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 6 3304 8555 FAX +66 6 3304 8556
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500

P/O : 89991919

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2222312

Date Received : Apr 27, 2022

Date Reported : May 05, 2022

Report Number : 2236783-1

Page 1 of 2

Sample Number : 2222312-1
Sampled Date : Apr 27, 2022 9:25 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : Apr 27, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	14	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	56	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	4	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.1	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2240	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	29	≤200	APHA (2017), 2540 D	Rayong

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

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

N. Banongkit

Narumon Banongkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 6 3304 8555 FAX +66 6 3304 8556
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 89991919

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0042

Lot ID: 2222312

Date Received : Apr 27, 2022

Date Reported : May 05, 2022

Report Number : 2236783-1

Page 2 of 2

Sample Number : 2222312-2
Sampled Date : Apr 27, 2022 9:20 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : Apr 27, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	5	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.5	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	532	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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N. Banongkit

Narumon Banongkit
Supervisor

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 6 3304 8555 FAX +66 6 3304 8556
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Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226353
Date Received : May 05, 2022
Date Reported : May 11, 2022
Report Number : 2244361-1

Page 1 of 2

Sample Number : 2226353-1
Sample Date : May 05, 2022 9:35 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : May 05, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	16	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	123	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	28.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2060	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	56	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226353
Date Received : May 05, 2022
Date Reported : May 11, 2022
Report Number : 2244361-1

Page 2 of 2

Sample Number : 2226353-2
Sample Date : May 05, 2022 9:30 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : May 05, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	29	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	27.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	932	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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Approved by

N. Banchookit

Narumon Banchookit
Supervisor

ADDRESS 616/10 Moo 5 T. Marnam Khu A. Phrakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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N. Banchookit

Narumon Banchookit
Supervisor

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



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226354
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244364-1

Page 1 of 2

Sample Number : 2226354-1
Sample Date : May 11, 2022 9:45 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : May 11, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	14	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	59	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1940	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	37	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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N. Banchookit

Narumon Banchookit
Supervisor

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



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226354
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244364-1

Page 2 of 2

Sample Number : 2226354-2
Sample Date : May 11, 2022 9:35 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : May 11, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	25	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1120	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤50	APHA (2017), 2540 D	Rayong

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

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.

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Approved by

N. Banchookit

Narumon Banchookit
Supervisor

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



TESTING
No.0042

Lot ID: 2226355
Date Received : May 18, 2022
Date Reported : May 25, 2022
Report Number : 2244367-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2226355-1
Sampled Date : May 18, 2022 9:30 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : May 18, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	13	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	43	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2300	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banchoikit

Narumon Banchoikit
Supervisor

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



TESTING
No.0042

Lot ID: 2226355
Date Received : May 18, 2022
Date Reported : May 25, 2022
Report Number : 2244367-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2226355-2
Sampled Date : May 18, 2022 9:34 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : May 18, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	22	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1470	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

- Remark :
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2226357
Date Received : May 25, 2022
Date Reported : Jun 01, 2022
Report Number : 2244367-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2226357-1
Sampled Date : May 25, 2022 9:25 AM
Sample Description : Wastewater
Location : Equalization Tank (Lift Station)
Date Analysis Commenced : May 25, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	13	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	57	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1860	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤200	APHA (2017), 2540 D	Rayong

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

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



TESTING
No.0042

Lot ID: 2226357
Date Received : May 25, 2022
Date Reported : Jun 01, 2022
Report Number : 2244367-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number : 2226357-2
Sampled Date : May 25, 2022 9:33 AM
Sample Description : Wastewater
Location : Inspection Pond (Faculative Pond#4)
Date Analysis Commenced : May 25, 2022
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	20	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	912	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

- Remark :
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Narumon Banchoikit
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263084
Date Received : Jun 01, 2022
Date Reported : Jun 09, 2022
Report Number : 2323221-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	8	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	44	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2300	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

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

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

N. Banchoangkit

Narunat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263085
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323220-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	11	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	49	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2220	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	26	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchoangkit

Narunat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263084
Date Received : Jun 01, 2022
Date Reported : Jun 09, 2022
Report Number : 2323221-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	29	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1450	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchoangkit

Narunat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263085
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323220-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	27	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1160	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

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Narunat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2263086
Date Received : Jun 16, 2022
Date Reported : Jun 23, 2022
Report Number : 2323218-1

Page 1 of 2

Sample Number	2263086-1						
Sampled Date	Jun 16, 2022 9:45 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Jun 16, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	8	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	39	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.1	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2010	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Nanut thammassaro

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2263087
Date Received : Jun 22, 2022
Date Reported : Jun 28, 2022
Report Number : 2323212-1

Page 1 of 2

Sample Number	2263087-1						
Sampled Date	Jun 22, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Jun 22, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	6	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	46	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2460	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤200	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2263086
Date Received : Jun 16, 2022
Date Reported : Jun 23, 2022
Report Number : 2323218-1

Page 2 of 2

Sample Number	2263086-2						
Sampled Date	Jun 16, 2022 9:35 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Faculative Pond#4)						
Date Analysis Commenced	Jun 16, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	13	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	29.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	952	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Nanut thammassaro

Remark :
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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2263087
Date Received : Jun 22, 2022
Date Reported : Jun 28, 2022
Report Number : 2323212-1

Page 2 of 2

Sample Number	2263087-2						
Sampled Date	Jun 22, 2022 9:40 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Faculative Pond#4)						
Date Analysis Commenced	Jun 22, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	44	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	31.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2130	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	21	≤50	APHA (2017), 2540 D	Rayong

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

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

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 49999999
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263088-1						
Sampled Date	Jun 29, 2022 9:40 AM						
Sample Description	Wastewater						
Location	Equalization Tank (Lift Station)						
Date Analysis Commenced	Jun 29, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	59	≤750	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.3	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2100	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	17	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchongkit

Approved by

D. Changchon

Narunat Banchongkit
Supervisor
โทรศัพท์มือถือ 09-323-94445

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-94442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221086-1						
Sampled Date	Jan 12, 2022 11:50 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	58	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	<0.1	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5800	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.4	≤100	APHA (2017), 4500-nitrog (C), NHD (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L. TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongachai, Thanassou Namakunna

Remark :
- LOD : Limit of Detection
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Technical Management

N. Banchongkit

Approved by

D. Changchon

Narunat Banchongkit
Supervisor
โทรศัพท์มือถือ 09-323-94445

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-94442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : 49999999
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263088-2						
Sampled Date	Jun 29, 2022 9:30 AM						
Sample Description	Wastewater						
Location	Inspection Pond (Facultative Pond#4)						
Date Analysis Commenced	Jun 29, 2022						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	43	≤120	APHA (2017), 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2140	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banchongkit

Approved by

D. Changchon

Narunat Banchongkit
Supervisor
โทรศัพท์มือถือ 09-323-94445

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-94442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221086-1						
Sampled Date	Jan 12, 2022 11:50 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.37	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	1645	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L. TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongachai, Thanassou Namakunna

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

Approved by

S. N. N. N.

Savitree Nonsajam
Assistant Manager

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Analysis / Test Report



TESTING
No 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 221101-1
Sampled Date : Jan 12, 2022 2:40 PM
Sample Description : Wastewater from Factory
Location : Dow Chemical
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	69	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	864	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

Remark :
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Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
โทรศัพท์ ๐-๓๒๓-๙-๙๔๔๕

Approved by

D. Chumma

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙-๙๔๔๕

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TESTING
No 0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 221101-1
Sampled Date : Jan 12, 2022 2:40 PM
Sample Description : Wastewater from Factory
Location : Dow Chemical
Date Analysis Commenced : Jan 13, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.19	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	243	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Sawitree N.

Sawitree Naisangiam
Assistant Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197
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TESTING
No 0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 221102-1
Sampled Date : Jan 12, 2022 9:45 AM
Sample Description : Wastewater from Factory
Location : GPSC
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	32	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	29.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	516	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
โทรศัพท์ ๐-๓๒๓-๙-๙๔๔๕

Approved by

D. Chumma

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙-๙๔๔๕

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Analysis / Test Report



TESTING
No 0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 221102-1
Sampled Date : Jan 12, 2022 9:45 AM
Sample Description : Wastewater from Factory
Location : GPSC
Date Analysis Commenced : Jan 13, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.11	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	126	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Approved by

Sawitree N.

Sawitree Naisangiam
Assistant Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197
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1317-32 19845

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221124-1						
Sampled Date	Jan 12, 2022 11:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	83	≤120	Based on APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	35.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31450	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Thanassun Namakunna

Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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TESTING
No.0042

Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-1

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221124-1						
Sampled Date	Jan 12, 2022 11:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.01	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.22	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Thanassun Namakunna
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

TESTING
No.0009

Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-2

Page 1 of 1

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-2676-3000

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 02-2676-3000

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Technical Management

Sawitree N.

Sawitree Naisangam
Assistant Manager
โทร: 02-2676-3000

Approved by

K. Anek

Kanokorn Anek
Senior Manager
โทร: 02-2676-3000

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221124-1						
Sampled Date	Jan 12, 2022 11:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.81	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	24353	No Standard	Based on APHA (2017), 4500-Cl (B)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Thanassun Namakunna
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

TESTING
No.0009

Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-3

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	21152607-1						
Sampled Date	Jan 12, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	56	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.4	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2090	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	16.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Thanassun Namakunna

Remark :
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TESTING
No.0042

Lot ID: 21152607
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191553-1

Page 1 of 1

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-2676-3000

Approved by

Sawitree N.

Sawitree Naisangam
Assistant Manager

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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-2676-3000

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 02-2676-3000

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Analysis / Test Report



TESTING
No.0009

Lot ID: 21152607

Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191553-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermit Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number 21152607-1
Sampled Date Jan 12, 2022 10:00 AM
Sample Description Wastewater from Factory
Location Indorama Petrochem
Date Analysis Commenced Jan 13, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.79	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1449	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachal, Thanassou Namakunna

Remark :
LOD : Limit of Detection
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Approved by

Savitree N.

Savitree Nongsiam
Assistant Manager

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



TESTING
No.0042

Lot ID: 21152643

Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191620-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermit Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number 21152643-1
Sampled Date Jan 12, 2022 10:45 AM
Sample Description Wastewater
Location PTT MCC
Date Analysis Commenced Jan 12, 2022
Condition of Sample Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	39	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	29.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	944	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachal, Thanassou Namakunna

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

Technical Management

N. Banphit

Narumon Banphit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

Dej Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 21152643

Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191620-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermit Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number 21152643-1
Sampled Date Jan 12, 2022 10:45 AM
Sample Description Wastewater
Location PTT MCC
Date Analysis Commenced Jan 13, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.42	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	405	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachal, Thanassou Namakunna

Remark :
LOD : Limit of Detection
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Approved by

Savitree N.

Savitree Nongsiam
Assistant Manager

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



TESTING
No.0042

Lot ID: 221178

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194209-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermit Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number 221178-1
Sampled Date Feb 09, 2022 10:00 AM
Sample Description Wastewater from Factory
Location Indorama Petrochem
Date Analysis Commenced Feb 09, 2022
Condition of Sample Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	55	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	35.3	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2120	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat Thammasaro, Jakkarin Manwicha

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

Technical Management

N. Banphit

Narumon Banphit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

Dej Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

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Analysis / Test Report



TESTING
No 0009

Lot ID: 221178
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194209-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221178-1						
Sampled Date	Feb 09, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.24	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	868	No Standard	Based on APHA (2017), 4500-Cl (O)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunth thammassaro, Jakkarin Manwicha

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

Page 1 of 1



Analysis / Test Report



TESTING
No 0042

Lot ID: 221184
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194219-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221184-1						
Sampled Date	Feb 09, 2022 3:00 PM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	49	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6640	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Jakkarin Manwicha

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

Technical Management

N. Banthit

Narumon Banthongkitt
Supervisor
โทรศัพท์ ๐-๓๒๓-๙๙๔๕

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙๙๔๕

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Analysis / Test Report



TESTING
No 0009

Lot ID: 221184
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194219-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221184-1						
Sampled Date	Feb 09, 2022 3:00 PM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.94	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1881	No Standard	Based on APHA (2017), 4500-Cl (O)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

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

Page 1 of 1



Analysis / Test Report



TESTING
No 0042

Lot ID: 221185
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194225-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221185-1						
Sampled Date	Feb 09, 2022 2:30 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	44	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	976	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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

Technical Management

N. Banthit

Narumon Banthongkitt
Supervisor
โทรศัพท์ ๐-๓๒๓-๙๙๔๕

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรศัพท์ ๐-๓๒๓-๙๙๔๕

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Analysis / Test Report



TESTING
No.0009

Lot ID: 221185

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194225-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999174
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	221185-1						
Sampled Date	Feb 09, 2022 2:30 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.07	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	342	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Narunat thammassaro, Jakkarn Manwicha

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

Sawitree N.

Sawitree Nolsangiam
Assistant Manager

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



TESTING
No.0009

Lot ID: 221186

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194228-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999174
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	221186-1						
Sampled Date	Feb 09, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.04	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	225	No Standard	Based on APHA (2017), 4500-Cl	Rayong

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

Sampled By : Narunat thammassaro, Jakkarn Manwicha

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.

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Approved by

Sawitree N.

Sawitree Nolsangiam
Assistant Manager

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



TESTING
No.0042

Lot ID: 221186

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194228-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999174
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	221186-1						
Sampled Date	Feb 09, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	25	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	472	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Narunat thammassaro, Jakkarn Manwicha

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.

Technical Management

N. Bangpit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 221189

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194233-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999174
Project Name : Project AIE Rayong
Project Location :

Page 3 of 1

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	86	≤120	APHA (2017), 5220 C	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.009	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31180	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro, Jakkarn Manwicha

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.

Technical Management

N. Bangpit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 221189
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194233-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (VI)	Bangkok
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Nannat thammassaro , Jakkarin Manwicha

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

Page 1 of 1



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.28	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	20074	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Nannat thammassaro , Jakkarin Manwicha

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

Page 1 of 1

Technical Management

Sawitree N.

Sawitree Naisangiam
Assistant Manager
โทรศัพท์ ๖-204-๖-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ ๖-204-๖-6111

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Approved by

Sawitree N.

Sawitree Naisangiam
Assistant Manager

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Analysis / Test Report



TESTING
No.0042

Lot ID: 221216
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194269-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221216-1						
Sampled Date	Feb 09, 2022 10:10 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	28	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S(C), (P)	Rayong
Temperature *	Degree C	-	-	30.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	716	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nannat thammassaro , Jakkarin Manwicha

Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Page 1 of 1



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	221216-1						
Sampled Date	Feb 09, 2022 10:10 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	172	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nannat thammassaro , Jakkarin Manwicha

Remark :
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Page 1 of 1

Technical Management

N. Banngnit

Nannat thammassaro
Supervisor
โทรศัพท์ ๖-323-๖-9445

Approved by

Dej Chongchon

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

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Approved by

Sawitree N.

Sawitree Naisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 019/019
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214270
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220135-1

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	15	≤500	APHA (2017), 5216 B	Rayong
COD	mg/L	1.5	5	90	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1990	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	72	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Technical Management

N. Banphit

Narunat Banphongkit
Supervisor
โทร: 09-09999999-323-4-9945

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 09-09999999-323-4-9942

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 019/019
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214272
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220138-1

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	47	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6940	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.9	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Technical Management

N. Banphit

Narunat Banphongkit
Supervisor
โทร: 09-09999999-323-4-9945

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 09-09999999-323-4-9942

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 019/019
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214270
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220135-2

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.68	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	725	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Approved by

S. Sawitree N.

Savitree Naisangiam
Assistant Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 019/019
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214272
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220138-2

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	3045	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Approved by

S. Sawitree N.

Savitree Naisangiam
Assistant Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214277
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220144-1

Page 1 of 1

Sample Number	2214277-1						
Sampled Date	Mar 09, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	992	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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.

Technical Management

N. Banchoangkit

Nannat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214279
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220150-1

Page 1 of 1

Sample Number	2214279-1							Page 1 of 1
Sampled Date	Mar 09, 2022 2:10 PM							
Sample Description	Wastewater from Factory							
Location	GPSC							
Date Analysis Commenced	Mar 09, 2022							
Condition of Sample	Contained in 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								
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong	
COD	mg/L	1.5	5	23	≤120	APHA (2017), 5220 D	Rayong	
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong	
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong	
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong	
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong	
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong	
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong	
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong	
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	APHA (2017), 2540 C	Rayong	
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong	
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong	

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

Remark :
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Technical Management

N. Banchoangkit

Nannat Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214279
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220144-2

Page 1 of 1

Sample Number	2214277-1						
Sampled Date	Mar 09, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.06	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	173	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Remark :
LOD : Limit of Detection
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Approved by

S. Sawitree N.

Sawitree Naisangam
Assistant 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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ รอยง
Project Name : Project AIE Rayong
Project Location :



TESTING

Lot ID: 2214279
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220150-2

Page 1 of 1

Sample Number	2214279-1							Page 1 of 1
Sampled Date	Mar 09, 2022 2:10 PM							
Sample Description	Wastewater from Factory							
Location	GPSC							
Date Analysis Commenced	Mar 10, 2022							
Condition of Sample	Contained in 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	
Metals Testing								
Iron	mg/L	0.003	0.005	0.08	No Standard	Based on APHA (2017), 3125	Bangkok	
Water Testing								
Chloride as Cl ⁻	mg/L	0.5	1	142	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong	

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

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

S. Sawitree N.

Sawitree Naisangam
Assistant 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
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214283

Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214283-1						
Sample Date	Mar 09, 2022 10:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	30520	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.7	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Chainomsorn Lertnankhunchai, Panupong Manit

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

Technical Management

N. Banpait

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2214283

Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214283-1						
Sample Date	Mar 09, 2022 10:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.16	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	<0.01	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.09	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Chainomsorn Lertnankhunchai, Panupong Manit

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

Savitree N.

Savitree Nongsangam
Assistant Manager
โทรศัพท์ 0-204-9-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 0-204-9-6111

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2214283

Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214283-1						
Sampled Date	Mar 09, 2022 10:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.27	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	17968	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Chainomsorn Lertnankhunchai, Panupong Manit

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

Savitree N.

Savitree Nongsangam
Assistant Manager
โทรศัพท์ 0-323-9-9445

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214309

Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220190-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 4999999

Project Name : Project AIE Rayong

Project Location :

Sample Number	2214309-1						
Sampled Date	Mar 09, 2022 10:20 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	17	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	840	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.5	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant
Sampled By : Narunat thammassaro, Jakkarin Maniwicha

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

N. Banpait

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2214309
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220190-2

Sample Number : 2214309-1
Sample Date : Mar 09, 2022 10:20 AM
Sample Description : Wastewater
Location : PTT MCC
Date Analysis Commenced : Mar 10, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.07	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	155	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunat thammassaro , Jakkarin Manwicha

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

Savitree N.
Savitree Nolsangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2222320
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236791-2

Sample Number : 2222320-1
Sample Date : Apr 12, 2022 10:20 AM
Sample Description : Wastewater from Factory
Location : Indorama Petrochem
Date Analysis Commenced : Apr 13, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	1.56	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	932	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

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

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Approved by

Chanatt L.
Chanattagam Imchom
Supervisor

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

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2222320
Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236791-1

Sample Number : 2222320-1
Sample Date : Apr 12, 2022 10:00 AM
Sample Description : Wastewater from Factory
Location : Indorama Petrochem
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	18	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	148	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2260	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	70	≤200	APHA (2017), 2540 D	Rayong

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

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

Technical Management

N. Banthit
Nanunat Bandrongkit
Supervisor
โทรศัพท์ 0-323-4-9445

Approved by

D. Chanchon
Dej Chanchon
Senior Manager
โทรศัพท์ 0-323-4-9442

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อียเอ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2222346
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236835-2

Sample Number : 2222346-1
Sample Date : Apr 12, 2022 10:20 AM
Sample Description : Wastewater
Location : PTT MCC
Date Analysis Commenced : Apr 13, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.11	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	184	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pithaya Thongtong, Nantawat Sarin

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

Chanatt L.
Chanattagam Imchom
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2226378
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244425-1

Sample Number	2226378-1						
Sampled Date	May 11, 2022 10:05 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	58	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.01	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	35.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1900	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanat Wongsochai, Nantawat Sarin

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

Technical Management : N. Banthongkit
Narumon Banthongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by : D. Changchon
Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2226379
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244436-1

Page: 1 of 1

Sample Number	2226379-1						
Sampled Date	May 11, 2022 11:45 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5360	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.3	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanat Wongsochai, Nantawat Sarin

Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management : N. Banthongkit
Narumon Banthongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by : D. Changchon
Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2226378
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244425-2

Sample Number	2226378-1						
Sampled Date	May 11, 2022 10:05 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	May 12, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.64	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	967	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanat Wongsochai, Nantawat Sarin

Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2226379
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244436-2

Sample Number	2226379-1						
Sampled Date	May 11, 2022 11:45 AM						
Sample Description	Wastewater from Factory/						
Location	Purac (Thailand)						
Date Analysis Commenced	May 12, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1744	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanat Wongsochai, Nantawat Sarin

Remark :
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"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0042
Lot ID: 22626380
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244437-1

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	988	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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

Technical Management

N. Banchoi

Narumon Banchoikit
Supervisor
โทร: 09-9445-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-9445-9442

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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0042
Lot ID: 22626383
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244438-1

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	37	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	736	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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

Technical Management

N. Banchoi

Narumon Banchoikit
Supervisor
โทร: 09-9445-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 09-9445-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0009
Lot ID: 22626380
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244437-2

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.37	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	494	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Remark :
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" < " : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Sawitree N.

Sawitree Naisangiam
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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

TESTING
No. 0009
Lot ID: 22626383
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244438-2

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.10	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	482	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Remark :
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Approved by

Sawitree N.

Sawitree Naisangiam
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
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2226385

Date Received : May 11, 2022
Date Reported : May 20, 2022
Report Number : 2244444-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : อนัญญา

Project Name : Project AIE Rayong

Project Location :

Sample Number : 2226385-1
Sampled Date : May 11, 2022 11:00 AM
Sample Description : Wastewater from ASM
Location : Wastewater from ASM
Date Analysis Commenced : May 11, 2022
Condition of Sample : Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CH(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33350	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanast Wongsochai, Nantawat Sarn

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.

Technical Management

N. Banphit

Narumon Banphongkit
Supervisor
โทร: 09-00000000-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 09-00000000-323-9-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2226385

Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244444-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : อนัญญา

Project Name : Project AIE Rayong

Project Location :

Sample Number : 2226385-1
Sampled Date : May 11, 2022 11:00 AM
Sample Description : Wastewater from ASM
Location : Wastewater from ASM
Date Analysis Commenced : May 12, 2022
Condition of Sample : Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.05	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanast Wongsochai, Nantawat Sarn

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.

Technical Management

Savitree N.

Savitree Naisangiam
Manager
โทร: 09-00000000-323-9-9442

Approved by

K. Anek

Kanokorn Anek
Senior Manager
โทร: 09-00000000-323-9-9441

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2226411

Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244444-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : อนัญญา

Project Name : Project AIE Rayong

Project Location :

Sample Number : 2226385-1
Sampled Date : May 11, 2022 11:00 AM
Sample Description : Wastewater from ASM
Location : Wastewater from ASM
Date Analysis Commenced : May 12, 2022
Condition of Sample : Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.86	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	26820	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanast Wongsochai, Nantawat Sarn

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.

Approved by

Savitree N.

Savitree Naisangiam
Manager
โทร: 09-00000000-323-9-9442

Technical Management

N. Banphit

Narumon Banphongkit
Supervisor
โทร: 09-00000000-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทร: 09-00000000-323-9-9442

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Analysis / Test Report

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Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 2226411
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244489-2

Page 1 of 1

Sample Number : 2226411-1
Sample Date : May 11, 2022 10:25 AM
Sample Description : Wastewater
Location : PTT MCC
Date Analysis Commenced : May 12, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.02	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	368	No Standard	Based on APHA (2017), 4500-Cl (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 2223234
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236793-1

Page 1 of 1

Sample Number : 2223234-1
Sample Date : Apr 12, 2022 11:45 AM
Sample Description : Wastewater from Factory
Location : Purac (Thailand)
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6400	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pithaya Thongtaeng, Nantawat Sarin

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

Technical Management

N. Banthit

Narumon Banthongkit
Supervisor
โทรศัพท์มือถือ 3-323-9-9445

Approved by

D. Chanchon

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

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133-10 (MAG)

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133-10 (MAG)



Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 2223234
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236793-2

Page 1 of 1

Sample Number : 2223234-1
Sample Date : Apr 12, 2022 11:45 AM
Sample Description : Wastewater from Factory
Location : Purac (Thailand)
Date Analysis Commenced : Apr 13, 2022
Condition of Sample : Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.27	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	3555	No Standard	Based on APHA (2017), 4500-Cl (B)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pithaya Thongtaeng, Nantawat Sarin

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 2223236
Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236794-1

Page 1 of 1

Sample Number : 2223236-1
Sample Date : Apr 12, 2022 9:40 AM
Sample Description : Wastewater from Factory
Location : Dow Chemical
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	32	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1008	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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

N. Banthit

Narumon Banthongkit
Supervisor
โทรศัพท์มือถือ 3-323-9-9445

Approved by

D. Chanchon

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

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133-10 (MAG)

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133-10 (MAG)



Analysis / Test Report



TESTING
No.0009

Lot ID: 2222326

Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236794-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 0000000000
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222326-1
Sampled Date	Apr 12, 2022 9:40 AM
Sample Description	Wastewater from Factory
Location	Dow Chemical
Date Analysis Commenced	Apr 13, 2022
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.05	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	245	No Standard	Based on APHA (2017), 4500-Cl	Rayong

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

Remark :
* LOD : Limit of Detection
* "C" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Page 1 of 1



Analysis / Test Report



TESTING
No.0042

Lot ID: 2222331

Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236800-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 0000000000
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222331-1
Sampled Date	Apr 12, 2022 11:40 AM
Sample Description	Wastewater from Factory
Location	GPSC
Date Analysis Commenced	Apr 12, 2022
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S(C), (F)	Rayong
Temperature *	Degree C	-	-	32.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	664	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Approved by

Chanatt L.
Chanattagarn Inmohm
Supervisor

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

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

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ +323-9-9442

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



TESTING
No.0009

Lot ID: 2222331

Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236800-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 0000000000
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222331-1
Sampled Date	Apr 12, 2022 11:40 AM
Sample Description	Wastewater from Factory
Location	GPSC
Date Analysis Commenced	Apr 13, 2022
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.12	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	195	No Standard	Based on APHA (2017), 4500-Cl	Rayong

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

Remark :
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2222333

Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236802-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 0000000000
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1
Sampled Date	Apr 12, 2022 10:45 AM
Sample Description	Wastewater from ASM
Location	Wastewater from ASM
Date Analysis Commenced	Apr 12, 2022
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	0.7	≤1.0	Based on APHA (2017), 4500-S(C), (F)	Rayong
Temperature *	Degree C	-	-	37.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31480	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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Approved by

Chanatt L.
Chanattagarn Inmohm
Supervisor

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Technical Management

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

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ +323-9-9442

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



TESTING

No.0009

Lot ID: 2222333
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236802-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1						
Sample Date	Apr 12, 2022 10:45 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Apr 18, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.01	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (6)	Bangkok
Zinc	mg/L	0.003	0.005	0.15	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pittaya Thongtaeng, Nantawat Sarin
Remark :
LOD : Limit of Detection
"≤" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report



TESTING

No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1						
Sample Date	Apr 12, 2022 10:45 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Apr 13, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.36	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	17822	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pittaya Thongtaeng, Nantawat Sarin
Remark :
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Technical Management

Chanatt L.

Chanattagarn Imchom
Supervisor
โทรศัพท์ 0-204-94710

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 0-204-6111

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2222346
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236835-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222346-1						
Sample Date	Apr 12, 2022 10:20 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	37	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1000	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pittaya Thongtaeng, Nantawat Sarin

Remark :
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Analysis / Test Report



TESTING

No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263089-1						
Sample Date	Jun 08, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	62	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	36.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2220	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	5.8	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	39	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pathompong Komsawat, Thanasson Namakunua

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

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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-94445

Approved by

Dej Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-94442

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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-94445

Approved by

Dej Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-94442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2263089
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323206-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263089-1						
Sampled Date	Jun 08, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.76	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	571	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant
Sampled By : Pathompong Komsawat, Thanasoun Namakunna

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

Chanatt L.
Chanattagarn Inthorn
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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3-Report_ML_0009_1-05090



Analysis / Test Report



TESTING
No.0009

Lot ID: 2263091
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323210-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263091-1						
Sampled Date	Jun 08, 2022 11:10 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.08	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1861	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanasoun Namakunna

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

Approved by

Chanatt L.
Chanattagarn Inthorn
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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3-Report_ML_0009_1-05090



Analysis / Test Report



TESTING
No.0042

Lot ID: 2263091
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323210-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263091-1						
Sampled Date	Jun 08, 2022 11:10 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5600	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanasoun Namakunna

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

Technical Management

N. Bangpit
Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Khunon
Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Huakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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3-Report_ML_0042_1-05090



Analysis / Test Report



TESTING
No.0042

Lot ID: 2263093
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323229-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Sample Number	2263093-1						
Sampled Date	Jun 08, 2022 2:45 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	33	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanasoun Namakunna

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

Technical Management

N. Bangpit
Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Khunon
Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Huakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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3-Report_ML_0042_1-05090



Analysis / Test Report



TESTING
No.0009

Lot ID: 2263093
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323229-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermiki Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2263093-1						
Sampled Date	Jun 08, 2022 2:45 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.24	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	112	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakurisa

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.
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Approved by

Chanatt L.
Chanattagorn Inthom
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand - PHONE +66 0 2760 3000 - FAX +66 0 2760 3197
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1127-12-02402



Analysis / Test Report



TESTING
No.0009

Lot ID: 2263094
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323230-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermiki Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Page 1 of 2

Sample Number	2263094-1						
Sample Date	Jun 08, 2022 2:33 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.02	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	129	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakurisa

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

Chanatt L.
Chanattagorn Inthom
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand - PHONE +66 0 2760 3000 - FAX +66 0 2760 3197
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1127-12-02402



Analysis / Test Report



TESTING
No.0042

Lot ID: 2263094
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323230-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermiki Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Page 1 of 1

Sample Number	2263094-1						
Sampled Date	Jun 08, 2022 2:33 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	40	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	668	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakurisa

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

Technical Management

N. Banthit
Narumon Banthongkit
Supervisor
โทรศัพท์ 0-323-3-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-3-9442

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1127-12-02402



Analysis / Test Report



TESTING
No.0042

Lot ID: 2263106
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323230-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermiki Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Page 1 of 3

Sample Number	2263106-1						
Sample Date	Jun 08, 2022 10:38 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment + preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	87	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	29760	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	6.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanassou Namakurisa

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

Technical Management

N. Banthit
Narumon Banthongkit
Supervisor
โทรศัพท์ 0-323-3-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-3-9442

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1127-12-02402



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991414
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263106
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323361-2

Page 1 of 1

Sample Number	2263106-1						
Sampled Date	Jun 08, 2022 10:38 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.10	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	0.01	≤0.25	Based on APHA (2017), 3500-Cr (6)	Bangkok
Zinc	mg/L	0.003	0.005	0.19	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pathompong Komsawat, Thanassou Namakunna

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

Technical Management

Chanatt L.
Chanattagarn Imchom
Supervisor
โทรสาร 02-204-4710

Approved by

Kanokorn Anek
Senior Manager
โทรสาร 02-204-6111

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991414
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263106
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323361-3

Page 1 of 1

Sample Number	2263106-1						
Sampled Date	Jun 08, 2022 10:38 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.49	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	14393	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pathompong Komsawat, Thanassou Namakunna

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

Approved by

Chanatt L.
Chanattagarn Imchom
Supervisor

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Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991414
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263136
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323387-1

Page 1 of 1

Sample Number	2263136-1						
Sampled Date	Jun 08, 2022 10:23 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	23	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1036	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pathompong Komsawat, Thanassou Namakunna

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

Technical Management

N. Banongkit
Narumon Banongkit
Supervisor
โทรสาร 02-323-9445

Approved by

Dej Changchon
Senior Manager
โทรสาร 02-323-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991414
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263136
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323387-2

Page 1 of 1

Sample Number	2263136-1						
Sampled Date	Jun 08, 2022 10:23 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.05	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	149	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pathompong Komsawat, Thanassou Namakunna

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

Chanatt L.
Chanattagarn Imchom
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 221086
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194114-1

Page 1 of 1

Sample Number	221086-1						
Sampled Date	Jan 12, 2022 11:50 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	58	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5800	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.4	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	13	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongasachai, Thanassoun Namakunna

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

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทร: 02-633-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 02-633-9-9442

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 221101
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194134-1

Page 1 of 1

Sample Number	221101-1						
Sampled Date	Jan 12, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	69	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	864	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทร: 02-633-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร: 02-633-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 221086
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194114-2

Page 1 of 1

Sample Number	221086-1						
Sampled Date	Jan 12, 2022 11:50 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.37	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	1645	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongasachai, Thanassoun Namakunna

Remark :
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Approved by

Sawitree N.

Sawitree Naisangam
Assistant Manager

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 221101
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194134-2

Page 1 of 1

Page 1 of 1							
Sample Number	221101-1						
Sampled Date	Jan 12, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.19	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	243	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

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Approved by

Sawitree N.

Sawitree Naisangam
Assistant Manager

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Analysis / Test Report

TESTING
No.0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermikj Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O :
Project Name : Project AIE Rayong
Project Location :Lot ID: 221102
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194136-1

Page 1 of 1

Sample Number	221102-1						
Sampled Date	Jan 12, 2022 9:45 AM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	32	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	29.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	516	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
โทรสาร 02-254-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรสาร 02-254-9442

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Analysis / Test Report

TESTING
No.0009Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermikj Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O :
Project Name : Project AIE Rayong
Project Location :Lot ID: 221102
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194136-2

Page 1 of 1

Sample Number	221102-1						
Sampled Date	Jan 12, 2022 9:45 AM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.11	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	126	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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Approved by

Savitree N.

Savitree Naisangam
Assistant Manager

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

TESTING
No.0042Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermikj Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O :
Project Name : Project AIE Rayong
Project Location :Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-1

Page 1 of 1

Sample Number	221124-1						
Sampled Date	Jan 12, 2022 11:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jan 12, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	83	≤120	Based on APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	35.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31450	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	31	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor
โทรสาร 02-254-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรสาร 02-254-9442

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Analysis / Test Report

TESTING
No.0009Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermikj Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500P/O :
Project Name : Project AIE Rayong
Project Location :Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-2

Page 1 of 1

Sample Number	221124-1						
Sampled Date	Jan 12, 2022 11:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.003	0.005	0.01	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (6)	Bangkok
Zinc	mg/L	0.003	0.005	0.22	≤5.0	Based on APHA (2017), 3125	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Technical Management

Savitree N.

Savitree Naisangam
Assistant Manager
โทรสาร 02-254-9440

Approved by

Kankorn Anek

Kankorn Anek
Senior Manager
โทรสาร 02-254-9411

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 221124-1
Sampled Date : Jan 12, 2022 11:15 AM
Sample Description : Wastewater from ASM
Location : Wastewater from ASM
Date Analysis Commenced : Jan 13, 2022
Condition of Sample : Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.81	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	24353	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

TESTING
No.0009
Lot ID: 221124
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2194143-3

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 21152607-1
Sampled Date : Jan 12, 2022 10:00 AM
Sample Description : Wastewater from Factory
Location : Indorama Petrochem
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	56	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.4	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2090	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	16.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

TESTING
No.0042
Lot ID: 21152607
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191553-1

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Approved by

Savitree N.
Savitree Nongsangam
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10350 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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Technical Management

N. Banphit

Narumon Banphongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 21152607-1
Sampled Date : Jan 12, 2022 10:00 AM
Sample Description : Wastewater from Factory
Location : Indorama Petrochem
Date Analysis Commenced : Jan 13, 2022
Condition of Sample : Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.79	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1449	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

TESTING
No.0009
Lot ID: 21152607
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191553-2

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number : 21152643-1
Sampled Date : Jan 12, 2022 10:45 AM
Sample Description : Wastewater
Location : PTT MCC
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	39	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol *	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	29.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	944	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

TESTING
No.0042
Lot ID: 21152643
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191620-1

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Approved by

Savitree N.
Savitree Nongsangam
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10350 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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Technical Management

N. Banphit

Narumon Banphongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No. 0009

Lot ID: 21152643
Date Received : Jan 12, 2022
Date Reported : Jan 19, 2022
Report Number : 2191620-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	21152643-1						
Sampled Date	Jan 12, 2022 10:45 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Jan 13, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.42	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	405	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Thanassou Namakunna

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

Savitree N.
Savitree Naisangiam
Assistant Manager

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



TESTING
No. 0042

Lot ID: 2211178

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194209-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221178-1						
Sampled Date	Feb 09, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	55	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	35.3	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2120	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat thammassaro, Jakkarn Manwicha

Remark :
LOD : Limit of Detection
"L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Bangpit
Narunat Banchongkit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

ADDRESS: 816/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand PHONE: +66 0 3304 8555 FAX: +66 0 3304 8556
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Analysis / Test Report



TESTING
No. 0009

Lot ID: 2211178

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194209-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221178-1							Page 1 of 1
Sampled Date	Feb 09, 2022 10:00 AM							
Sample Description	Wastewater from Factory							
Location	Indorania Petrochem							
Date Analysis Commenced	Feb 10, 2022							
Condition of Sample	Contained in 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	
Metals Testing								
Iron	mg/L	0.003	0.005	0.24	≤10.0	Based on APHA (2017), 3125	Bangkok	
Water Testing								
Chloride as Cl *	mg/L	0.5	1	868	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat thammassaro, Jakkarn Manwicha

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

Savitree N.
Savitree Naisangiam
Assistant Manager

ADDRESS: 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE: +66 0 2760 3000 FAX: +66 0 2760 3197
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S:\Report\AL\2211178 (1) (1) (1)



Analysis / Test Report



TESTING
No. 0042

Lot ID: 2211184

Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194219-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Sample Number	221184-1						
Sampled Date	Feb 09, 2022 3:00 PM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	49	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6640	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Jakkarn Manwicha

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

Technical Management

N. Bangpit
Narunat Banchongkit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

ADDRESS: 816/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand PHONE: +66 0 3304 8555 FAX: +66 0 3304 8556
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1317-10 DMS

S:\Report\AL\2211184 (1) (1) (1)



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 221184
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194219-2

Page 1 of 1

Sample Number	221184-1						
Sample Date	Feb 09, 2022 3:00 PM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.94	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1881	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Jakkarn Manwicha

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.



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 221185
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194225-1

Page 1 of 1

Sample Number	221185-1						
Sampled Date	Feb 09, 2022 2:30 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	44	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	976	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤100	APHA (2017), 4500-Nitrogen (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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.

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Approved by

Sawitree N.
Sawitree Nongsam
Assistant 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
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Technical Management

N. Banchoi
Narunat Banchoi
Supervisor
โทรศัพท์มือถือ +323-9-9445

Approved by

D. Chanchon
Dej Chanchon
Senior Manager
โทรศัพท์มือถือ +323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 221185
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194225-2

Page 1 of 1

Sample Number	221185-1							Page 1 of 1
Sample Date	Feb 09, 2022 2:30 PM							
Sample Description	Wastewater from Factory							
Location	Dow Chemical							
Date Analysis Commenced	Feb 10, 2022							
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Metals Testing								
Iron	mg/L	0.003	0.005	0.07	No Standard	Based on APHA (2017), 3125	Bangkok	
Water Testing								
Chloride as Cl ⁻	mg/L	0.5	1	342	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong	

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

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.



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัทฯ
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 221186
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194228-1

Page 1 of 1

Page 1 of 1

Sample Number	221186-1						
Sample Date	Feb 09, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	25	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	472	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Nitrogen (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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.

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Approved by

Sawitree N.
Sawitree Nongsam
Assistant 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
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Technical Management

N. Banchoi
Narunat Banchoi
Supervisor
โทรศัพท์มือถือ +323-9-9445

Approved by

D. Chanchon
Dej Chanchon
Senior Manager
โทรศัพท์มือถือ +323-9-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Anuphwa
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221186
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194232-2

Page 1 of 1

Sample Number	221186-1						
Sampled Date	Feb 09, 2022 2:40 PM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.04	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	225	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Narunat thammassaro , Jakkarn Manwicha

Remark :
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"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Sawitree N.

Sawitree Naisangiam
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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153732 (ENG)

Subsidiary (M, L, J, S, R, P, H, T)



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Anuphwa
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221189
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194233-2

Page 1 of 1

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Based on APHA (2017), 3125	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro , Jakkarn Manwicha

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.

Technical Management

Sawitree N.

Sawitree Naisangiam
Assistant Manager
โทร: 02-2760-3197

Approved by

Karokom Anek

Karokom Anek
Senior Manager
โทร: 02-2760-3111

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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153732 (ENG)

Subsidiary (M, L, J, S, R, P, H, T)



Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Anuphwa
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221189
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194233-1

Page 1 of 1

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 09, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	86	≤120	APHA (2017), 5220 C	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.009	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31180	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	4.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro , Jakkarn Manwicha

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.

Technical Management

N. Banchoi

Narumon Banchoi
Supervisor
โทร: 02-323-9-9445

Approved by

D. Chanchon

Dj Chanchon
Senior Manager
โทร: 02-323-9-9442

ADDRESS 161/10 Moo 5, T. Maenam Khui A, Phakdaeng Rayong 21140 Thailand PHONE +66 0 3304 8555 FAX +66 0 3304 8556
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153732 (ENG)

Subsidiary (M, L, J, S, R, P, H, T)



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Anuphwa
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221189
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194233-3

Page 1 of 1

Sample Number	221189-1						
Sampled Date	Feb 09, 2022 10:40 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Feb 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.28	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	20074	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Narunat thammassaro , Jakkarn Manwicha

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.

Approved by

Sawitree N.

Sawitree Naisangiam
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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Subsidiary (M, L, J, S, R, P, H, T)



Analysis / Test Report



TESTING
No.0042

Lot ID: 221216
Date Received : Feb 09, 2022
Date Reported : Feb 17, 2022
Report Number : 2194269-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรย์กิง
Project Name : Project AIE Rayong
Project Location :

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	28	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CH(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	716	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.1	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunt thammassaro , Jakkarin Manwicha

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

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-223-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-223-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2214270
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220135-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรย์กิง
Project Name : Project AIE Rayong
Project Location :

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	15	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	90	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CH(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1990	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	72	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunt thammassaro , Jakkarin Manwicha

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

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-223-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-223-9-9442

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรย์กิง
Project Name : Project AIE Rayong
Project Location :

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	172	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunt thammassaro , Jakkarin Manwicha

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

Approved by

S. Sawitree N.

Sawitree Naisiangiam
Assistant Manager

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



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermik Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : บริษัท อีเอ เรย์กิง
Project Name : Project AIE Rayong
Project Location :

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.68	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	725	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Nanunt thammassaro , Jakkarin Manwicha

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

Approved by

S. Sawitree N.

Sawitree Naisiangiam
Assistant Manager

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



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214272
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220138-1

Page 1 of 1

Sample Number	2214272-1						
Sampled Date	Mar 09, 2022 11:20 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	47	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6940	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.9	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Technical Management

Narumon Banichongkit
Supervisor
โทรศัพท์ ๐-๒๓๒-๙-๙๔๔๕

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๒๓๒-๙-๙๔๔๕

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1313531-0008



Analysis / Test Report



TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214277
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220144-1

Page 1 of 1

Sample Number	2214277-1						
Sample Date	Mar 09, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	992	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.6	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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

Technical Management

Narumon Banichongkit
Supervisor
โทรศัพท์ ๐-๒๓๒-๙-๙๔๔๕

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ ๐-๒๓๒-๙-๙๔๔๕

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Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214272
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220138-2

Page 1 of 1

Sample Number	2214272-1						
Sampled Date	Mar 09, 2022 11:20 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	3045	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Narunat thammassaro , Jakkarin Manwicha

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

Sawitree N.
Assistant Manager

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1313531-0009



Analysis / Test Report



TESTING
No.0009

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214277
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220144-2

Page 1 of 1

Sample Number	2214277-1						
Sampled Date	Mar 09, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.06	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	173	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

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

Approved by

Sawitree N.
Assistant Manager

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1313531-0009

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 49/11/14
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 2214279
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220150-1

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	23	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CH(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	508	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Nanat thammassaro , Jakkarn Manwicha

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

N. Bangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silm 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 49/11/14
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0042
Lot ID: 2214283
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-1

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CH(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	7.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	30620	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.7	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Chansorn Lertnathakunchai , Panupong Manit

Remark :
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Technical Management

N. Bangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Thailand 10500
P/O : 49/11/14
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 2214279
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220150-2

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.08	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	142	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Nanat thammassaro , Jakkarn Manwicha

Remark :
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Approved by

Sawitree N.

Sawitree Nonsangam
Assistant Manager

ADDRESS 104 Phatthakan Rd. 40 Phatthakan Rd. Khwaeng Phatthakan, Khet Suan Luang, Bangkok 10250 Thailand : PHONE +66 0 2760 3100 FAX +66 0 2760 3197
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Thailand 10500
P/O : 49/11/14
Project Name : Project AIE Rayong
Project Location :



TESTING

No.0009
Lot ID: 2214283
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-2

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.16	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	<0.01	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.09	≤5.0	Based on APHA (2017), 3125	Bangkok

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Chansorn Lertnathakunchai , Panupong Manit

Remark :
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Technical Management

Sawitree N.

Sawitree Nonsangam
Assistant Manager
โทรศัพท์ 0-204-4-709

Approved by

K. Anek

Kanokorn Anek
Senior Manager
โทรศัพท์ 0-204-4-6111

ADDRESS 104 Phatthakan Rd. 40 Phatthakan Rd. Khwaeng Phatthakan, Khet Suan Luang, Bangkok 10250 Thailand : PHONE +66 0 2760 3100 FAX +66 0 2760 3197
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Thailand 10500
P/O : 499914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214283
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220152-3

Page 1 of 1

Sample Number	2214283-1						
Sampled Date	Mar 09, 2022 10:15 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.27	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	17968	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Chaiyosorn Lertnathakulchai, Panupong Manit

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Approved by

Sawitree N.

Sawitree Nonsangam
Assistant Manager

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TESTING
No.0009

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Thailand 10500
P/O : 499914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214309
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220190-2

Page 1 of 1

Page 3 of 8

Sample Number	2214309-1						
Sampled Date	Mar 09, 2022 10:20 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Mar 10, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.07	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	155	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat Thammasaro, Jakkarn Manwicha

Remark :
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Approved by

Sawitree N.

Sawitree Nonsangam
Assistant Manager

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



TESTING
No.0042

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Thailand 10500
P/O : 499914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214309
Date Received : Mar 09, 2022
Date Reported : Mar 16, 2022
Report Number : 2220190-1

Page 1 of 1

Sample Number	2214309-1						
Sampled Date	Mar 09, 2022 10:20 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Mar 09, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	17	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	840	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.5	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Narunat Thammasaro, Jakkarn Manwicha

Remark :
LOD : Limit of Detection
"L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banthit

Narumon Banchongkit
Supervisor
โทรศัพท์มือถือ 7-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์มือถือ 7-323-9-9442

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556
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TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : 499914
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2222320
Date Received : Apr 12, 2022
Date Reported : Apr 21, 2022
Report Number : 2236791-1

Page 1 of 1

Sample Number	2222320-1						
Sampled Date	Apr 12, 2022 10:00 AM						
Sample Description	Wastewater from Factory						
Location	Indorama Petrochem						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	18	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	148	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2260	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	70	≤200	APHA (2017), 2540 D	Rayong

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

Remark :
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Technical Management

N. Banthit

Narumon Banchongkit
Supervisor
โทรศัพท์มือถือ 7-323-9-9445

Approved by

D. Chongchon

Dej Chongchon
Senior Manager
โทรศัพท์มือถือ 7-323-9-9442

ADDRESS 616/10 Moo 5 T. Maenam Khu A. Phukdaeng Rayong 21140 Thailand : PHONE +66 0 3304 8555 : FAX +66 0 3304 8556
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Thailand 10500
P/O : #009114
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 222320
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236791-2

Sample Number 222320-1
Sample Date Apr 12, 2022 10:00 AM
Sample Description Wastewater from Factory
Location Indorama Petrochem
Date Analysis Commenced Apr 13, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	1.56	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	932	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #009114
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 222346
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236835-2

Sample Number 222346-1
Sample Date Apr 12, 2022 10:20 AM
Sample Description Wastewater
Location PTT MCC
Date Analysis Commenced Apr 13, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.11	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	184	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Remark :
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Approved by

Chanatt L.
Chanattagarn Inthom
Supervisor

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

Chanatt L.
Chanattagarn Inthom
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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Thailand 10500
P/O : #009114
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2226378
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 224425-1

Sample Number 2226378-1
Sample Date May 11, 2022 10:05 AM
Sample Description Wastewater from Factory
Location Indorama Petrochem
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	7	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	58	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5550 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.01	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-ClO ₂ (F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S ₂ (C), (F)	Rayong
Temperature *	Degree C	-	-	35.5	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1900	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.4	≤100	APHA (2017), 4500-Norg (C), NH ₃ (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	20	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Nantawat Sarin

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

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #009114
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2226378
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 224425-2

Sample Number 2226378-1
Sample Date May 11, 2022 10:05 AM
Sample Description Wastewater from Factory
Location Indorama Petrochem
Date Analysis Commenced May 12, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.64	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	967	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
LOD : Limit of Detection
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Page 1 of 1

Technical Management

N. Banthit

Narumon Banthongkit
Supervisor
โทรสาร 02-223-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทรสาร 02-223-9442

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Approved by

Sawitree N

Sawitree Nongniam
Manager

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

TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #R99YV4
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226379
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244436-1

Page 1 of 1

Sample Number	2226379-1						
Sampled Date	May 11, 2022 11:45 AM						
Sample Description	Wastewater from Factory						
Location	Phrae (Thailand)						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	6.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5360	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.3	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
LOD : Limit of Detection
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Technical Management

N. Banphit

Approved by

D. Chum

Narumon Banchoangkit
Supervisor
โทรศัพท์มือถือ : 0323-9-9445

Dej Changchon
Senior Manager
โทรศัพท์มือถือ : 0323-9-9442

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Analysis / Test Report

TESTING
No.0042

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #R99YV4
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226380
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244437-1

Page 1 of 1

Sample Number	2226380-1						
Sampled Date	May 11, 2022 2:56 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	May 11, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	988	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norp (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Tanasit Wongsachai, Nantawat Sarin

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Technical Management

N. Banphit

Approved by

D. Chum

Narumon Banchoangkit
Supervisor
โทรศัพท์มือถือ : 0323-9-9445

Dej Changchon
Senior Manager
โทรศัพท์มือถือ : 0323-9-9442

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TESTING
No.0009

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : #R99YV4
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226379
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244436-2

Page 1 of 1

Sample Number	2226379-1						
Sampled Date	May 11, 2022 11:45 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	May 12, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	1744	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
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Approved by

Savitree N.

Savitree Naisiangiam
Manager

ADDRESS 104 Phatthanakan 40 Phatthanakan Rd. Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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TESTING
No.0009

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Thailand 10500
P/O : #R99YV4
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226380
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244437-2

Page 1 of 1

Sample Number	2226380-1						
Sampled Date	May 11, 2022 2:56 PM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	May 12, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.37	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	494	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong
Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).							
Sampled By : Tanasit Wongsachai , Nantawat Sarin							
Remark :							
LOD : Limit of Detection							
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Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
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Approved by

Savitree N.

Savitree Naisiangiam
Manager

ADDRESS 104 Phatthanakan 40 Phatthanakan Rd. Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 3197
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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499999999
Project Name : Project AIE Rayong
Project Location :

Sample Number 2226383-1
Sampled Date May 11, 2022 2:30 PM
Sample Description Wastewater from Factory
Location GPSC
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	37	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.01	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	736	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Remark :
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TESTING

No 0042
Lot ID: 2226383
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244438-1

Page 1 of 1



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499999999
Project Name : Project AIE Rayong
Project Location :

Sample Number 2226383-1
Sampled Date May 11, 2022 2:30 PM
Sample Description Wastewater from Factory
Location GPSC
Date Analysis Commenced May 12, 2022
Condition of Sample Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.10	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	482	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Remark :
LOD : Limit of Detection
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TESTING

No 0009
Lot ID: 2226383
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244438-2

Page 1 of 1

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์มือถือ 09-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-9-9442

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499999999
Project Name : Project AIE Rayong
Project Location :

Sample Number 2226385-1
Sampled Date May 11, 2022 11:00 AM
Sample Description Wastewater from ASM
Location Wastewater from ASM
Date Analysis Commenced May 11, 2022
Condition of Sample Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	0.02	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	0.2	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	34.5	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33350	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
โทรศัพท์มือถือ 09-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-9-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : 499999999
Project Name : Project AIE Rayong
Project Location :

Sample Number 2226385-1
Sampled Date May 11, 2022 11:00 AM
Sample Description Wastewater from ASM
Location Wastewater from ASM
Date Analysis Commenced May 12, 2022
Condition of Sample Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.02	≤2.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok
Zinc	mg/L	0.003	0.005	0.05	≤5.0	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Nantawat Sarin

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.

TESTING

No 0009
Lot ID: 2226385
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244444-2

Page 1 of 1

Technical Management

Savitree N.

Savitree Naisangam
Manager
โทรศัพท์มือถือ 09-204-6-4709

Approved by

Kanokorn Anek

Kanokorn Anek
Senior Manager
โทรศัพท์มือถือ 09-204-6-6111

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2226385
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244444-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991913
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2226385-1
Sampled Date	May 11, 2022 11:00 AM
Sample Description	Wastewater from ASM
Location	Wastewater from ASM
Date Analysis Commenced	May 12, 2022
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.86	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	26820	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Tanasit Wongsachai, Nantawat Sarin

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.



Analysis / Test Report



TESTING
No.0042

Lot ID: 2226411
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244489-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991913
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2226411-1
Sampled Date	May 11, 2022 10:25 AM
Sample Description	Wastewater
Location	PTT MCC
Date Analysis Commenced	May 11, 2022
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	23	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	31.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	760	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Nantawat Sarin

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.

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Approved by

Savitree N.
Savitree Nolsangiam
Manager

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

N. Banphit
Narumon Banphongkit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2226411
Date Received : May 11, 2022
Date Reported : May 19, 2022
Report Number : 2244489-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991913
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2226411-1
Sampled Date	May 11, 2022 10:25 AM
Sample Description	Wastewater
Location	PTT MCC
Date Analysis Commenced	May 12, 2022
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.02	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	368	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Tanasit Wongsachai, Nantawat Sarin

Remark :
LOD : Limit of Detection
"c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2226324
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236793-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 4991913
Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2226324-1
Sampled Date	Apr 12, 2022 11:45 AM
Sample Description	Wastewater from Factory
Location	Purac (Thailand)
Date Analysis Commenced	Apr 12, 2022
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	54	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	6400	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	2.6	≤100	APHA (2017), 4500-Norg (C), NH3	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pichay Thongtong, Nantawat Sarin

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.

Technical Management

N. Banphit
Narumon Banphongkit
Supervisor
โทรศัพท์ 3-323-4-9445

Approved by

D. Chongchon
Dej Chongchon
Senior Manager
โทรศัพท์ 3-323-4-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 222324

Date Received : Apr 12, 2022

Date Reported : Apr 22, 2022

Report Number : 2236793-2

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Page 1 of 1

Sample Number	222324-1						
Sample Date	Apr 12, 2022 11:45 AM						
Sample Description	Wastewater from Factory						
Location	Purac (Thailand)						
Date Analysis Commenced	Apr 13, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.27	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	3555	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Pithaya Thongtaeng , Nantawat Sarn

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.

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Approved by

Chanatt L.
Chanattagarn Imchom
Supervisor

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



TESTING
No.0009

Lot ID: 2223236

Date Received : Apr 12, 2022

Date Reported : Apr 22, 2022

Report Number : 2236794-2

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Page 1 of 1

Sample Number	2223236-1						
Sample Date	Apr 12, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Apr 13, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.05	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	245	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

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.

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Approved by

Chanatt L.
Chanattagarn Imchom
Supervisor

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



TESTING
No.0042

Lot ID: 2223326

Date Received : Apr 12, 2022

Date Reported : Apr 21, 2022

Report Number : 2236794-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Page 1 of 1

Sample Number	2223326-1						
Sample Date	Apr 12, 2022 9:40 AM						
Sample Description	Wastewater from Factory						
Location	Dow Chemical						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	32	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1008	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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.

Technical Management

N. Banthit

Narumon Banthongkiet
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

D. Chanchon

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

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2223331

Date Received : Apr 12, 2022

Date Reported : Apr 21, 2022

Report Number : 2236800-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Page 1 of 1

Sample Number	2223331-1						
Sampled Date	Apr 12, 2022 11:40 AM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	35	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	<0.010	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	664	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

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.

Technical Management

N. Banthit

Narumon Banthongkiet
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

D. Chanchon

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

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2222331
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236800-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #499715
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222331-1						
Sampled Date	Apr 12, 2022 11:40 AM						
Sample Description	Wastewater from Factory						
Location	GPSC						
Date Analysis Commenced	Apr 13, 2022						
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.12	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	195	No Standard	Based on APHA (2017), 4500-Cl (D)	Ryong

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

Sampled By : Pitthaya Thongtaeng, Nantawat Sam

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.

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Approved by

Chanatt L.
Chanattagarn Inthom
Supervisor

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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1310-10-096



Analysis / Test Report



TESTING
No.0009

Lot ID: 2222333
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236802-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #499715
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1							Page 1 of 1
Sampled Date	Apr 12, 2022 10:45 AM							
Sample Description	Wastewater from ASM							
Location	Wastewater from ASM							
Date Analysis Commenced	Apr 18, 2022							
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Metals Testing								
Copper	mg/L	0.0003	0.0005	0.01	≤2.0	based on APHA (2017), 3125	Bangkok	
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.25	Based on APHA (2017), 3500-Cr (B)	Bangkok	
Zinc	mg/L	0.003	0.005	0.15	≤5.0	Based on APHA (2017), 3125	Bangkok	

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pitthaya Thongtaeng, Nantawat Sam

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

Technical Management

Chanatt L.
Chanattagarn Inthom
Supervisor

Approved by

Kanokorn Anik
Kanokorn Anik
Senior Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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1310-10-096



Analysis / Test Report



TESTING
No.0042

Lot ID: 2222333
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236802-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #499715
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1						
Sampled Date	Apr 12, 2022 10:45 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Apr 12, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	1.5	5	89	≤120	APHA (2017), 5220 B	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	0.7	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	37.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31480	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pitthaya Thongtaeng, Nantawat Sam

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchoh
Narumon Banchoh
Supervisor

Approved by

D. Changchon
Dej Changchon
Senior Manager

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



TESTING
No.0009

Lot ID: 2222333
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 2236802-3

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #499715
Project Name : Project AIE Rayong
Project Location :

Sample Number	2222333-1						
Sampled Date	Apr 12, 2022 10:45 AM						
Sample Description	Wastewater from ASM						
Location	Wastewater from ASM						
Date Analysis Commenced	Apr 13, 2022						
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.36	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	17822	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pitthaya Thongtaeng, Nantawat Sam

Remark :
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Approved by

Chanatt L.
Chanattagarn Inthom
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 84991914
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 222346
Date Received : Apr 12, 2022
Date Reported : Apr 22, 2022
Report Number : 223683-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	37	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.0	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1000	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pittaya Thongtaeng, Nantawat Sarin

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-262-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทร: 02-262-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 84991914
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0009
Lot ID: 2263089
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323206-2

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.76	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	571	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pathompong Komsawat, Thanassun Namakunna

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

Chanatt L.
Chanattagorn Imchom
Supervisor

ADDRESS 104 Phatthanakan Rd. Phatthanakan Rd. Khwaeng Phatthanakan Khet Suan Luang Bangkok 10250 Thailand PHONE +66 0 2760 3000 FAX +66 0 2760 8187
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 84991914
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263089
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323206-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	5	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	62	≤750	APHA (2017), 5220 D	Rayong
Cyanide as HCN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	36.7	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2220	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	5.8	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	39	≤200	APHA (2017), 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampled By : Pathompong Komsawat, Thanassun Namakunna

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

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-262-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทร: 02-262-9442

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : 84991914
Project Name : Project AIE Rayong
Project Location :

TESTING
No.0042
Lot ID: 2263091
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323210-1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	48	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.3	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	5600	(1)	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	3.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of the Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanassun Namakunna

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

N. Banchongkit

Narumon Banchongkit
Supervisor
โทร: 02-262-9445

Approved by

D. Chanchon

Dej Chanchon
Senior Manager
โทร: 02-262-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2263091

Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323210-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2263091-1
Sampled Date	Jun 08, 2022 11:10 AM
Sample Description	Wastewater from Factory
Location	Purac (Thailand)
Date Analysis Commenced	Jun 09, 2022
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.08	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	1861	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(*) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanassou Namakunna

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

Chanattagorn Imchom
Supervisor

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



TESTING
No.0009

Lot ID: 2263093

Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323229-2

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2263093-1
Sampled Date	Jun 08, 2022 2:45 PM
Sample Description	Wastewater from Factory
Location	GPSC
Date Analysis Commenced	Jun 09, 2022
Condition of Sample	Contained in 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
Metals Testing							
Iron	mg/L	0.003	0.005	0.24	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl ⁻	mg/L	0.5	1	112	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakunna

Remark :
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Chanattagorn Imchom
Supervisor

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



TESTING
No.0042

Lot ID: 2263093

Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323229-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2263093-1
Sampled Date	Jun 08, 2022 2:45 PM
Sample Description	Wastewater from Factory
Location	Dow Chemical
Date Analysis Commenced	Jun 08, 2022
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	33	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	0.006	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	36.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1040	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.9	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakunna

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Technical Management

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2263094

Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323230-1

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : Project Name : Project AIE Rayong
Project Location :

Page 1 of 1

Sample Number	2263094-1
Sampled Date	Jun 08, 2022 2:33 PM
Sample Description	Wastewater from Factory
Location	GPSC
Date Analysis Commenced	Jun 08, 2022
Condition of Sample	Contained in 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							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	40	≤120	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (E)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	33.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	668	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), NH3 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

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

Sampled By : Pathompong Komsawat, Thanassou Namakunna

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Technical Management

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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TESTING
No.0009

Lot ID: 2263094

Date Received : Jun 08, 2022

Date Reported : Jun 15, 2022

Report Number : 232330-2

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number	2263094-1	Page 1 of 1				
Sampled Date	Jun 08, 2022 2:33 PM					
Sample Description	Wastewater from Factory					
Location	GPSC					
Date Analysis Commenced	Jun 09, 2022					
Condition of Sample	Contained in 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
Metals Testing						
Iron	mg/L	0.003	0.005	0.02	No Standard	Based on APHA (2017), 3125
Water Testing						
Chloride as Cl *	mg/L	0.5	1	129	No Standard	Based on APHA (2017), 4500-Cl (D)

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

Remark :
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Approved by

Chanatt L.
Chanattagarn Imchom
Supervisor

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2263106

Date Received : Jun 08, 2022

Date Reported : Jun 15, 2022

Report Number : 2323361-2

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number	2263106-1	Page 1 of 1				
Sampled Date	Jun 08, 2022 10:38 AM					
Sample Description	Wastewater from ASM					
Location	Wastewater from ASM					
Date Analysis Commenced	Jun 09, 2022					
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Metals Testing						
Copper	mg/L	0.0003	0.0005	0.10	≤2.0	Based on APHA (2017), 3125
Hexavalent Chromium	mg/L	0.003	0.01	0.01	≤0.25	Based on APHA (2017), 3500-Cr (B)
Zinc	mg/L	0.003	0.005	0.19	≤5.0	Based on APHA (2017), 3125

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanassun Namakunna

Remark :
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Technical Management

Chanatt L.
Chanattagarn Imchom
Supervisor
โทรศัพท์ 02-204-3-4710

Approved by

Kankkorn Anek
Senior Manager
โทรศัพท์ 02-204-6-6111

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



TESTING
No.0042

Lot ID: 2263106

Date Received : Jun 08, 2022

Date Reported : Jun 15, 2022

Report Number : 2323361-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : บริษัท

Project Name : Project AIE Rayong

Project Location :

Sample Number	2263106-1	Page 1 of 1				
Sampled Date	Jun 08, 2022 10:38 AM					
Sample Description	Wastewater from ASM					
Location	Wastewater from ASM					
Date Analysis Commenced	Jun 08, 2022					
Condition of Sample	Contained in one amber glass bottle and seven plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method
Water Testing						
BOD (5 days at 20 Degree C)	mg/L	-	2	3	≤20	APHA (2017), 5210 B
COD *	mg/L	1.5	5	87	≤120	APHA (2017), 5220 B
Cyanide as CN	mg/L	0.001	0.005	Not Detected	≤0.2	Based on APHA (2017), 4500-CN(C), (F)
Formaldehyde	mg/L	0.03	0.1	0.1	≤1.0	Wastewater Analysis
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B
pH (on site) *	-	-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)
Phenol	mg/L	0.005	0.01	Not Detected	≤1.0	APHA (2017), 5530 D
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1.0	Based on APHA (2017), 4500-Cl(F)
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)
Temperature *	Degree C	-	-	37.6	≤40	Based on APHA (2017), 2550 B
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	29760	(1)	APHA (2017), 2540 C
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	6.2	≤100	APHA (2017), 4500-Norg (C), NH3 (D)
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D

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

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pathompong Komsawat, Thanassun Namakunna

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Technical Management

N. Banchoi
Narumon Banchoi
Supervisor
โทรศัพท์ 02-323-3-9445

Approved by

D. Chanchon
Dej Chanchon
Senior Manager
โทรศัพท์ 02-323-6-9442

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #999999
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0042

Lot ID: 2263136
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323387-1

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2263136-1							
Sampled Date	Jun 08, 2022 10:23 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Jun 08, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤500	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	23	≤750	APHA (2017), 5220 D	Rayong
Cyanide as CN	mg/L	0.001	0.005	<0.005	≤0.2	Based on APHA (2017), 4500-CN(C), (F)	Rayong
Formaldehyde	mg/L	0.03	0.1	0.1	≤1	Wastewater Analysis	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Based on APHA (2017), 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Phenol	mg/L	0.005	0.01	Not Detected	≤1	APHA (2017), 5530 D	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Based on APHA (2017), 4500-Cl(F)	Rayong
Sulfide *	mg/L	-	0.5	<0.5	≤1.0	Based on APHA (2017), 4500-S2(C), (F)	Rayong
Temperature *	Degree C	-	-	32.8	≤45	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1036	≤3000	APHA (2017), 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	<1.0	≤100	APHA (2017), 4500-Norg (C), N13	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	APHA (2017), 2540 D	Rayong

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

Sampled By : Pathompong Komsawat , Thanasoun Namakunna

Remark :
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Technical Management *N. Banthit*
Narumon Banthongkit
Supervisor
โทร: 02-616-10000-3-323-9-9445

Approved by *D. Chuan*
Dej Chuanchoon
Senior Manager
โทร: 02-616-10000-3-323-9-9442

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Analysis / Test Report

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49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : #999999
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009

Lot ID: 2263136
Date Received : Jun 08, 2022
Date Reported : Jun 15, 2022
Report Number : 2323387-2

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
2263136-1							
Sampled Date	Jun 08, 2022 10:23 AM						
Sample Description	Wastewater						
Location	PTT MCC						
Date Analysis Commenced	Jun 09, 2022						
Condition of Sample	Contained in one amber glass bottle and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Metals Testing							
Iron	mg/L	0.003	0.005	0.05	≤10.0	Based on APHA (2017), 3125	Bangkok
Water Testing							
Chloride as Cl *	mg/L	0.5	1	149	No Standard	Based on APHA (2017), 4500-Cl (D)	Rayong

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

Sampled By : Pathompong Komsawat , Thanasoun Namakunna

Remark :
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Approved by *Chanatt L.*
Chanattagn Inthom
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 21152577
Date Received : Jan 12, 2022
Date Reported : Jan 14, 2022
Report Number : 2191384-1

Page 1 of 1

Sample Number	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
21152577-1						
Sampled Date	Jan 12, 2022 2:50 PM					
Sample Description	Surface Water					
Location	คลองท่าหลวงท่าหลวงท่าหลวงท่าหลวงท่าหลวง (W1) (Flow rate)					
Date Analysis Commenced	Jan 12, 2022					
Condition of Sample	data sheet					
Water Testing						
Flow rate	m3/s	-	-	0.255	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

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

Approved by *N. Banthit*
Narumon Banthongkit
Supervisor

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 21152577
Date Received : Jan 12, 2022
Date Reported : Jan 14, 2022
Report Number : 2191384-1

Page 2 of 3

Sample Number	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
21152577-2						
Sampled Date	Jan 12, 2022 2:30 PM					
Sample Description	Surface Water					
Location	คลองท่าหลวงท่าหลวงท่าหลวงท่าหลวงท่าหลวง (W5.2) (Flow rate)					
Date Analysis Commenced	Jan 12, 2022					
Condition of Sample	data sheet					
Water Testing						
Flow rate	m3/s	-	-	1.935	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

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

Approved by *N. Banthit*
Narumon Banthongkit
Supervisor

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P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 21152577
Date Received : Jan 12, 2022
Date Reported : Jan 14, 2022
Report Number : 2191384-1

Sample Number : 21152577-3
Sample Date : Jan 12, 2022 3:00 PM
Sample Description : Surface Water
Location : คลองบางนาตอนใต้ท้ายซอยสุขุมวิทซอย 1 (W2/1) (Flow rate)
Date Analysis Commenced : Jan 12, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.185	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

Remark :
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Thailand 10500

P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221007
Date Received : Feb 09, 2022
Date Reported : Feb 11, 2022
Report Number : 2194013-1

Sample Number : 221007-1
Sample Date : Feb 09, 2022 1:00 PM
Sample Description : Surface Water
Location : คลองบางนาตอนใต้ท้ายซอยสุขุมวิทซอย 1 (W1) (Flow rate)
Date Analysis Commenced : Feb 09, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.090	Flow meter	Rayong

Sampled By : Narunat thammassaro

Remark :
LOD : Limit of Detection
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P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221007
Date Received : Feb 09, 2022
Date Reported : Feb 11, 2022
Report Number : 2194013-1

Sample Number : 221007-2
Sample Date : Feb 09, 2022 1:30 PM
Sample Description : Surface Water
Location : คลองบางนาตอนใต้ท้ายซอยสุขุมวิทซอย 2 (W5/2) (Flow rate)
Date Analysis Commenced : Feb 09, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.251	Flow meter	Rayong

Sampled By : Narunat thammassaro

Remark :
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P/O :
Project Name : Project AIE Rayong
Project Location :

Lot ID: 221007
Date Received : Feb 09, 2022
Date Reported : Feb 11, 2022
Report Number : 2194013-1

Sample Number : 221007-3
Sample Date : Feb 09, 2022 1:15 PM
Sample Description : Surface Water
Location : คลองบางนาตอนใต้ท้ายซอยสุขุมวิทซอย 1 (W2/1) (Flow rate)
Date Analysis Commenced : Feb 09, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.170	Flow meter	Rayong

Sampled By : Narunat thammassaro

Remark :
LOD : Limit of Detection
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Supervisor

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P/O : ชัยฤทธิ์
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214233
Date Received : Mar 14, 2022
Date Reported : Mar 16, 2022
Report Number : 2220083-1

Page 1 of 3

Sample Number : 2214233-1
Sample Date : Mar 14, 2022 10:20 AM
Sample Description : Surface Water
Location : คลองบางกอกใหญ่ทางตอนบนด้านซ้ายของโครงการ (W1) (Flow rate)
Date Analysis Commenced : Mar 14, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.048	Flow meter	Rayong

Sampled By : Chainusorn Lertnathakunchai

Remark :
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P/O : ชัยฤทธิ์
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214233
Date Received : Mar 14, 2022
Date Reported : Mar 16, 2022
Report Number : 2220083-1

Page 2 of 3

Sample Number : 2214233-2
Sample Date : Mar 14, 2022 11:05 AM
Sample Description : Surface Water
Location : คลองบางกอกใหญ่ทางตอนบนด้านซ้ายของโครงการ (WS.2) (Flow rate)
Date Analysis Commenced : Mar 14, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.004	Flow meter	Rayong

Sampled By : Chainusorn Lertnathakunchai

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P/O : ชัยฤทธิ์
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2214233
Date Received : Mar 14, 2022
Date Reported : Mar 16, 2022
Report Number : 2220083-1

Page 3 of 3

Sample Number : 2214233-3
Sample Date : Mar 14, 2022 10:15 AM
Sample Description : Surface Water
Location : คลองบางกอกใหญ่ทางตอนบนด้านซ้ายของโครงการ (W2/1) (Flow rate)
Date Analysis Commenced : Mar 14, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.415	Flow meter	Rayong

Sampled By : Chainusorn Lertnathakunchai

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P/O : ชัยฤทธิ์
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2222302
Date Received : Apr 12, 2022
Date Reported : Apr 18, 2022
Report Number : 2236765-1

Page 1 of 3

Sample Number : 2222302-1
Sample Date : Apr 12, 2022 9:30 AM
Sample Description : Surface Water
Location : คลองบางกอกใหญ่ทางตอนบนด้านซ้ายของโครงการ (W1) (Flow rate)
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.1173	Flow meter	Rayong

Sampled By : Pittaya Thonglaeng

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P/O : ศัญญาจิรา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2222302
Date Received : Apr 12, 2022
Date Reported : Apr 18, 2022
Report Number : 2236765-1

Sample Number : 2222302-3
Sampled Date : Apr 12, 2022 12:10 PM
Sample Description : Surface Water
Location : คลองบางนาตอนบนวัดคลองตันราษฎร์ (W5.2) (Flow rate)
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.1386	Flow meter	Rayong

Sampled By : Pitthaya Thongtaeng

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P/O : ศัญญาจิรา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2222302
Date Received : Apr 12, 2022
Date Reported : Apr 18, 2022
Report Number : 2236765-1

Sample Number : 2222302-3
Sampled Date : Apr 12, 2022 12:15 PM
Sample Description : Surface Water
Location : คลองบางนาตอนบนวัดคลองตันราษฎร์ (W2/1) (Flow rate)
Date Analysis Commenced : Apr 12, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.1543	Flow meter	Rayong

Sampled By : Pitthaya Thongtaeng

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P/O : ศัญญาจิรา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226343
Date Received : May 11, 2022
Date Reported : May 13, 2022
Report Number : 2244351-1

Sample Number : 2226343-1
Sampled Date : May 11, 2022 2:50 PM
Sample Description : Surface Water
Location : คลองบางนาตอนบนวัดคลองตันราษฎร์ (W1) (Flow rate)
Date Analysis Commenced : May 11, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.028	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

Remark :
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P/O : ศัญญาจิรา
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226343
Date Received : May 11, 2022
Date Reported : May 13, 2022
Report Number : 2244351-1

Sample Number : 2226343-2
Sampled Date : May 11, 2022 2:20 PM
Sample Description : Surface Water
Location : คลองบางนาตอนบนวัดคลองตันราษฎร์ (W5.2) (Flow rate)
Date Analysis Commenced : May 11, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m ³ /s	-	-	0.298	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

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P/O : ศฤงคาร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2226343
Date Received : May 11, 2022
Date Reported : May 13, 2022
Report Number : 2243351-1

Page 3 of 3

Sample Number : 2226343-3
Sampled Date : May 11, 2022 9:55 AM
Sample Description : Surface Water
Location : บริเวณทางระบายน้ำที่คลองโรงน้ำ (W2/1) (Flow rate)
Date Analysis Commenced : May 11, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.060	Flow meter	Rayong

Sampled By : Tanasit Wongsachai

Remark :
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P/O : ศฤงคาร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263076
Date Received : Jun 20, 2022
Date Reported : Jun 21, 2022
Report Number : 2323175-1

Page 1 of 3

Sample Number : 2263076-1
Sampled Date : Jun 20, 2022 9:30 AM
Sample Description : Surface Water
Location : คลองระบายน้ำที่คลองโรงน้ำที่คลองโรงน้ำ (W1) (Flow rate)
Date Analysis Commenced : Jun 20, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.010	Flow meter	Rayong

Sampled By : Sayan Yathammung

Remark :
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P/O : ศฤงคาร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263076
Date Received : Jun 20, 2022
Date Reported : Jun 21, 2022
Report Number : 2323175-1

Page 2 of 3

Sample Number : 2263076-2
Sampled Date : Jun 20, 2022 10:25 AM
Sample Description : Surface Water
Location : คลองระบายน้ำที่คลองโรงน้ำที่คลองโรงน้ำ (W5.2) (Flow rate)
Date Analysis Commenced : Jun 20, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.000	Flow meter	Rayong

Sampled By : Sayan Yathammung

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



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : ศฤงคาร
Project Name : Project AIE Rayong
Project Location :

Lot ID: 2263076
Date Received : Jun 20, 2022
Date Reported : Jun 21, 2022
Report Number : 2323175-1

Page 3 of 3

Sample Number : 2263076-3
Sampled Date : Jun 20, 2022 10:00 AM
Sample Description : Surface Water
Location : บริเวณทางระบายน้ำที่คลองโรงน้ำ (W2/1) (Flow rate)
Date Analysis Commenced : Jun 20, 2022
Condition of Sample : data sheet

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
Flow rate	m3/s	-	-	0.290	Flow meter	Rayong

Sampled By : Sayan Yathammung

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

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Approved by

N. Banphit

Narumon Banchoangkit
Supervisor

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สดุษฎาจิรา
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 1 of 9

Sample Number 2214244-1
Sampled Date Mar 14, 2022 10:06 AM
Sample Description Groundwater
Location G1 (วัดประยุรมิตรบำรุง หน้าอาคารอเนกประสงค์)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles, two glass vials, two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.0006	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.02	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	Not Detected	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.008	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.08	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : สดุษฎาจิรา
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 2 of 9

Sample Number 2214244-1
Sampled Date Mar 14, 2022 10:06 AM
Sample Description Groundwater
Location G1 (วัดประยุรมิตรบำรุง หน้าอาคารอเนกประสงค์)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles, two glass vials, two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbontetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.12	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.
49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500
P/O : สักยกร้าง
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 3 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Panupong Manit

Remark :

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

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand / PHONE +66 0 2760 3000 / FAX +66 0 2760 3197
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Thailand 10500
P/O : สักยกร้าง
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 4 of 9

Sample Number 2214244-2
Sampled Date Mar 14, 2022 9:48 AM
Sample Description Groundwater
Location G2 (น้ำบ่อต้นบริเวณเข้านนิคมโรงงาน)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles, two glass vials, two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.0009	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.14	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	<0.0005	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0005	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.08	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สหุภรณ์

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2214244

Date Received : Mar 14, 2022

Date Reported : Mar 22, 2022

Report Number : 2220105-1

Page 5 of 9

Sample Number	2214244-2
Sampled Date	Mar 14, 2022 9:48 AM
Sample Description	Groundwater
Location	G2 (น้ำบาดาลบริเวณบ้านเรือน)
Date Analysis Commenced	Mar 15, 2022
Condition of Sample	Contained in two plastic bottles, two glass vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.12	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

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Thailand 10500

P/O : สหุภรณ์

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2214244

Date Received : Mar 14, 2022

Date Reported : Mar 22, 2022

Report Number : 2220105-1

Page 6 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Panupong Manit

Remark :

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

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Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

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Thailand 10500
P/O : สหุภพกิจ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 7 of 9

Sample Number 2214244-3
Sampled Date Mar 14, 2022 2:04 PM
Sample Description Groundwater
Location G3 (น้ำปดต้นบริเวณบ้านน้ำเงิน)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles, two glass vials, two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.001	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.003	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.58	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	0.003	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.02	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.08	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.
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Thailand 10500
P/O : สหุภพกิจ
Project Name : Project AIE Rayong
Project Location :



TESTING
No.0009
Lot ID: 2214244
Date Received : Mar 14, 2022
Date Reported : Mar 22, 2022
Report Number : 2220105-1

Page 8 of 9

Sample Number 2214244-3
Sampled Date Mar 14, 2022 2:04 PM
Sample Description Groundwater
Location G3 (น้ำปดต้นบริเวณบ้านน้ำเงิน)
Date Analysis Commenced Mar 15, 2022
Condition of Sample Contained in two plastic bottles, two glass vials, two vials, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.12	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤญญาจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2214244

Date Received : Mar 14, 2022

Date Reported : Mar 22, 2022

Report Number : 2220105-1

Page 9 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Panupong Manit

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.



Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤญญาจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 1 of 9

Sample Number	2263081-1
Sampled Date	Jun 20, 2022 2:32 PM
Sample Description	Groundwater
Location	G1 (ใกล้ประตูนมมิตรบำรุง หน้าอาคารอเนกประสงค์)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.0008	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.05	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	<0.0005	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	<0.0005	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	<0.005	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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Approved by

Sawitree N.

Sawitree Noisangiam
Assistant Manager

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

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สัตยกรำจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 2 of 9

Sample Number	2263081-1
Sample Date	Jun 20, 2022 2:32 PM
Sample Description	Groundwater
Location	G1 (วัดประยุรวงศาวาสวรวิหาร กรุงเทพมหานคร)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbon tetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.04	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สัตยกรำจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING
No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 3 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Sayan Yattamrungs

Remark :

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

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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
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Client : Asia Industrial Estate Co., Ltd.

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Thailand 10500

P/O : สฤตญาจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 4 of 9

Sample Number	2263081-2
Sampled Date	Jun 20, 2022 2:23 PM
Sample Description	Groundwater
Location	G2 (น้ำปัสสาวะบริเวณบ้านเงินโป่ง)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.009	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.002	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.11	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	<0.0005	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	0.001	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	0.01	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สฤตญาจ่าง

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 5 of 9

Sample Number	2263081-2
Sampled Date	Jun 20, 2022 2:23 PM
Sample Description	Groundwater
Location	G2 (น้ำปัสสาวะบริเวณบ้านเงินโป่ง)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbontetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.04	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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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
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Analysis / Test Report



TESTING
No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สัตยการกิจ

Project Name : Project AIE Rayong

Project Location :

Page 6 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Sayan Yatbamrung

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.



Analysis / Test Report



TESTING
No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สัตยการกิจ

Project Name : Project AIE Rayong

Project Location :

Page 7 of 9

Sample Number 2263081-3

Sampled Date Jun 20, 2022 1:59 PM

Sample Description Groundwater

Location G3 (น้ำบาดาลบริเวณบ้านน้ำเงิน)

Date Analysis Commenced Jun 21, 2022

Condition of Sample Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	0.002	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.003	Based on APHA (2017), 3125	Bangkok
Copper	mg/L	0.0003	0.0005	0.002	≤1.0	Based on APHA (2017), 3125	Bangkok
Hexavalent Chromium	mg/L	0.003	0.01	Not Detected	≤0.05	Based on APHA (2017), 3500-Cr (B)	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Manganese	mg/L	0.0003	0.0005	0.28	≤0.5	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.0001	0.0005	Not Detected	≤0.001	Based on US EPA, Method 1631 Revision E	Bangkok
Nickel	mg/L	0.0003	0.0005	0.001	≤0.02	Based on APHA (2017), 3125	Bangkok
Selenium	mg/L	0.0003	0.0005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Zinc	mg/L	0.003	0.005	<0.005	≤5.0	Based on APHA (2017), 3125	Bangkok
Volatile Organics Compounds							
1,1,1-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤200	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1,2-Trichloroethane	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,1-Dichloroethylene	ug/L	0.11	0.5	Not Detected	≤7	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dibromoethane *	ug/L	0.50	1.0	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,2-Dichloroethane	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
1,3-Dichloropropane *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
1,4-Dichlorobenzene *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

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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
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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สืบญกรกิจ

Project Name : Project AIE Rayong

Project Location :



TESTING

No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 8 of 9

Sample Number	2263081-3
Sampled Date	Jun 20, 2022 1:59 PM
Sample Description	Groundwater
Location	G3 (น้ำบาดาลบริเวณบ้านน้ำร้อน)
Date Analysis Commenced	Jun 21, 2022
Condition of Sample	Contained in four glass vials and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Volatile Organics Compounds							
2-Butanone	ug/L	0.14	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Benzene	ug/L	0.03	0.5	Not Detected	5	Based on US EPA, Method 5030B and 8260D	Bangkok
Carbontetrachloride	ug/L	0.08	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Chloroform *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,2-Dichloroethylene *	ug/L	0.04	0.5	Not Detected	≤70	Based on US EPA, Method 5030B and 8260D	Bangkok
cis-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Ethylbenzene	ug/L	0.03	0.5	Not Detected	700	Based on US EPA, Method 5030B and 8260D	Bangkok
Methyl Chloride *	ug/L	0.15	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Methylene Chloride (Dichloromethane)	ug/L	0.10	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Styrene	ug/L	0.02	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
Tetrachloroethylene	ug/L	0.07	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Toluene	ug/L	0.04	0.5	Not Detected	1000	Based on US EPA, Method 5030B and 8260D	Bangkok
Total Xylene	ug/L	0.04	1.5	Not Detected	10000	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,2-Dichloroethylene	ug/L	0.10	0.5	Not Detected	≤100	Based on US EPA, Method 5030B and 8260D	Bangkok
trans-1,3-Dichloropropene *	ug/L	0.2	0.5	Not Detected	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok
Trichloroethylene	ug/L	0.05	0.5	Not Detected	≤5	Based on US EPA, Method 5030B and 8260D	Bangkok
Vinyl chloride	ug/L	0.16	0.3	Not Detected	≤2	Based on US EPA, Method 5030B and 8260D	Bangkok

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Analysis / Test Report

Client : Asia Industrial Estate Co., Ltd.

49 Soi Pipat (Silom 3) Asia Sermkij Tower, 7th Floor, Silom Road, Bang Rak, Bangkok
Thailand 10500

P/O : สืบญกรกิจ

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Project Location :



TESTING

No.0009

Lot ID: 2263081

Date Received : Jun 20, 2022

Date Reported : Jun 28, 2022

Report Number : 2323181-1

Page 9 of 9

Guideline : Notification of the National Environmental Board, No. 20, B.E.2543

Sampled By : Sayan Yattbamrung

Remark :

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

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ภาคผนวก ง

แผนที่ทรัพยากรแร่ แสดงพื้นที่แหล่งแร่ และพื้นที่ศักยภาพทางแร่

ภาคผนวก จ

สำเนาหนังสือใบอนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

ที่ อก ๐๓๑๐(๑)/ ๑๐๖๕



กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ เขตราชเทวี
กรุงเทพมหานคร ๑๐๕๐๐

๒๕ มกราคม ๒๕๖๕

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขีดความสามารถของห้องปฏิบัติการวิเคราะห์เอกชน
ลงวันที่ ๓๐ กรกฎาคม ๒๕๖๓

- สิ่งที่ส่งมาด้วย ๑. รายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๑ แผ่น
๒. รายชื่อเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๕ แผ่น
๓. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๓ แผ่น

ตามหนังสือที่อ้างถึง บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุ
หนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๒๐๕ สถานที่ตั้งเลขที่ ๑๐๕
ซอยพัฒนาการ ๕๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร
ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย)
จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้
ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย ตามสิ่งที่ส่งมาด้วย ๑
ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๑๒๒ ราย ตามสิ่งที่ส่งมาด้วย ๒
ค. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนไว้วิเคราะห์ในน้ำเสีย จำนวน ๕๔ รายการ น้ำใต้ดิน
จำนวน ๑๒๖ รายการ อากาศเสีย ๑๖ รายการ สิ่งปฏิกูลหรือวัสดุที่ไม่ใช้แล้ว จำนวน ๓๕ รายการ และดิน
จำนวน ๑๒๕ รายการ รวมทั้งสิ้นจำนวน ๓๖๓ รายการ ตามสิ่งที่ส่งมาด้วย ๓

หนังสือฉบับนี้จะหมดอายุในวันที่ ๒ กันยายน ๒๕๖๖ หากประสงค์จะต่ออายุหนังสือ
รับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอ
ต่อกรมโรงงานอุตสาหกรรม ภายใน ๓๐ วัน ก่อนวันสิ้นสุดของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์
เอกชน ซึ่งคำขอต่ออายุดังกล่าวขอรับได้ที่กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายศิระ จันทร์เชิด)

อธิบดีกองสุขภัณฑ์และสุขาภิบาล กรมโรงงานอุตสาหกรรม
ผู้อำนวยการกองวิจัยและเฝ้าระวังมลพิษทางอากาศ
ปฏิบัติการทางเทคนิคและเฝ้าระวังมลพิษทางอากาศ

กองวิจัยและเฝ้าระวังมลพิษโรงงาน

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ

โทร. ๐ ๒๒๐๒ ๔๓๖๖ ๐ ๒๒๐๒ ๔๐๐๒

โทรสาร ๐ ๒๒๕๔ ๓๒๐๘ ๐ ๒๒๕๔ ๓๔๑๕

ที่ อก ๐๓๑๐(๑)/ ๑๐๖๕



กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ เขตราชเทวี
กรุงเทพมหานคร ๑๐๕๐๐

๒๕ มกราคม ๒๕๖๕

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขีดความสามารถของห้องปฏิบัติการวิเคราะห์เอกชน
ลงวันที่ ๓๐ กรกฎาคม ๒๕๖๓

- สิ่งที่ส่งมาด้วย ๑. รายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๑ แผ่น
๒. รายชื่อเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๕ แผ่น
๓. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๓ แผ่น

ตามหนังสือที่อ้างถึง บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุ
หนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๒๐๕ สถานที่ตั้งเลขที่ ๑๐๕
ซอยพัฒนาการ ๕๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร
ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย)
จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้
ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย ตามสิ่งที่ส่งมาด้วย ๑
ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๑๒๒ ราย ตามสิ่งที่ส่งมาด้วย ๒
ค. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนไว้วิเคราะห์ในน้ำเสีย จำนวน ๕๔ รายการ น้ำใต้ดิน
จำนวน ๑๒๖ รายการ อากาศเสีย ๑๖ รายการ สิ่งปฏิกูลหรือวัสดุที่ไม่ใช้แล้ว จำนวน ๓๕ รายการ และดิน
จำนวน ๑๒๕ รายการ รวมทั้งสิ้นจำนวน ๓๖๓ รายการ ตามสิ่งที่ส่งมาด้วย ๓

หนังสือฉบับนี้จะหมดอายุในวันที่ ๒ กันยายน ๒๕๖๖ หากประสงค์จะต่ออายุหนังสือ
รับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอ
ต่อกรมโรงงานอุตสาหกรรม ภายใน ๓๐ วัน ก่อนวันสิ้นสุดของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์
เอกชน ซึ่งคำขอต่ออายุดังกล่าวขอรับได้ที่กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายศิระ จันทร์เชิด)

อธิบดีกองสุขภัณฑ์และสุขาภิบาล กรมโรงงานอุตสาหกรรม
ผู้อำนวยการกองวิจัยและเฝ้าระวังมลพิษทางอากาศ
ปฏิบัติการทางเทคนิคและเฝ้าระวังมลพิษทางอากาศ

กองวิจัยและเฝ้าระวังมลพิษโรงงาน

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ

โทร. ๐ ๒๒๐๒ ๔๓๖๖ ๐ ๒๒๐๒ ๔๐๐๒

โทรสาร ๐ ๒๒๕๔ ๓๒๐๘ ๐ ๒๒๕๔ ๓๔๑๕

เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ๖-๒๐๕

ที่ อก ๐๓๑๐(๑)/

ลงวันที่ ๒๕ มกราคม ๒๕๖๕

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ จำนวน ๖ ราย

- | | |
|--------------------------------|----------------------------|
| ๑) นางสาวพาริชา จันทร์ปลั่ง | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๐ |
| ๒) นางสาวชัชชัย โกมารกุล ณ นคร | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๑ |
| ๓) นายศรายุทธ จิตราพันธ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๒ |
| ๔) นางสาวกนกกร เอนก | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๓ |
| ๕) นายสุริยา สอนแก้ว | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๔ |
| ๖) นายวิฑูรย์ ชุมเห็ด | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๕ |

(นายศิระ จันทร์เชิด)

อธิบดีกองสุขภัณฑ์และสุขาภิบาล กรมโรงงานอุตสาหกรรม
ผู้อำนวยการกองวิจัยและเฝ้าระวังมลพิษทางอากาศ
ปฏิบัติการทางเทคนิคและเฝ้าระวังมลพิษทางอากาศ

เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ๖-๒๐๕

ที่ อก ๐๓๑๐(๑)/

๑๐๖๕ ลงวันที่ ๒๕ มกราคม ๒๕๖๕

ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๑๒๒ ราย

- | | |
|--|----------------------------|
| ๑) นางสาวจินดา ไชยธรรม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๖ |
| ๒) นางสาวศิริลักษณ์ น้อยเจริญ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๗ |
| ๓) นางสาวณัฏฐาญญา อิมขม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๘ |
| ๔) นางสาววันวิมล สายแสง | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๐๙ |
| ๕) นางสาวนันทิ์ สมบูรณ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๐ |
| ๖) นางสาวศรีนยา เติมธารักษ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๑ |
| ๗) นางสาวสิริกมล มงคลจิรภูมิ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๒ |
| ๘) นางสาวศิริลักษณ์ พึ่งแพง | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๓ |
| ๙) นายพนธ์กิตติ์ จันทร์พุ่ม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๔ |
| ๑๐) นายนครเศรษฐ์ โกมลกย์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๕ |
| ๑๑) นายธินา จริยา | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๖ |
| ๑๒) นางสาวเกศรินทร์ แก้วมัน | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๗ |
| ๑๓) นางสาวสุวิมล ชัยเรืองวุฒิ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๘ |
| ๑๔) นางสาวสุภาวดี อรรถการ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๑๙ |
| ๑๕) นางสาวเมก้า ชัยเดชอนกุล | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๐ |
| ๑๖) นางสาวศศิธร พูลสวัสดิ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๑ |
| ๑๗) นางสาวเสาวลักษณ์ ภูมิกษาพร | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๒ |
| ๑๘) นายอภิสิทธิ์ สิงหา | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๓ |
| ๑๙) นายศักดิ์สิทธิ์ โสภณพิสุทธิ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๔ |
| ๒๐) ว่าที่ร้อยตรีหญิง พรหมภา ฉ่างเจริญ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๕ |
| ๒๑) นางจิตตา คำภูแก้ว | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๖ |
| ๒๒) นางสาวอรรณพ รักษ์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๗ |
| ๒๓) นางสาวพรรัตน์ อัมมการณ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๘ |
| ๒๔) นายสุเชษฐา วรินทร์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๒๙ |
| ๒๕) นางสาวศุภาวิณี รุ่งคำ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๐ |
| ๒๖) นายนคร สุขเจริญ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๑ |
| ๒๗) นายบัญชา นามเขตต์ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๒ |
| ๒๘) นายพรมิ ศรีบัณฑิต | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๓ |
| ๒๙) นายอุทิศ อุ่นลิ้ม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๔ |
| ๓๐) ว่าที่ร้อยตรี เติมเกียรติ อมรศรีธรรม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๕ |
| ๓๑) นางสาววิริยา ศรีงาม | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๖ |
| ๓๒) นายอนุพงษ์ รัตนศรีประเสริฐ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๗ |
| ๓๓) นางสาวจุฑารัตน์ โอนสันเทียะ | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๘ |
| ๓๔) นางสาวจางวรรณ พิมพ์อุกฤติยา | ทะเบียนเลขที่ ๖-๒๐๕-๙-๔๙๓๙ |

(นายศิระ จันทร์เชิด)

อธิบดีกองสุขภัณฑ์และสุขาภิบาล กรมโรงงานอุตสาหกรรม
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ปฏิบัติการทางเทคนิคและเฝ้าระวังมลพิษทางอากาศ

๓๕) นางสาวปรังทิพย์...

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

เลขทะเบียน ๖-๒๐๔

ที่ อภ ๐๓๐๑(๑)/ ๑๐๖๕

ลงวันที่ ๒๘ มกราคม ๒๕๖๕

ขอขยายสารเคมีที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๖๑ รายการ

น้ำเสีย จำนวน 59 รายการ

ลำดับที่	สารเคมี	วิธีวิเคราะห์
1	Aldicarb	High-Performance Liquid Chromatographic Method ⁽⁴⁾
2	Aldicarb Sulfone	High-Performance Liquid Chromatographic Method ⁽⁴⁾
3	Aldicarb Sulfoxide	High-Performance Liquid Chromatographic Method ⁽⁴⁾
4	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
5	Arsenic	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
6	Barium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
7	α-BHC	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
8	β-BHC	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
9	γ-BHC	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
10	γ-BHC	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
11	Biochemical Oxygen Demand	1) 5-Day BOD Test, Azide Modification Method ⁽⁴⁾ 2) 5-Day BOD Test, Membrane Electrode Method ⁽⁴⁾
12	Carbaryl	High-Performance Liquid Chromatographic Method ⁽⁴⁾
13	Carbofuran	High-Performance Liquid Chromatographic Method ⁽⁴⁾
14	Cadmium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
15	Chemical Oxygen Demand	1) Closed Reflux, Colorimetric Method ⁽⁴⁾ 2) Closed Reflux, Titrimetric Method ⁽⁴⁾
16	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
17	Chromium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁽⁴⁾
18	Color	ADMI Weighted-Ordinate Spectrophotometric Method


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และระบบนิเวศน์ปฏิบัติการ

19 Copper...

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ลำดับที่	สารเคมี	วิธีวิเคราะห์
19	Copper	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
20	Cyanide	Distillation, Colorimetric Method ⁽⁴⁾
21	2,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
22	4,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
23	2,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
24	4,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
25	2,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
26	4,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
27	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
28	Endosulfan Sulfate	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
29	Endosulfan I	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
30	Endosulfan II	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
31	Endrin	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
32	Endrin Aldehyde	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
33	Formaldehyde	Distillation, Colorimetric Method ⁽⁴⁾
34	Free Chlorine	1) DPD Ferrous Titrimetric Method ⁽⁴⁾ 2) Iodometric Method ⁽⁴⁾
35	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
36	Heptachlor epoxide	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
37	Hexavalent Chromium	Filtration, Colorimetric Method ⁽⁴⁾
38	3-Hydroxycarbofuran	High-Performance Liquid Chromatographic Method ⁽⁴⁾
39	Lead	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
40	Manganese	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
41	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁽⁴⁾
42	Methiocarb	High-Performance Liquid Chromatographic Method ⁽⁴⁾
43	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾


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และระบบนิเวศน์ปฏิบัติการ


44 Methoxyl...

- ๓ -

ลำดับที่	สารเคมี	วิธีวิเคราะห์
44	Methoxyl	High-Performance Liquid Chromatographic Method ⁽⁴⁾
45	Nickel	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
46	Oil & Grease	1) Liquid-Liquid, Partition-Gravimetric Method ⁽⁴⁾ 2) Soxhlet Extraction Method ⁽⁴⁾
47	Oxamyl	High-Performance Liquid Chromatographic Method ⁽⁴⁾
48	Propoxur	High-Performance Liquid Chromatographic Method ⁽⁴⁾
49	pH	Electrometric Method ⁽⁴⁾
50	Phenols	1) Distillation, Chloroform Extraction Method ⁽⁴⁾ 2) Distillation, Direct Photometric Method ⁽⁴⁾
51	Selenium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
52	Sulfide	Iodometric Method ⁽⁴⁾
53	Temperature	Laboratory and Field Methods ⁽⁴⁾
54	Total Dissolved Solids	Dried at 180 °C ⁽⁴⁾
55	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method ⁽⁴⁾
56	Total Suspended Solids	Dried at 103-105 °C ⁽⁴⁾
57	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic Method ⁽⁴⁾
58	Trivalent Chromium	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation ⁽⁴⁾
59	Zinc	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁽⁴⁾

น้ำดื่ม จำนวน 126 รายการ


ลำดับที่	สารเคมี	วิธีวิเคราะห์
1	Acenaphthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
2	Acetone	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾


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3 Aldrin...


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ลำดับที่	สารเคมี	วิธีวิเคราะห์
3	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
4	Anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
5	Antimony	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
7	Atrazine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
8	Barium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
9	Benz(a)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
11	Benzo(b)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
12	Benzo(k)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
13	Benzoic Acid	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
14	Benzo(a)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
15	Benzo(g,h,i)perylene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
17	Bis(2-chloroethyl)ether	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾


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
18 Bis(2-ethylhexyl)phthalate...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
18	Bis(2-ethylhexyl)phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
21	Butanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
22	Butyl Benzyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
24	Carbazole	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
25	Carbon Disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
27	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
28	p-Chloroaniline	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
32	2-Chlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
33	Chromium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾


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
34 Chromium (III)...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation ⁽⁴⁾
35	Chromium (VI)	Colorimetric Method ⁽⁴⁾
36	Chrysene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
37	Cyanide	Distillation, Colorimetric Method ⁽⁴⁾
38	2,4-D	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
39	DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
40	DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
41	DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
42	Dibenz(a,h)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
43	Di-n-Butyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
47	3,3-Dichlorobenzidine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾


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
51 cis-1,2-Dichloroethylene...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
53	2,4-Dichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
57	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
58	Diethyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
59	2,4-Dimethylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
60	2,4-Dinitrophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
61	2,4-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
62	2,6-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
63	Di-n-Octyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
64	Endosulfan	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
65	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
67	Fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾


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
68 Fluorene...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
68	Fluorene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
69	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
70	Heptachlor epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
71	Hexachlorobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
73	n-Hexane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
74	α-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
75	β-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
76	γ-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
77	Hexachlorocyclopentadiene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
78	Hexachloroethane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
79	Indeno(1,2,3-cd)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
80	Isophorone	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
81	Lead	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
82	Manganese	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
83	Mercury	1) Cold Vapor Atomic Absorption Spectrometric Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾


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
84 Methanol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
84	Methanol	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾ 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
85	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
86	Methyl Bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
87	Methylene Chloride	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
88	2-Methylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
89	2-Methylnaphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
90	Methyl tert-Butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
91	Naphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
92	Nickel	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
93	Nitrobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
94	N-Nitrosodiphenylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
95	N-Nitrosodi-n-Propylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
96	Polychlorinated Biphenyls - PCB 1016 - PCB 1221 - PCB 1232 - PCB 1242 - PCB 1248 - PCB 1254 - PCB 1260	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾


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 กรมควบคุมมลพิษ

97 Pentachlorophenol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
97	Pentachlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
98	pH	Electrometric Method ⁽⁴⁾
99	Phenanthrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
100	Phenol	1) Distillation, Direct Photometric Method ⁽⁴⁾ 2) Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
101	Pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
102	Selenium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
103	Silver	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
104	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
105	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
106	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
107	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
108	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
109	TPH (C ₅ -C ₆)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(13,24)
110	TPH (C ₈ -C ₁₆)	Solvent Extraction, Gas Chromatographic Method ^(9,21)
111	TPH (C ₁₈ -C ₃₃)	Solvent Extraction, Gas Chromatographic Method ^(9,21)
112	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
113	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾



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114 1,1,2-Trichloroethane...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
114	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
115	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
116	2,4,5-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
117	2,4,6-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
118	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
119	Vanadium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
120	Vinyl Acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
121	Vinyl Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
122	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
123	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
124	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
125	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
126	Zinc	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾


ตรวจเฉลี่ย (เบื้องต้น) จำนวน 16 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Antimony	Isokinetic, Digestion, Inductively Coupled Plasma Method ⁽⁵⁾
2	Arsenic	Isokinetic, Digestion, Inductively Coupled Plasma Method ⁽⁵⁾


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 กรมควบคุมมลพิษ

3 Carbon Monoxide...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
3	Carbon Monoxide	1) Sampling Bag Non-Dispersive Infrared Method ⁽⁵⁾ 2) Non-Dispersive Infrared Method ⁽⁵⁾ 3) Instrumental Analyzer Method ⁽⁵⁾
4	Chlorine	1) Absorption Sampling, Ion Chromatographic Method ⁽⁵⁾ 2) Isokinetic Sampling, Ion Chromatographic Method ⁽⁵⁾
5	Copper	Isokinetic, Digestion, Inductively Coupled Plasma Method ⁽⁵⁾
6	Dioxins	Isokinetic Sampling, Analysis by ISO/IEC 17025 Accredited Laboratory or Analysis by Department of Industrial Works Registered Laboratory (Dioxins/Furans Analysis Approved) ⁽⁵⁾
7	Hydrogen Chloride	1) Absorption Sampling, Ion Chromatographic Method ⁽⁵⁾ 2) Isokinetic Sampling, Ion Chromatographic Method ⁽⁵⁾
8	Hydrogen Sulfide	Absorption Sampling, Iodometric Method ⁽⁵⁾
9	Lead	Isokinetic, Digestion, Inductively Coupled Plasma Method ⁽⁵⁾
10	Mercury	1) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽⁵⁾ 2) Isokinetic, Digestion, Inductively Coupled Plasma Method ⁽⁵⁾
11	Opacity	Ringelmann's Method ⁽²⁾
12	Oxides of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method ⁽⁵⁾ 2) Chemiluminescence Method ⁽⁵⁾ 3) Instrumental Analyzer Method ⁽⁵⁾
13	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method ⁽⁵⁾ 2) UV Fluorescence Method ⁽⁵⁾ 3) Instrumental Analyzer Method ⁽⁵⁾
14	Sulfuric Acid	Isokinetic Sampling, Barium-Thorin Titrimetric Method ⁽⁵⁾
15	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method ⁽⁵⁾
16	Xylene	Adsorption Sampling, Gas Chromatographic Method ⁽⁵⁾


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 กรมควบคุมมลพิษ

สิ่งปลูก...

สิ่งปลูกถ่ายหรือวัสดุที่ไม่ใช่แล้ว จำนวน 35 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Aldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
2	Antimony	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
3	Arsenic	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
4	Barium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
5	Beryllium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)

วิมล
(นางธิษฐาน จักรกฤษณ์)
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กรมส่งเสริมการค้าระหว่างประเทศ

6 Cadmium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
6	Cadmium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
7	Chlordane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
8	Chromium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
9	Chromium (III)	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method; Waste Extraction, Colorimetric Method; Calculation Method ^(1,6,15,17) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Waste Extraction, Colorimetric Method; Calculation Method ^(1,6,16,17) 3) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,15,17) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,16,17)
10	Chromium (VI)	1) Waste Extraction, Colorimetric Method ^(1,6,17) 2) Alkaline Digestion, Colorimetric Method ^(1,17)

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11 Cobalt...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
11	Cobalt	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
12	Copper	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
13	2,4-D	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
14	DDD	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
15	DOE	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
16	DDT	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25)

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กรมส่งเสริมการค้าระหว่างประเทศ


2) Soxhlet...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
17	Dieldrin	2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
18	Endrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
19	Heptachlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
20	Lead	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
21	Lindane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
22	Mercury	1) Waste Extraction, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ^(1,6,18)

วิมล
(นางธิษฐาน จักรกฤษณ์)
ผู้อำนวยการศูนย์มาตรฐานวิชาการระดับท้องถิ่น
กรมส่งเสริมการค้าระหว่างประเทศ


2) Waste Extraction...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
23	Methoxychlor	2) Waste Extraction, Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method ^(1,6,19) 3) Waste Extraction, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ^(1,6,20) 4) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽¹⁸⁾ 5) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method ⁽¹⁹⁾ 6) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ⁽²⁰⁾
24	Mirex	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
25	Molybdenum	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
26	Nickel	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)


 (นางจิราภรณ์ นิตยกุลวิไล)
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
27 Polychlorinated...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
27	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,3-Dichlorobiphenyl - 2,2',5-Trichlorobiphenyl - 2,4',5-Trichlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4,6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5,6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method ^(1,9,23) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,23) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)


 (นางจิราภรณ์ นิตยกุลวิไล)
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28 Pentachlorophenol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
28	Pentachlorophenol	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
29	pH	Electrometric Method ^(29,30)
30	Selenium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
31	Silver	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16)
32	Thallium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
33	Toxaphene	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,25) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(22,31)
34	Vanadium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15)



 (นางจิราภรณ์ นิตยกุลวิไล)
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4) Digestion...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
35	Zinc	4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16) 1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,15) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,16) 3) Digestion, Inductively Coupled Plasma Method ^(7,15) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)


สืบ จำนวน 125 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
2	Acetone	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(1,4,24)
3	Aldrin	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
4	Anthracene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
5	Antimony	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)
7	Atrazine	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
8	Barium	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,16)


 (นางจิราภรณ์ นิตยกุลวิไล)
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
9 Benz(a)anthracene...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
9	Benz(a)anthracene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
11	Benzo(b)fluoranthene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
12	Benzo(k)fluoranthene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
13	Benzoic acid	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
14	Benzo(a)pyrene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
15	Benzo(g,h,i)perylene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,16)
17	Bis(2-chloroethyl)ether	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
18	Bis(2-ethylhexyl)phthalate	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
21	Butanol	Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method ^(12,24)
22	Butyl Benzyl Phthalate	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,16)
24	Carbazole	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
25	Carbon Disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)


 (นางธิษฏาณันท์ อัครสกุลวิไล)
 ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ห้องทดสอบพิษ


26 Carbon tetrachloride...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
27	Chlordane	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
28	p-Chloroaniline	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
32	2-Chlorophenol	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
33	Chromium	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,16)
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,8,15,17) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,8,16,17)
35	Chromium (VI)	Alkaline Digestion, Colorimetric Method ^(8,17)
36	Chrysene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
37	Cyanide	Extraction, Distillation, Colorimetric Method ^(26,27,28)
38	2,4-D	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
39	DDD	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)


 (นางธิษฏาณันท์ อัครสกุลวิไล)
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
40 DDE...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
40	DDE	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
41	DDT	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
42	Dibenz(a,h)anthracene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
43	Di-n-Butyl Phthalate	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
47	3,3-Dichlorobenzidine	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
53	2,4-Dichlorophenol	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)


 (นางธิษฏาณันท์ อัครสกุลวิไล)
 ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ห้องทดสอบพิษ

57 Dieldrin...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
57	Dieldrin	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
58	Diethyl Phthalate	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
59	2,4-Dimethylphenol	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
60	2,4-Dinitrophenol	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
61	2,4-Dinitrotoluene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
62	2,6-Dinitrotoluene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
63	Di-n-Octyl Phthalate	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
64	Endosulfan	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
65	Endrin	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
67	Fluoranthene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
68	Fluorene	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
69	Heptachlor	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
70	Heptachlor Epoxide	1) Soxhlet Extraction, Gas Chromatographic/ Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)


 (นางธิษฏาณันท์ อัครสกุลวิไล)
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71 Hexachlorobenzene...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
71	Hexachlorobenzene	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
73	n-Hexane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
74	α-HCH	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
75	β-HCH	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
76	γ-HCH	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
77	Hexachlorocyclopentadiene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
78	Hexachloroethane	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
79	Indeno(1,2,3-cd)pyrene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
80	Isophorone	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
81	Lead	1) Digestion, Inductively Coupled Plasma Method ^(7,13) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,14)
82	Manganese	1) Digestion, Inductively Coupled Plasma Method ^(7,13) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,14)
83	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽¹⁸⁾

อัครกุล (นางสาว) อัครกุล (นาย)
ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษ
กรมส่งเสริมการค้าระหว่างประเทศ

2) Thermal...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
		2) Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry ⁽¹⁹⁾ 3) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ⁽²⁰⁾
84	Methanol	Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
85	Methoxychlor	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
86	Methyl Bromide	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
87	Methylene Chloride	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
88	2-methylphenol	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
89	2-Methylnaphthalene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
90	Methyl tert-Butyl Ether	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
91	Naphthalene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
92	Nickel	1) Digestion, Inductively Coupled Plasma Method ^(7,13) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,14)
93	Nitrobenzene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
94	N-Nitrosodiphenylamine	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
95	N-Nitrosodi-n-propylamine	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
96	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic Method ^(25,31)

อัครกุล (นางสาว) อัครกุล (นาย)
ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษ
กรมส่งเสริมการค้าระหว่างประเทศ

- Aroclor 1242...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
	- Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3',3',4',6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6'-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5,6'-Heptachlorobiphenyl - 2,2',3,4',5,5',6'-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl - Pentachlorophenol	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
97	Phenanthrene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
99	Phenol	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
100	Pyrene	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)

อัครกุล (นางสาว) อัครกุล (นาย)
ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษ
กรมส่งเสริมการค้าระหว่างประเทศ

101 Selenium...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
101	Selenium	1) Digestion, Inductively Coupled Plasma Method ^(7,13) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,14)
102	Silver	1) Digestion, Inductively Coupled Plasma Method ^(7,13) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,14)
103	Styrene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
104	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
105	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
106	Toluene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
107	Toxaphene	1) Soxhlet Extraction, Gas Chromatographic Method ^(10,22) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)
108	TPH (C ₃ -C ₆)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
109	TPH (C ₈ -C ₁₆)	1) Solvent Extraction, Gas Chromatographic Method ^(11,21) 2) Automated Soxhlet Extraction, Gas Chromatographic Method ^(21,31)
110	TPH (C ₁₆ -C ₃₃)	1) Solvent Extraction, Gas Chromatographic Method ^(11,21) 2) Automated Soxhlet Extraction, Gas Chromatographic Method ^(21,31)
111	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
112	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
113	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
114	Trichloroethylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(14,24)
115	2,4,5-Trichlorophenol	Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(25,31)

อัครกุล (นางสาว) อัครกุล (นาย)
ผู้อำนวยการศูนย์มาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษ
กรมส่งเสริมการค้าระหว่างประเทศ

116 2,4,6-Trichlorophenol...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
116	2,4,6-Trichlorophenol	Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(25,31)
117	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
118	Vanadium	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,14)
119	Vinyl Acetate	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
120	Vinyl Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
121	m-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
122	o-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
123	p-Xylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
124	Xylene (Total)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(14,24)
125	Zinc	1) Digestion, Inductively Coupled Plasma Method ^(7,15) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,14)

๑๓) นายวิมล หันไชยเนาว์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๕๗
๑๔) นางสาวนาถิ์ เจริญธรรมกุล	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๕๘
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๑๘) นายสิริจาง เพ็ชรแสง	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๒
๑๙) นายกณณกร มณีสัมพันธ์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๓
๒๐) นางสาวจันทิพย์ โกเมนชนะ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๔
๒๑) นายธวัชกร อธิกรณ์ดา	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๕
๒๒) นายศุภณัฐ พิสัยพันธ์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๖
๒๓) นายศุภชัย วงศ์สุริยาชัย	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๗
๒๔) นายปฐมพงศ์ กรสวลีศรี	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๘
๒๕) นายไสร ต้นโพธิ์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๖๙
๒๖) นางสาวกิตติยา พิณภูริวารมณ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๐
๒๗) นางสาวเจษฎาพร ศรีบุญเรือง	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๑
๒๘) นางสาวกณิศา สิงห์ใจ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๒
๒๙) นางสาววิภากรัตน์ ศิริมงคลโร	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๓
๓๐) นายพิพัฒน์ นิกัทธิเศรษฐ์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๔
๓๑) นายศิริวิทย์ เรืองสม	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๕
๓๒) นายปารเมศ สัตยาคุณ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๖
๓๓) นายณัฐพร ธรรมสโร	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๗
๓๔) นางสาวศุภรัตน์ โลจันทร	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๘
๓๕) นายพรกร อินทรเสนา	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๗๙
๓๖) นายทิวากร เข้มมาก	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๐
๓๗) นายอนุรักษ์ ทองขจรศักดิ์	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๑
๓๘) นายอภิชาติ วิลาศ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๒
๓๙) นายจรัสศรี ศรีรักษา	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๓
๔๐) นายประสาธมิตร เชื้อนเพชร	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๔
๔๑) นายภาณุวัฒน์ วังบง	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๕
๔๒) นายสันติ ชัยชนะ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๖
๔๓) นายสิทธิชัย แก้วเกตุ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๗
๔๔) นายทินกร กุลชาติ	ทะเบียนเลขที่ 7-๒๒๓-จ-๙๔๘๘

ค. ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนไว้วิเคราะห์ในน้ำเสีย จำนวน ๑๔ รายการ
อากาศเสีย (ปล่อยระบาย) จำนวน ๗ รายการ และน้ำใต้ดิน จำนวน ๓ รายการ รวมทั้งสิ้นจำนวน ๒๔ รายการ
ตามสิ่งที่แนบมาด้วย

หนังสือฉบับนี้มีอายุ ๓ ปี นับจากวันที่กรมโรงงานอุตสาหกรรมออกหนังสือ หากประสงค์
จะต่ออายุหนังสือรับขึ้นทะเบียนต้องปฏิบัติตามวิธีวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบ
คำขอต่อกรมโรงงานอุตสาหกรรมภายใน ๓๐ วัน ก่อนวันสิ้นสุดอายุของหนังสือรับขึ้นทะเบียนต้องปฏิบัติตาม
วิธีวิเคราะห์เอกชน ซึ่งคำขอต่ออายุดังกล่าวขอรับได้ที่กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ


(นางจินดา เศษะกรีนทร์)

ผู้อำนวยการกองควบคุมมลพิษและสิ่งแวดล้อม
กรมโรงงานอุตสาหกรรม

๒๘ มิ.ย. ๒๕๖๕

กองวิจัยและเตือนภัยมลพิษโรงงาน
ศูนย์วิจัยและเตือนภัยมลพิษโรงงานภาคตะวันออก
โทร. ๐ ๓๘๐๕ ๙๐๖๑๓-๓
ไปรษณีย์อิเล็กทรอนิกส์ envsodw@mail.go.th

เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนต้องปฏิบัติตามวิธีวิเคราะห์เอกชน

บริษัท แอ๊ดแอส แล็บอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน 7-๒๒๓

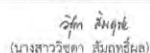
ที่ อก ๐๓๑๐(๓)/ ๒๔ ๗๐ ลงวันที่ ๒๔ มิถุนายน ๒๕๖๕

ขอบข่ายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๒๔ รายการ
น้ำเสีย จำนวน 14 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemical Oxygen Demand	1) 5-Day BOD Test, Membrane Electrode Method ^[2]
2	Chemical Oxygen Demand	2) 5-Day BOD Test, Azide Modification Method ^[2] 1) Open Reflux, Titrimetric Method ^[2] 2) Closed Reflux, Colorimetric Method ^[2] 3) Closed Reflux, Titrimetric Method ^[2]
3	Color	ADMI Weighted - Ordinate Spectrophotometric Method ^[2]
4	Cyanide	Distillation, Colorimetric Method ^[2]
5	Formaldehyde	Distillation, Colorimetric Method ^[1]
6	Free Chlorine	DPD-Ferrous Titrimetric Method ^[2]
7	Oil and Grease	Liquid-Liquid Partition-Gravimetric Method ^[2]
8	pH	Electrometric Method ^[2]
9	Phenols	1) Distillation, Chloroform Extraction Method ^[2] 2) Distillation, Direct Photometric Method ^[2]
10	Sulfide	ZnS Precipitation, Iodometric Method ^[2]
11	Temperature	Laboratory and Field Method ^[2]
12	Total Dissolved Solids	Dried at 180 °C ^[2]
13	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method ^[2]
14	Total Suspended Solids	Dried at 103-105 °C ^[2]

อากาศเสีย (ปล่อยระบาย) จำนวน 7 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Carbon Monoxide	1) Sampling Bag, Non-Dispersive Infrared Method ^[5] 2) Instrumental Analyzer Method ^[6]
2	Hydrogen Sulfide	Absorption Sampling, Iodometric Method ^[5]
3	Opacity	Ringelmann's Method ^[2,4]
4	Oxide of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method ^[4] 2) Instrumental Analyzer Method ^[6]
5	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method ^[5] 2) Instrumental Analyzer Method ^[10]


(นางสาววิชุดา สัมฤทธิ์ผล)

ผู้อำนวยการ

ศูนย์วิจัยและเตือนภัยมลพิษโรงงานภาคตะวันออก

Sulfuric Acid...

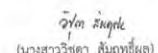
ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
6	Sulfuric Acid	Isokinetic Sampling, Barium - Thorin Titrimetric Method ^[6]
7	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method ^[7]

น้ำใต้ดิน จำนวน 3 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Cyanide	Distillation, Colorimetric Method ^[2]
2	pH	Electrometric Method ^[2]
3	Phenols	Distillation, Direct Photometric Method ^[2]

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(นางสาววิชุดา สัมฤทธิ์ผล)

ผู้อำนวยการ

ศูนย์วิจัยและเตือนภัยมลพิษโรงงานภาคตะวันออก

ศูนย์วิจัยและเตือนภัยมลพิษโรงงานภาคตะวันออก กองวิจัยและเตือนภัยมลพิษโรงงาน กรมโรงงานอุตสาหกรรม โทร. ๐ ๓๘๐๕ ๙๐๖๑๓-๓



บริษัท เอแอลเอส แลборาทอรี กรุ๊ป (ประเทศไทย) จำกัด

104 ซอยพัฒนาการ 40 ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร 10250

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