

ภาคผนวก ค

ใบรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ค-1

ผลการตรวจวิเคราะห์คุณภาพน้ำทิ้ง



Analysis / Test Report

TESTING

No.0042

Lot ID: 2472281

Date Received : Jul 03, 2024

Date Reported : Jul 11, 2024

Report Number : 3034010-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	2472281-1
Sampled Date	Jul 03, 2024 8:55 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	37	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	246	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ ว-323-จ-9449

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 2472281

Date Received : Jul 03, 2024

Date Reported : Jul 11, 2024

Report Number : 3034010-1

Page 2 of 2

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

Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461 , Pattapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

ทะเบียนเลขที่ ว-323-จ-9449

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2472281

Date Received : Jul 03, 2024

Date Reported : Jul 11, 2024

Report Number : 3034010-2

Page 1 of 1

Sample Number	2472281-1						
Sampled Date	Jul 03, 2024 8:55 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Jul 08, 2024						
Condition of Sample	Contained in one amber glass bottle, two glass vials 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							
Total Organic Carbon	mg/L	0.01	0.1	8.91	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Remark :

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

Approved by

Suwimon C.

Suwimon Chairuangwut
Scientist (3)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

8525-21/ EMAIL

S:\Reports\All_GL.rpt (6:24PM)



Analysis / Test Report

TESTING

No.0042

Lot ID: 2485358

Date Received : Aug 07, 2024

Date Reported : Aug 20, 2024

Report Number : 3064975-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	2485358-1
Sampled Date	Aug 07, 2024 9:05 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Aug 07, 2024
Condition of Sample	Contained in two glass vials, two amber glass bottles 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	-	2.0	5.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	38	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	262	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2485358

Date Received : Aug 07, 2024

Date Reported : Aug 20, 2024

Report Number : 3064975-1

Page 2 of 2

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

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-0101

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2485358

Date Received : Aug 07, 2024

Date Reported : Aug 20, 2024

Report Number : 3064975-2

Page 1 of 1

Sample Number	2485358-1						
Sampled Date	Aug 07, 2024 9:05 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Aug 08, 2024						
Condition of Sample	Contained in two glass vials, two amber glass bottles 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							
Total Organic Carbon	mg/L	0.01	0.1	9.73	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

8525-21/ EMAIL

S:\Reports\All_GL.rpt (3:58PM)



Analysis / Test Report

TESTING

No.0042

Lot ID: 2494456

Date Received : Sep 04, 2024

Date Reported : Sep 12, 2024

Report Number : 3084983-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	2494456-1
Sampled Date	Sep 04, 2024 9:15 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in two amber glass bottles, two glass vials 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	28	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	212	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	19	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda
Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 2494456

Date Received : Sep 04, 2024

Date Reported : Sep 12, 2024

Report Number : 3084983-1

Page 2 of 2

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

Sampling By : Wanlop Hunchainaow ทะเบียนเลขที่ ว-323-จ-0038 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2494456

Date Received : Sep 04, 2024

Date Reported : Sep 12, 2024

Report Number : 3084983-2

Page 1 of 1

Sample Number	2494456-1						
Sampled Date	Sep 04, 2024 9:15 AM						
Sample Description	Wastewater						
Location	H-304						
Date Analysis Commenced	Sep 05, 2024						
Condition of Sample	Contained in two amber glass bottles, two glass vials 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							
Total Organic Carbon	mg/L	0.01	0.1	6.20	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Wanlop Hunchainaow , Pattarapol Sawangjaitam

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

8525-21/ EMAIL

S:\Reports\All_GL.rpt (2:08PM)



Analysis / Test Report

TESTING

No.0042

Lot ID: 24105045

Date Received : Oct 02, 2024

Date Reported : Oct 10, 2024

Report Number : 3107768-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	24105045-1
Sampled Date	Oct 02, 2024 9:50 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in two glass vials, two amber glass bottles 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	-	2.0	5.3	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	62	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	388	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 24105045

Date Received : Oct 02, 2024

Date Reported : Oct 10, 2024

Report Number : 3107768-1

Page 2 of 2

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

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24105045

Date Received : Oct 02, 2024

Date Reported : Oct 08, 2024

Report Number : 3107768-2

Page 1 of 1

Sample Number	24105045-1
Sampled Date	Oct 02, 2024 9:50 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Oct 04, 2024
Condition of Sample	Contained in two glass vials, two amber glass bottles 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							
Total Organic Carbon	mg/L	0.01	0.1	15.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

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

Sampling By : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Narin Saiseng
Supervisor

ทะเบียนเลขที่ ว-204-จ-0009

Approved by

Kanokkorn Anek
Assistant General Manager
ทะเบียนเลขที่ ว-204-ค-0004

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 24122398

Date Received : Nov 06, 2024

Date Reported : Nov 14, 2024

Report Number : 3147244-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	24122398-1
Sampled Date	Nov 06, 2024 8:50 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Nov 06, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	30	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	<5	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.4	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	344	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 24122398

Date Received : Nov 06, 2024

Date Reported : Nov 14, 2024

Report Number : 3147244-1

Page 2 of 2

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

Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-0041 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24122398

Date Received : Nov 06, 2024

Date Reported : Nov 14, 2024

Report Number : 3147244-2

Page 1 of 1

Sample Number	24122398-1
Sampled Date	Nov 06, 2024 8:50 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Nov 11, 2024
Condition of Sample	Contained in one amber glass bottle, two glass vials 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							
Total Organic Carbon	mg/L	0.01	0.1	8.03	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

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

Sampling By : Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Remark :

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

Approved by

Suwimon C.

Suwimon Chairuangwut
Scientist (3)

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

8525-21/ EMAIL

S:\Reports\MixRef_All_GL.rpt (3:48PM)



Analysis / Test Report

TESTING

No.0042

Lot ID: 24133806

Date Received : Dec 04, 2024

Date Reported : Dec 13, 2024

Report Number : 3176054-1

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	24133806-1
Sampled Date	Dec 04, 2024 10:31 AM
Sample Description	Wastewater
Location	H-304
Date Analysis Commenced	Dec 04, 2024
Condition of Sample	Contained in two glass vials, 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	53	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.7	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	420	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	11	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 24133806

Date Received : Dec 04, 2024

Date Reported : Dec 13, 2024

Report Number : 3176054-1

Page 2 of 2

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

Sampling By : Surawit Narapong ทะเบียนเลขที่ ว-323-จ-0011 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-0101

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150
P/O : 4515498514
Project Name : Water Testing
Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24133806

Date Received : Dec 04, 2024

Date Reported : Dec 13, 2024

Report Number : 3176054-2

Page 1 of 1

Sample Number 24133806-1
Sampled Date Dec 04, 2024 10:31 AM
Sample Description Wastewater
Location H-304
Date Analysis Commenced Dec 06, 2024
Condition of Sample Contained in two glass vials, 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							
Total Organic Carbon	mg/L	0.01	0.1	12.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	Bangkok

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

Sampling By : Surawit Narapong , Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

8525-21/ EMAIL

S:\Reports\MixRef_All_GL.rpt (12:50PM)



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2455752

Date Received : Jul 03, 2024

Date Reported : Jan 02, 2025

Report Number : 3073898-1 C4

Page 1 of 2

Sample Number	2455752-1
Sampled Date	Jul 03, 2024 10:10 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jul 03, 2024
Condition of Sample	Contained in four glass vials, two amber glass bottles 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	-	2.0	2.1	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	440	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

ทะเบียนเลขที่ จ-323-จ-0031

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ จ-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2455752

Date Received : Jul 03, 2024

Date Reported : Jan 02, 2025

Report Number : 3073898-1 C4

Page 2 of 2

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

Note : This Analysis test report is reissued to supersede report No.3033931-1, Date Reported : Jul 11, 2024 due to revise analytical information.

Sampled By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-0041 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

ทะเบียนเลขที่ ว-323-จ-0031

Approved by

D. Changchon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2455752

Date Received : Jul 03, 2024

Date Reported : Jan 02, 2025

Report Number : 3073898-3 C4

Page 1 of 1

Sample Number	2455752-1
Sampled Date	Jul 03, 2024 10:10 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Jul 04, 2024
Condition of Sample	Contained in four glass vials, two amber glass bottles 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							
Total Organic Carbon *	mg/L	0.01	0.1	10.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Note : This Analysis test report is reissued to supersede report No.3033931-1, Date Reported : Jul 11, 2024 due to revise analytical information.

Sampled By : Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2485330

Date Received : Aug 07, 2024

Date Reported : Aug 16, 2024

Report Number : 3064893-1 C4

Page 1 of 2

Sample Number	2485330-1						
Sampling Date	Aug 07, 2024 10:11 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Aug 07, 2024						
Condition of Sample	Contained in six glass vials, two amber glass bottles 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	52	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	12	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	11	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	33.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	796	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2485330

Date Received : Aug 07, 2024

Date Reported : Aug 16, 2024

Report Number : 3064893-1 C4

Page 2 of 2

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

Sampling By : Sansoen Khuiyoksui , 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.

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-9446

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-9442

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 00081289

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2485330

Date Received : Aug 07, 2024

Date Reported : Aug 16, 2024

Report Number : 3064893-3 C4

Page 1 of 1

Sample Number	2485330-1						
Sampling Date	Aug 07, 2024 10:11 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Aug 08, 2024						
Condition of Sample	Contained in six glass vials, two amber glass bottles 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							
Total Organic Carbon	mg/L	0.01	0.1	13.9	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	Bangkok

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

Sampling By : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2494411

Date Received : Sep 04, 2024

Date Reported : Jan 06, 2025

Report Number : 3084849-1 C4

Page 1 of 2

Sample Number	2494411-1
Sampled Date	Sep 04, 2024 10:30 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Sep 04, 2024
Condition of Sample	Contained in six glass vials, three amber glass bottles and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	6	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH at 25 degree C		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	32.0	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	536	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ จ-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ จ-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2494411

Date Received : Sep 04, 2024

Date Reported : Jan 06, 2025

Report Number : 3084849-1 C4

Page 2 of 2

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 Hunchainaow ทะเบียนเลขที่ ว-323-จ-0038 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 2494411

Date Received : Sep 04, 2024

Date Reported : Jan 06, 2025

Report Number : 3084849-3 C4

Page 1 of 1

Sample Number	2494411-1						
Sampled Date	Sep 04, 2024 10:30 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Sep 05, 2024						
Condition of Sample	Contained in six glass vials, three amber glass bottles and eight plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon *	mg/L	0.01	0.1	10.8	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5310 B	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 : Wanlop Hunchainaow , Pattarapol Sawangjaitam

Remark :

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

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 24105028

Date Received : Oct 02, 2024

Date Reported : Jan 06, 2025

Report Number : 3107730-1 C4

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	24105028-1
Sampled Date	Oct 02, 2024 11:10 AM
Sample Description	Wastewater
Location	Outfall (จุดติดตั้งอุปกรณ์บริเวณน้ำทิ้งระบายออกนอกโรงงาน)
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in six glass vials, two amber glass bottles 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	35	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	9	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.6	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	564	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 24105028

Date Received : Oct 02, 2024

Date Reported : Jan 06, 2025

Report Number : 3107730-1 C4

Page 2 of 2

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 : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0009

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24105028

Date Received : Oct 02, 2024

Date Reported : Jan 06, 2025

Report Number : 3107730-2 C4

Page 1 of 1

Sample Number	24105028-1
Sampled Date	Oct 02, 2024 11:10 AM
Sample Description	Wastewater
Location	Outfall (จุดติดตั้งอุปกรณ์บริเวณน้ำทิ้งระบายออกนอกโรงงาน)
Date Analysis Commenced	Oct 03, 2024
Condition of Sample	Contained in six glass vials, two amber glass bottles 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							
Total Organic Carbon *	mg/L	0.01	0.1	10.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	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 : Sansoen Khuiyoksui , Pattarapol Sawangjaitam

Remark :

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

Approved by

Chanattagarn Imchom
Section Head

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



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24122386

Date Received : Nov 15, 2024

Date Reported : Jan 06, 2025

Report Number : 3147224-1 C4

Page 1 of 2

Sample Number	24122386-1
Sampled Date	Nov 15, 2024 9:15 AM
Sample Description	Wastewater
Location	Outfall (จุดติดตั้งอุปกรณ์บริเวณน้ำทิ้งระบายออกนอกโรงงาน)
Date Analysis Commenced	Nov 15, 2024
Condition of Sample	Contained in six glass vials, two amber glass bottles 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	32	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	8	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	352	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0042

Lot ID: 24122386

Date Received : Nov 15, 2024

Date Reported : Jan 06, 2025

Report Number : 3147224-1 C4

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 2 of 2

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 Hunchainaow ทะเบียนเลขที่ ว-323-จ-0038 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-0101

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING

No.0009

Lot ID: 24122386

Date Received : Nov 15, 2024

Date Reported : Jan 06, 2025

Report Number : 3147224-3 C4

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 1

Sample Number	24122386-1
Sampled Date	Nov 15, 2024 9:15 AM
Sample Description	Wastewater
Location	Outfall (จุดติดตั้งอุปกรณ์บริเวณน้ำทิ้งระบายออกนอกโรงงาน)
Date Analysis Commenced	Nov 16, 2024
Condition of Sample	Contained in six glass vials, two amber glass bottles 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							
Total Organic Carbon *	mg/L	0.01	0.1	6.60	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	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 : Wanlop Hunchainaow , 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

Chanattagarn Imchom
Section Head

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



Analysis / Test Report

TESTING

No.0042

Lot ID: 24133796

Date Received : Dec 10, 2024

Date Reported : Jan 07, 2025

Report Number : 3176039-1 C4

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Page 1 of 2

Sample Number	24133796-1
Sampled Date	Dec 10, 2024 8:42 AM
Sample Description	Wastewater
Location	Outfall
Date Analysis Commenced	Dec 10, 2024
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven 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	-	2.0	<2.0	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Rayong
COD	mg/L	1.5	25	49	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Rayong
Color (at Original pH)	ADMI	-	5	14	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Color (at pH 7.0)	ADMI	-	5	13	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	<3	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Rayong
pH at 25 degree C		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	29.3	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1056	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Rayong

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ จ-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ จ-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

TESTING

No.0042

Lot ID: 24133796

Date Received : Dec 10, 2024

Date Reported : Jan 07, 2025

Report Number : 3176039-1 C4

Page 2 of 2

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 : Sansoen Khuiyoksui ทะเบียนเลขที่ ว-323-จ-0005 , Thanasoun Namakunna ทะเบียนเลขที่ ว-204-จ-0101

Remark :

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

Technical Management

Photchana S.

Photchana Seeda

Scientist (4)

ทะเบียนเลขที่ ว-323-จ-0028

Approved by

D. Changchon.

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-ค-0001

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O :

Project Name : Water Testing

Project Location: Map Ta Phut_PU (PPTL)

Lot ID: 24133796

Date Received : Dec 10, 2024

Date Reported : Jan 07, 2025

Report Number : 3176039-3 C4

Page 1 of 1

Sample Number	24133796-1						
Sampled Date	Dec 10, 2024 8:42 AM						
Sample Description	Wastewater						
Location	Outfall						
Date Analysis Commenced	Dec 12, 2024						
Condition of Sample	Contained in six glass vials, two amber glass bottles and seven plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Organic Carbon	mg/L	0.01	0.1	18.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B	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 : Sansoen Khuiyoksui , Thanasoun Namakunna

Remark :

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

Approved by

Siriluk P.

Siriluk Bunnak
Section Head

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

6506-102/ EMAIL

ภาคผนวก ค-2

ผลการตรวจวัดระดับเสียงทั่วไปและระดับเสียงรบกวน



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2499845

Date Received : Sep 04, 2024

Date Reported : Sep 09, 2024

Report Number: 3105859-1

Page 1 of 1

Sample Number : 2499845-1
Parameter : Noise (Leq 24 hrs.)
Location : ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date : Aug 29 - Aug 30, 2024
Measurement by : Apichart Wilars
Sound Level meter : Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	62.0	84.0	55.7
09:00 AM - 10:00 AM	59.2	72.7	55.0
10:00 AM - 11:00 AM	70.0	81.4	67.1
11:00 AM - 12:00 PM	63.3	70.4	62.9
12:00 PM - 01:00 PM	61.5	73.0	60.3
01:00 PM - 02:00 PM	59.3	74.8	58.2
02:00 PM - 03:00 PM	56.6	73.4	55.2
03:00 PM - 04:00 PM	67.9	87.2	65.1
04:00 PM - 05:00 PM	65.0	82.9	64.3
05:00 PM - 06:00 PM	60.7	71.0	59.8
06:00 PM - 07:00 PM	57.9	72.7	56.9
07:00 PM - 08:00 PM	56.7	68.9	55.6
08:00 PM - 09:00 PM	55.7	69.6	54.3
09:00 PM - 10:00 PM	53.9	70.5	52.3
10:00 PM - 11:00 PM	53.8	69.3	52.3
11:00 PM - 12:00 AM	53.5	72.6	51.6
12:00 AM - 01:00 AM	54.7	72.0	51.8
01:00 AM - 02:00 AM	52.6	62.8	50.2
02:00 AM - 03:00 AM	52.3	71.8	49.2
03:00 AM - 04:00 AM	50.3	67.4	48.5
04:00 AM - 05:00 AM	49.4	67.2	47.9
05:00 AM - 06:00 AM	51.2	64.2	49.4
06:00 AM - 07:00 AM	54.9	72.8	52.4
07:00 AM - 08:00 AM	57.4	79.3	53.4

Leq Average 24 hrs. (dB(A)) : 61.2
Lmax (dB(A)) : 87.2
L90 (dB(A)) : 54.3
Ldn (dB(A)) : 63.0

Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2499845

Date Received : Sep 04, 2024

Date Reported : Sep 09, 2024

Report Number: 3105860-1

Page 1 of 1

Sample Number 2499845-2
Parameter Noise (Leq 24 hrs.)
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 30 - Aug 31, 2024
Measurement by Apichart Wilars
Sound Level meter Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	54.9	69.3	52.1
09:00 AM - 10:00 AM	54.8	74.2	51.6
10:00 AM - 11:00 AM	55.0	67.5	51.7
11:00 AM - 12:00 PM	55.8	68.2	52.4
12:00 PM - 01:00 PM	55.9	76.9	51.9
01:00 PM - 02:00 PM	55.8	72.0	52.4
02:00 PM - 03:00 PM	60.7	82.8	55.8
03:00 PM - 04:00 PM	58.2	78.3	54.7
04:00 PM - 05:00 PM	55.5	72.4	52.7
05:00 PM - 06:00 PM	54.0	70.5	51.1
06:00 PM - 07:00 PM	54.2	73.3	50.6
07:00 PM - 08:00 PM	53.0	69.6	49.5
08:00 PM - 09:00 PM	53.5	77.4	49.2
09:00 PM - 10:00 PM	51.5	70.0	48.2
10:00 PM - 11:00 PM	51.7	78.5	48.3
11:00 PM - 12:00 AM	52.6	79.1	48.7
12:00 AM - 01:00 AM	49.4	69.2	47.3
01:00 AM - 02:00 AM	49.0	68.0	46.9
02:00 AM - 03:00 AM	49.7	64.6	47.7
03:00 AM - 04:00 AM	50.0	72.5	47.8
04:00 AM - 05:00 AM	49.8	67.7	47.7
05:00 AM - 06:00 AM	51.1	75.2	48.5
06:00 AM - 07:00 AM	54.3	75.7	50.7
07:00 AM - 08:00 AM	56.0	80.1	51.7

Leq Average 24 hrs. (dB(A)) 54.6
Lmax (dB(A)) 82.8
L90 (dB(A)) 50.6
Ldn (dB(A)) 58.6

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

TESTING
No.0042

Client : Dow Chemical Thailand Ltd.

8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Lot ID: 2499845

Date Received : Sep 04, 2024

Date Reported : Sep 09, 2024

Report Number: 3105861-1

Page 1 of 1

Sample Number : 2499845-3
Parameter : Noise (Leq 24 hrs.)
Location : ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date : Aug 31 - Sep 01, 2024
Measurement by : Apichart Wilars
Sound Level meter : Serial No. 734223

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	52.0	67.8	50.0
09:00 AM - 10:00 AM	51.7	66.7	49.5
10:00 AM - 11:00 AM	51.8	67.1	49.6
11:00 AM - 12:00 PM	52.5	71.5	49.0
12:00 PM - 01:00 PM	51.9	66.9	49.3
01:00 PM - 02:00 PM	53.8	78.1	49.8
02:00 PM - 03:00 PM	52.3	78.6	49.1
03:00 PM - 04:00 PM	53.5	80.4	49.3
04:00 PM - 05:00 PM	52.8	71.0	50.0
05:00 PM - 06:00 PM	54.6	80.1	50.7
06:00 PM - 07:00 PM	54.0	69.4	50.8
07:00 PM - 08:00 PM	54.6	79.8	49.5
08:00 PM - 09:00 PM	54.0	73.4	50.1
09:00 PM - 10:00 PM	50.7	67.4	48.3
10:00 PM - 11:00 PM	51.1	74.8	47.9
11:00 PM - 12:00 AM	49.5	68.5	47.0
12:00 AM - 01:00 AM	49.7	66.0	47.2
01:00 AM - 02:00 AM	50.9	70.7	48.6
02:00 AM - 03:00 AM	49.6	62.5	48.1
03:00 AM - 04:00 AM	50.3	69.3	47.9
04:00 AM - 05:00 AM	49.2	69.9	47.4
05:00 AM - 06:00 AM	50.1	61.6	48.3
06:00 AM - 07:00 AM	52.3	73.3	49.5
07:00 AM - 08:00 AM	53.0	72.2	49.5

Leq Average 24 hrs. (dB(A)) : 52.2
Lmax (dB(A)) : 80.4
L90 (dB(A)) : 49.3
Ldn (dB(A)) : 57.3

Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Chontichak

Chonticha Subongkoch
Scientist (3)

Approved by

Supot S

Supot Salamteh
Section Head



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102644-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2499846-1
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 29 - 30, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
08:00 AM - 09:00 AM	62.0	52.2	61.5	-	45.0	16.5
09:00 AM - 10:00 AM	59.2	48.9	58.8	-	45.2	13.6
10:00 AM - 11:00 AM	70.0	48.6	70.0	-	44.3	25.7
11:00 AM - 12:00 PM	63.3	48.9	63.1	-	43.6	19.5
12:00 PM - 01:00 PM	61.5	50.8	61.1	-	46.1	15.0
01:00 PM - 02:00 PM	59.3	49.0	58.9	-	44.2	14.7
02:00 PM - 03:00 PM	56.6	52.5	54.5	-	46.3	8.2
03:00 PM - 04:00 PM	67.9	55.2	67.7	-	44.2	23.5
04:00 PM - 05:00 PM	65.0	50.8	64.8	-	46.3	18.5
05:00 PM - 06:00 PM	60.7	51.7	60.1	-	46.6	13.5
06:00 PM - 07:00 PM	57.9	51.3	56.8	-	46.5	10.3
07:00 PM - 08:00 PM	56.7	50.5	55.5	-	45.8	9.7
08:00 PM - 09:00 PM	55.7	50.8	54.0	-	44.6	9.4
09:00 PM - 10:00 PM	53.9	48.9	52.2	-	43.2	9.0
10:00 PM - 10:05 PM	54.3	46.4	-	56.5	42.8	13.7
10:05 PM - 10:10 PM	53.1	58.0	-	n/a	43.3	-
10:10 PM - 10:15 PM	52.7	46.7	-	54.4	43.0	11.4
10:15 PM - 10:20 PM	53.1	51.0	-	51.9	43.1	8.8
10:20 PM - 10:25 PM	53.0	50.8	-	52.0	42.1	9.9
10:25 PM - 10:30 PM	53.4	51.4	-	52.1	43.0	9.1
10:30 PM - 10:35 PM	53.9	47.7	-	55.7	42.0	13.7
10:35 PM - 10:40 PM	55.3	49.4	-	57.0	43.1	13.9
10:40 PM - 10:45 PM	54.3	47.5	-	56.3	42.4	13.9
10:45 PM - 10:50 PM	55.0	47.3	-	57.2	42.9	14.3
10:50 PM - 10:55 PM	53.6	48.2	-	55.1	42.4	12.7
10:55 PM - 11:00 PM	53.1	48.8	-	54.1	41.5	12.6
11:00 PM - 11:05 PM	52.6	46.3	-	54.4	41.9	12.5
11:05 PM - 11:10 PM	52.8	46.4	-	54.7	41.6	13.1
11:10 PM - 11:15 PM	52.9	45.9	-	54.9	41.8	13.1
11:15 PM - 11:20 PM	52.3	45.9	-	54.2	41.9	12.3
11:20 PM - 11:25 PM	54.1	49.8	-	55.1	41.8	13.3
11:25 PM - 11:30 PM	53.5	46.6	-	55.5	40.7	14.8
11:30 PM - 11:35 PM	53.9	47.5	-	55.8	43.5	12.3
11:35 PM - 11:40 PM	53.0	48.6	-	54.0	43.6	10.4
11:40 PM - 11:45 PM	54.6	51.1	-	55.0	43.7	11.3
11:45 PM - 11:50 PM	54.7	47.0	-	56.9	43.6	13.3
11:50 PM - 11:55 PM	51.7	45.2	-	53.6	41.0	12.6
11:55 PM - 12:00 AM	54.3	53.9	-	46.7	41.4	5.3
12:00 AM - 12:05 AM	54.0	46.8	-	56.1	43.4	12.7
12:05 AM - 12:10 AM	52.7	48.2	-	53.8	43.3	10.5

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102644-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2499846-1
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 29 - 30, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	53.2	46.1	-	55.3	42.6	12.7
12:15 AM - 12:20 AM	52.5	44.1	-	54.8	40.0	14.8
12:20 AM - 12:25 AM	51.8	45.5	-	53.6	41.0	12.6
12:25 AM - 12:30 AM	55.2	45.3	-	57.7	41.4	16.3
12:30 AM - 12:35 AM	57.4	46.1	-	60.1	42.5	17.6
12:35 AM - 12:40 AM	57.3	47.3	-	59.8	44.1	15.7
12:40 AM - 12:45 AM	55.2	47.4	-	57.4	43.9	13.5
12:45 AM - 12:50 AM	54.8	49.0	-	56.5	46.3	10.2
12:50 AM - 12:55 AM	54.5	48.2	-	56.3	45.6	10.7
12:55 AM - 01:00 AM	54.3	46.5	-	56.5	43.8	12.7
01:00 AM - 01:05 AM	53.5	47.4	-	55.3	44.0	11.3
01:05 AM - 01:10 AM	52.4	45.6	-	54.4	43.3	11.1
01:10 AM - 01:15 AM	52.8	46.0	-	54.8	42.2	12.6
01:15 AM - 01:20 AM	53.1	45.4	-	55.3	41.7	13.6
01:20 AM - 01:25 AM	53.5	48.0	-	55.1	43.3	11.8
01:25 AM - 01:30 AM	52.5	44.7	-	54.7	42.7	12.0
01:30 AM - 01:35 AM	52.7	47.4	-	54.2	41.8	12.4
01:35 AM - 01:40 AM	52.0	44.6	-	54.1	42.5	11.6
01:40 AM - 01:45 AM	51.7	46.2	-	53.3	42.6	10.7
01:45 AM - 01:50 AM	53.0	46.1	-	55.0	44.1	10.9
01:50 AM - 01:55 AM	52.2	44.2	-	54.5	42.9	11.6
01:55 AM - 02:00 AM	50.8	48.4	-	50.1	43.6	6.5
02:00 AM - 02:05 AM	51.6	43.9	-	53.8	40.2	13.6
02:05 AM - 02:10 AM	51.8	56.0	-	n/a	40.7	-
02:10 AM - 02:15 AM	52.9	47.9	-	54.2	45.2	9.0
02:15 AM - 02:20 AM	51.5	47.2	-	52.5	44.9	7.6
02:20 AM - 02:25 AM	54.1	47.3	-	56.1	44.8	11.3
02:25 AM - 02:30 AM	50.7	47.8	-	50.6	43.7	6.9
02:30 AM - 02:35 AM	51.8	46.7	-	53.2	44.5	8.7
02:35 AM - 02:40 AM	50.8	48.4	-	50.1	46.4	3.7
02:40 AM - 02:45 AM	56.1	49.2	-	58.1	47.5	10.6
02:45 AM - 02:50 AM	52.1	48.7	-	52.4	47.1	5.3
02:50 AM - 02:55 AM	49.5	49.7	-	n/a	48.1	-
02:55 AM - 03:00 AM	50.9	49.2	-	49.0	48.0	1.0
03:00 AM - 03:05 AM	51.1	50.9	-	40.6	47.4	-6.8
03:05 AM - 03:10 AM	50.1	47.7	-	49.4	45.7	3.7
03:10 AM - 03:15 AM	50.2	51.3	-	n/a	45.6	-
03:15 AM - 03:20 AM	50.5	48.0	-	49.9	46.9	3.0
03:20 AM - 03:25 AM	50.5	48.7	-	48.8	47.2	1.6
03:25 AM - 03:30 AM	49.3	47.9	-	46.7	46.2	0.5

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102644-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2499846-1
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 29 - 30, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))						
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีกิจกรรม	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	50.7	47.0	-	51.3	45.6	5.7
03:35 AM - 03:40 AM	50.1	47.7	-	49.4	45.3	4.1
03:40 AM - 03:45 AM	49.6	48.5	-	46.1	45.5	0.6
03:45 AM - 03:50 AM	50.1	46.6	-	50.5	45.0	5.5
03:50 AM - 03:55 AM	49.4	48.0	-	46.8	43.8	3.0
03:55 AM - 04:00 AM	51.7	44.7	-	53.7	42.4	11.3
04:00 AM - 04:05 AM	48.7	45.9	-	48.5	44.3	4.2
04:05 AM - 04:10 AM	48.8	46.1	-	48.5	44.4	4.1
04:10 AM - 04:15 AM	49.2	47.9	-	46.3	43.7	2.6
04:15 AM - 04:20 AM	49.6	45.7	-	50.3	43.6	6.7
04:20 AM - 04:25 AM	48.5	48.2	-	39.7	44.9	-5.2
04:25 AM - 04:30 AM	48.6	47.3	-	45.7	45.1	0.6
04:30 AM - 04:35 AM	51.1	48.2	-	51.0	46.7	4.3
04:35 AM - 04:40 AM	48.9	49.6	-	n/a	46.0	-
04:40 AM - 04:45 AM	49.8	47.8	-	48.5	46.2	2.3
04:45 AM - 04:50 AM	49.4	48.6	-	44.7	45.6	-0.9
04:50 AM - 04:55 AM	49.4	50.2	-	n/a	45.9	-
04:55 AM - 05:00 AM	50.2	48.3	-	48.7	45.4	3.3
05:00 AM - 05:05 AM	50.6	48.6	-	49.3	45.1	4.2
05:05 AM - 05:10 AM	49.4	49.2	-	38.9	44.4	-5.5
05:10 AM - 05:15 AM	51.2	47.2	-	52.0	43.1	8.9
05:15 AM - 05:20 AM	50.5	47.4	-	50.6	43.5	7.1
05:20 AM - 05:25 AM	51.2	48.2	-	51.2	44.0	7.2
05:25 AM - 05:30 AM	50.1	49.2	-	45.8	44.0	1.8
05:30 AM - 05:35 AM	50.9	48.6	-	50.0	45.6	4.4
05:35 AM - 05:40 AM	51.4	52.1	-	n/a	45.5	-
05:40 AM - 05:45 AM	51.6	51.9	-	n/a	46.9	-
05:45 AM - 05:50 AM	52.9	51.2	-	51.0	47.1	3.9
05:50 AM - 05:55 AM	52.2	53.2	-	n/a	47.6	-
05:55 AM - 06:00 AM	51.8	53.1	-	n/a	48.2	-
06:00 AM - 07:00 AM	54.9	58.6	n/a	-	49.7	-
07:00 AM - 08:00 AM	57.4	52.9	55.5	-	49.5	6.0
ค่ามาตรฐาน						≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน

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

Remark:

- ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 29-30 สิงหาคม 2567
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีกิจกรรม (Sample No.2417816-1 วันที่ตรวจวัด 20-21 สิงหาคม 2567)
- n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีกิจกรรม

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

Approved by

Wilawan Borirak
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102645-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2499846-2
Parameter เสียงรบกวน
Location หนองตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 30 - 31, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
08:00 AM - 09:00 AM	54.9	52.2	51.6	-	45.0	6.6
09:00 AM - 10:00 AM	54.8	48.9	53.5	-	45.2	8.3
10:00 AM - 11:00 AM	55.0	48.6	53.9	-	44.3	9.6
11:00 AM - 12:00 PM	55.8	48.9	54.8	-	43.6	11.2
12:00 PM - 01:00 PM	55.9	50.8	54.3	-	46.1	8.2
01:00 PM - 02:00 PM	55.8	49.0	54.8	-	44.2	10.6
02:00 PM - 03:00 PM	60.7	52.5	60.0	-	46.3	13.7
03:00 PM - 04:00 PM	58.2	55.2	55.2	-	44.2	11.0
04:00 PM - 05:00 PM	55.5	50.8	53.7	-	46.3	7.4
05:00 PM - 06:00 PM	54.0	51.7	50.1	-	46.6	3.5
06:00 PM - 07:00 PM	54.2	51.3	51.1	-	46.5	4.6
07:00 PM - 08:00 PM	53.0	50.5	49.4	-	45.8	3.6
08:00 PM - 09:00 PM	53.5	50.8	50.2	-	44.6	5.6
09:00 PM - 10:00 PM	51.5	48.9	48.0	-	43.2	4.8
10:00 PM - 10:05 PM	50.2	46.4	-	50.9	42.8	8.1
10:05 PM - 10:10 PM	53.2	58.0	-	n/a	43.3	-
10:10 PM - 10:15 PM	56.8	46.7	-	59.4	43.0	16.4
10:15 PM - 10:20 PM	51.3	51.0	-	42.5	43.1	-0.6
10:20 PM - 10:25 PM	49.7	50.8	-	n/a	42.1	-
10:25 PM - 10:30 PM	50.3	51.4	-	n/a	43.0	-
10:30 PM - 10:35 PM	50.0	47.7	-	49.1	42.0	7.1
10:35 PM - 10:40 PM	50.8	49.4	-	48.2	43.1	5.1
10:40 PM - 10:45 PM	50.7	47.5	-	50.9	42.4	8.5
10:45 PM - 10:50 PM	49.7	47.3	-	49.0	42.9	6.1
10:50 PM - 10:55 PM	49.9	48.2	-	48.0	42.4	5.6
10:55 PM - 11:00 PM	50.1	48.8	-	47.2	41.5	5.7
11:00 PM - 11:05 PM	51.9	46.3	-	53.5	41.9	11.6
11:05 PM - 11:10 PM	51.1	46.4	-	52.3	41.6	10.7
11:10 PM - 11:15 PM	52.6	45.9	-	54.6	41.8	12.8
11:15 PM - 11:20 PM	52.6	45.9	-	54.6	41.9	12.7
11:20 PM - 11:25 PM	51.5	49.8	-	49.6	41.8	7.8
11:25 PM - 11:30 PM	51.2	46.6	-	52.4	40.7	11.7
11:30 PM - 11:35 PM	50.5	47.5	-	50.5	43.5	7.0
11:35 PM - 11:40 PM	54.5	48.6	-	56.2	43.6	12.6
11:40 PM - 11:45 PM	50.4	51.1	-	n/a	43.7	-
11:45 PM - 11:50 PM	50.6	47.0	-	51.1	43.6	7.5
11:50 PM - 11:55 PM	49.9	45.2	-	51.1	41.0	10.1
11:55 PM - 12:00 AM	57.3	53.9	-	57.6	41.4	16.2
12:00 AM - 12:05 AM	49.1	46.8	-	48.2	43.4	4.8
12:05 AM - 12:10 AM	48.8	48.2	-	42.9	43.3	-0.4

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102645-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2499846-2
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 30 - 31, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	49.2	46.1	-	49.3	42.6	6.7
12:15 AM - 12:20 AM	48.7	44.1	-	49.9	40.0	9.9
12:20 AM - 12:25 AM	50.2	45.5	-	51.4	41.0	10.4
12:25 AM - 12:30 AM	48.8	45.3	-	49.2	41.4	7.8
12:30 AM - 12:35 AM	48.6	46.1	-	48.0	42.5	5.5
12:35 AM - 12:40 AM	51.9	47.3	-	53.1	44.1	9.0
12:40 AM - 12:45 AM	48.2	47.4	-	43.5	43.9	-0.4
12:45 AM - 12:50 AM	48.0	49.0	-	n/a	46.3	-
12:50 AM - 12:55 AM	50.9	48.2	-	50.6	45.6	5.0
12:55 AM - 01:00 AM	47.8	46.5	-	44.9	43.8	1.1
01:00 AM - 01:05 AM	49.3	47.4	-	47.8	44.0	3.8
01:05 AM - 01:10 AM	48.7	45.6	-	48.8	43.3	5.5
01:10 AM - 01:15 AM	48.4	46.0	-	47.7	42.2	5.5
01:15 AM - 01:20 AM	50.2	45.4	-	51.5	41.7	9.8
01:20 AM - 01:25 AM	48.5	48.0	-	41.9	43.3	-1.4
01:25 AM - 01:30 AM	50.7	44.7	-	52.4	42.7	9.7
01:30 AM - 01:35 AM	48.0	47.4	-	42.1	41.8	0.3
01:35 AM - 01:40 AM	49.0	44.6	-	50.0	42.5	7.5
01:40 AM - 01:45 AM	48.6	46.2	-	47.9	42.6	5.3
01:45 AM - 01:50 AM	48.6	46.1	-	48.0	44.1	3.9
01:50 AM - 01:55 AM	48.6	44.2	-	49.6	42.9	6.7
01:55 AM - 02:00 AM	48.8	48.4	-	41.2	43.6	-2.4
02:00 AM - 02:05 AM	49.4	43.9	-	51.0	40.2	10.8
02:05 AM - 02:10 AM	48.9	56.0	-	n/a	40.7	-
02:10 AM - 02:15 AM	49.0	47.9	-	45.5	45.2	0.3
02:15 AM - 02:20 AM	50.3	47.2	-	50.4	44.9	5.5
02:20 AM - 02:25 AM	47.3	47.3	-	n/a	44.8	-
02:25 AM - 02:30 AM	48.4	47.8	-	42.5	43.7	-1.2
02:30 AM - 02:35 AM	50.5	46.7	-	51.2	44.5	6.7
02:35 AM - 02:40 AM	52.6	48.4	-	53.5	46.4	7.1
02:40 AM - 02:45 AM	50.9	49.2	-	49.0	47.5	1.5
02:45 AM - 02:50 AM	49.9	48.7	-	46.7	47.1	-0.4
02:50 AM - 02:55 AM	48.1	49.7	-	n/a	48.1	-
02:55 AM - 03:00 AM	48.3	49.2	-	n/a	48.0	-
03:00 AM - 03:05 AM	47.9	50.9	-	n/a	47.4	-
03:05 AM - 03:10 AM	48.0	47.7	-	39.2	45.7	-6.5
03:10 AM - 03:15 AM	49.1	51.3	-	n/a	45.6	-
03:15 AM - 03:20 AM	48.6	48.0	-	42.7	46.9	-4.2
03:20 AM - 03:25 AM	48.5	48.7	-	n/a	47.2	-
03:25 AM - 03:30 AM	49.1	47.9	-	45.9	46.2	-0.3

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102645-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2499846-2
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 30 - 31, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	49.3	47.0	-	48.4	45.6	2.8
03:35 AM - 03:40 AM	50.1	47.7	-	49.4	45.3	4.1
03:40 AM - 03:45 AM	54.9	48.5	-	56.8	45.5	11.3
03:45 AM - 03:50 AM	50.5	46.6	-	51.2	45.0	6.2
03:50 AM - 03:55 AM	49.8	48.0	-	48.1	43.8	4.3
03:55 AM - 04:00 AM	48.4	44.7	-	49.0	42.4	6.6
04:00 AM - 04:05 AM	50.0	45.9	-	50.9	44.3	6.6
04:05 AM - 04:10 AM	49.1	46.1	-	49.1	44.4	4.7
04:10 AM - 04:15 AM	48.9	47.9	-	45.0	43.7	1.3
04:15 AM - 04:20 AM	49.1	45.7	-	49.4	43.6	5.8
04:20 AM - 04:25 AM	49.1	48.2	-	44.8	44.9	-0.1
04:25 AM - 04:30 AM	49.4	47.3	-	48.2	45.1	3.1
04:30 AM - 04:35 AM	50.5	48.2	-	49.6	46.7	2.9
04:35 AM - 04:40 AM	50.5	49.6	-	46.2	46.0	0.2
04:40 AM - 04:45 AM	51.4	47.8	-	51.9	46.2	5.7
04:45 AM - 04:50 AM	49.2	48.6	-	43.3	45.6	-2.3
04:50 AM - 04:55 AM	48.4	50.2	-	n/a	45.9	-
04:55 AM - 05:00 AM	50.4	48.3	-	49.2	45.4	3.8
05:00 AM - 05:05 AM	49.5	48.6	-	45.2	45.1	0.1
05:05 AM - 05:10 AM	48.9	49.2	-	n/a	44.4	-
05:10 AM - 05:15 AM	49.4	47.2	-	48.4	43.1	5.3
05:15 AM - 05:20 AM	49.5	47.4	-	48.3	43.5	4.8
05:20 AM - 05:25 AM	49.5	48.2	-	46.6	44.0	2.6
05:25 AM - 05:30 AM	51.3	49.2	-	50.1	44.0	6.1
05:30 AM - 05:35 AM	50.0	48.6	-	47.4	45.6	1.8
05:35 AM - 05:40 AM	52.7	52.1	-	46.8	45.5	1.3
05:40 AM - 05:45 AM	53.6	51.9	-	51.7	46.9	4.8
05:45 AM - 05:50 AM	51.4	51.2	-	40.9	47.1	-6.2
05:50 AM - 05:55 AM	51.4	53.2	-	n/a	47.6	-
05:55 AM - 06:00 AM	52.8	53.1	-	n/a	48.2	-
06:00 AM - 07:00 AM	54.3	58.6	n/a	-	49.7	-
07:00 AM - 08:00 AM	56.0	52.9	53.1	-	49.5	3.6
ค่ามาตรฐาน						≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน

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

Remark:

- ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 30-31 สิงหาคม 2567
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2417816-1 วันที่ตรวจวัด 20-21 สิงหาคม 2567)
- n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by

Wilawan Borirak
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102646-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2499846-3
Parameter เสียงรบกวน
Location หนองตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 31 - Sep 01, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
08:00 AM - 09:00 AM	52.0	52.2	n/a	-	45.0	-
09:00 AM - 10:00 AM	51.7	48.9	48.5	-	45.2	3.3
10:00 AM - 11:00 AM	51.8	48.6	49.0	-	44.3	4.7
11:00 AM - 12:00 PM	52.5	48.9	50.0	-	43.6	6.4
12:00 PM - 01:00 PM	51.9	50.8	45.4	-	46.1	-0.7
01:00 PM - 02:00 PM	53.8	49.0	52.1	-	44.2	7.9
02:00 PM - 03:00 PM	52.3	52.5	n/a	-	46.3	-
03:00 PM - 04:00 PM	53.5	55.2	n/a	-	44.2	-
04:00 PM - 05:00 PM	52.8	50.8	48.5	-	46.3	2.2
05:00 PM - 06:00 PM	54.6	51.7	51.5	-	46.6	4.9
06:00 PM - 07:00 PM	54.0	51.3	50.7	-	46.5	4.2
07:00 PM - 08:00 PM	54.6	50.5	52.5	-	45.8	6.7
08:00 PM - 09:00 PM	54.0	50.8	51.2	-	44.6	6.6
09:00 PM - 10:00 PM	50.7	48.9	46.0	-	43.2	2.8
10:00 PM - 10:05 PM	50.7	46.4	-	51.7	42.8	8.9
10:05 PM - 10:10 PM	51.3	58.0	-	n/a	43.3	-
10:10 PM - 10:15 PM	50.9	46.7	-	51.8	43.0	8.8
10:15 PM - 10:20 PM	52.0	51.0	-	48.1	43.1	5.0
10:20 PM - 10:25 PM	50.5	50.8	-	n/a	42.1	-
10:25 PM - 10:30 PM	54.7	51.4	-	55.0	43.0	12.0
10:30 PM - 10:35 PM	51.6	47.7	-	52.3	42.0	10.3
10:35 PM - 10:40 PM	50.0	49.4	-	44.1	43.1	1.0
10:40 PM - 10:45 PM	48.1	47.5	-	42.2	42.4	-0.2
10:45 PM - 10:50 PM	49.7	47.3	-	49.0	42.9	6.1
10:50 PM - 10:55 PM	49.4	48.2	-	46.2	42.4	3.8
10:55 PM - 11:00 PM	50.5	48.8	-	48.6	41.5	7.1
11:00 PM - 11:05 PM	50.1	46.3	-	50.8	41.9	8.9
11:05 PM - 11:10 PM	49.5	46.4	-	49.6	41.6	8.0
11:10 PM - 11:15 PM	48.4	45.9	-	47.8	41.8	6.0
11:15 PM - 11:20 PM	48.6	45.9	-	48.3	41.9	6.4
11:20 PM - 11:25 PM	47.6	49.8	-	n/a	41.8	-
11:25 PM - 11:30 PM	48.5	46.6	-	47.0	40.7	6.3
11:30 PM - 11:35 PM	48.6	47.5	-	45.1	43.5	1.6
11:35 PM - 11:40 PM	50.5	48.6	-	49.0	43.6	5.4
11:40 PM - 11:45 PM	50.7	51.1	-	n/a	43.7	-
11:45 PM - 11:50 PM	49.5	47.0	-	48.9	43.6	5.3
11:50 PM - 11:55 PM	51.4	45.2	-	53.2	41.0	12.2
11:55 PM - 12:00 AM	48.3	53.9	-	n/a	41.4	-
12:00 AM - 12:05 AM	48.9	46.8	-	47.7	43.4	4.3
12:05 AM - 12:10 AM	50.3	48.2	-	49.1	43.3	5.8

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102646-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2499846-3
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 31 - Sep 01, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	49.3	46.1	-	49.5	42.6	6.9
12:15 AM - 12:20 AM	50.3	44.1	-	52.1	40.0	12.1
12:20 AM - 12:25 AM	49.5	45.5	-	50.3	41.0	9.3
12:25 AM - 12:30 AM	48.7	45.3	-	49.0	41.4	7.6
12:30 AM - 12:35 AM	50.3	46.1	-	51.2	42.5	8.7
12:35 AM - 12:40 AM	49.3	47.3	-	48.0	44.1	3.9
12:40 AM - 12:45 AM	49.9	47.4	-	49.3	43.9	5.4
12:45 AM - 12:50 AM	49.9	49.0	-	45.6	46.3	-0.7
12:50 AM - 12:55 AM	48.6	48.2	-	41.0	45.6	-4.6
12:55 AM - 01:00 AM	50.3	46.5	-	51.0	43.8	7.2
01:00 AM - 01:05 AM	48.9	47.4	-	46.6	44.0	2.6
01:05 AM - 01:10 AM	52.3	45.6	-	54.3	43.3	11.0
01:10 AM - 01:15 AM	52.0	46.0	-	53.7	42.2	11.5
01:15 AM - 01:20 AM	50.3	45.4	-	51.6	41.7	9.9
01:20 AM - 01:25 AM	50.3	48.0	-	49.4	43.3	6.1
01:25 AM - 01:30 AM	51.0	44.7	-	52.8	42.7	10.1
01:30 AM - 01:35 AM	49.5	47.4	-	48.3	41.8	6.5
01:35 AM - 01:40 AM	50.4	44.6	-	52.1	42.5	9.6
01:40 AM - 01:45 AM	50.9	46.2	-	52.1	42.6	9.5
01:45 AM - 01:50 AM	50.3	46.1	-	51.2	44.1	7.1
01:50 AM - 01:55 AM	50.8	44.2	-	52.7	42.9	9.8
01:55 AM - 02:00 AM	52.5	48.4	-	53.4	43.6	9.8
02:00 AM - 02:05 AM	49.8	43.9	-	51.5	40.2	11.3
02:05 AM - 02:10 AM	49.5	56.0	-	n/a	40.7	-
02:10 AM - 02:15 AM	50.1	47.9	-	49.1	45.2	3.9
02:15 AM - 02:20 AM	49.1	47.2	-	47.6	44.9	2.7
02:20 AM - 02:25 AM	49.8	47.3	-	49.2	44.8	4.4
02:25 AM - 02:30 AM	49.8	47.8	-	48.5	43.7	4.8
02:30 AM - 02:35 AM	50.2	46.7	-	50.6	44.5	6.1
02:35 AM - 02:40 AM	50.0	48.4	-	47.9	46.4	1.5
02:40 AM - 02:45 AM	48.8	49.2	-	n/a	47.5	-
02:45 AM - 02:50 AM	49.0	48.7	-	40.2	47.1	-6.9
02:50 AM - 02:55 AM	50.1	49.7	-	42.5	48.1	-5.6
02:55 AM - 03:00 AM	48.1	49.2	-	n/a	48.0	-
03:00 AM - 03:05 AM	48.3	50.9	-	n/a	47.4	-
03:05 AM - 03:10 AM	49.2	47.7	-	46.9	45.7	1.2
03:10 AM - 03:15 AM	49.2	51.3	-	n/a	45.6	-
03:15 AM - 03:20 AM	49.0	48.0	-	45.1	46.9	-1.8
03:20 AM - 03:25 AM	49.9	48.7	-	46.7	47.2	-0.5
03:25 AM - 03:30 AM	50.0	47.9	-	48.8	46.2	2.6

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2499846
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number : 3102646-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2499846-3
Parameter เสียงรบกวน
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792)
Measurement Date Aug 31 - Sep 01, 2024
Measurement by Apichart Wilars
Sound Level Meter 00734223

ระดับเสียง (dB(A))

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	49.7	47.0	-	49.4	45.6	3.8
03:35 AM - 03:40 AM	49.1	47.7	-	46.5	45.3	1.2
03:40 AM - 03:45 AM	49.7	48.5	-	46.5	45.5	1.0
03:45 AM - 03:50 AM	49.8	46.6	-	50.0	45.0	5.0
03:50 AM - 03:55 AM	53.2	48.0	-	54.6	43.8	10.8
03:55 AM - 04:00 AM	53.1	44.7	-	55.4	42.4	13.0
04:00 AM - 04:05 AM	48.3	45.9	-	47.6	44.3	3.3
04:05 AM - 04:10 AM	48.4	46.1	-	47.5	44.4	3.1
04:10 AM - 04:15 AM	48.1	47.9	-	37.6	43.7	-6.1
04:15 AM - 04:20 AM	48.4	45.7	-	48.1	43.6	4.5
04:20 AM - 04:25 AM	48.8	48.2	-	42.9	44.9	-2.0
04:25 AM - 04:30 AM	48.9	47.3	-	46.8	45.1	1.7
04:30 AM - 04:35 AM	48.9	48.2	-	43.6	46.7	-3.1
04:35 AM - 04:40 AM	49.2	49.6	-	n/a	46.0	-
04:40 AM - 04:45 AM	49.7	47.8	-	48.2	46.2	2.0
04:45 AM - 04:50 AM	49.7	48.6	-	46.2	45.6	0.6
04:50 AM - 04:55 AM	50.1	50.2	-	n/a	45.9	-
04:55 AM - 05:00 AM	51.2	48.3	-	51.1	45.4	5.7
05:00 AM - 05:05 AM	49.6	48.6	-	45.7	45.1	0.6
05:05 AM - 05:10 AM	49.2	49.2	-	n/a	44.4	-
05:10 AM - 05:15 AM	49.6	47.2	-	48.9	43.1	5.8
05:15 AM - 05:20 AM	49.8	47.4	-	49.1	43.5	5.6
05:20 AM - 05:25 AM	49.8	48.2	-	47.7	44.0	3.7
05:25 AM - 05:30 AM	49.3	49.2	-	35.9	44.0	-8.1
05:30 AM - 05:35 AM	50.1	48.6	-	47.8	45.6	2.2
05:35 AM - 05:40 AM	50.0	52.1	-	n/a	45.5	-
05:40 AM - 05:45 AM	51.1	51.9	-	n/a	46.9	-
05:45 AM - 05:50 AM	51.3	51.2	-	37.9	47.1	-9.2
05:50 AM - 05:55 AM	50.7	53.2	-	n/a	47.6	-
05:55 AM - 06:00 AM	50.4	53.1	-	n/a	48.2	-
06:00 AM - 07:00 AM	52.3	58.6	n/a	-	49.7	-
07:00 AM - 08:00 AM	53.0	52.9	36.6	-	49.5	-12.9
ค่ามาตรฐาน						≤ 10

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน

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

Remark:

- ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 31 สิงหาคม-01 กันยายน 2567
- ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2417816-1 วันที่ตรวจวัด 20-21 สิงหาคม 2567)
- n/a: ไม่สามารถคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดน้อยกว่าระดับเสียงขณะไม่มีการรบกวน

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

Approved by

Wilawan Borirak
Manager

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

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

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2417816
Date Received : Aug 21, 2024
Date Reported : Sep 09, 2024
Report No. : 2911791-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 1 of 3

Sample No. 2417816-1
Parameter Noise
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792) (Shut down)
Measurement Date Aug 20 - 21, 2024
Measurement by Nantawat Sarin
Sound Level Meter 01222716

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	48.6	69.7	44.3
11:00 AM - 12:00 PM	48.9	71.1	43.6
12:00 PM - 01:00 PM	50.8	66.9	46.1
01:00 PM - 02:00 PM	49.0	72.2	44.2
02:00 PM - 03:00 PM	52.5	81.8	46.3
03:00 PM - 04:00 PM	55.2	84.5	44.2
04:00 PM - 05:00 PM	50.8	71.5	46.3
05:00 PM - 06:00 PM	51.7	73.4	46.6
06:00 PM - 07:00 PM	51.3	74.3	46.5
07:00 PM - 08:00 PM	50.5	72.8	45.8
08:00 PM - 09:00 PM	50.8	78.7	44.6
09:00 PM - 10:00 PM	48.9	77.7	43.2
10:00 PM - 10:05 PM	46.4	58.0	42.8
10:05 PM - 10:10 PM	58.0	84.0	43.3
10:10 PM - 10:15 PM	46.7	58.1	43.0
10:15 PM - 10:20 PM	51.0	72.0	43.1
10:20 PM - 10:25 PM	50.8	70.7	42.1
10:25 PM - 10:30 PM	51.4	73.1	43.0
10:30 PM - 10:35 PM	47.7	60.8	42.0
10:35 PM - 10:40 PM	49.4	67.7	43.1
10:40 PM - 10:45 PM	47.5	63.1	42.4
10:45 PM - 10:50 PM	47.3	61.0	42.9
10:50 PM - 10:55 PM	48.2	67.3	42.4
10:55 PM - 11:00 PM	48.8	65.9	41.5
11:00 PM - 11:05 PM	46.3	63.4	41.9
11:05 PM - 11:10 PM	46.4	61.4	41.6
11:10 PM - 11:15 PM	45.9	61.5	41.8
11:15 PM - 11:20 PM	45.9	57.7	41.9
11:20 PM - 11:25 PM	49.8	70.7	41.8
11:25 PM - 11:30 PM	46.6	67.8	40.7
11:30 PM - 11:35 PM	47.5	59.2	43.5
11:35 PM - 11:40 PM	48.6	61.3	43.6
11:40 PM - 11:45 PM	51.1	72.4	43.7
11:45 PM - 11:50 PM	47.0	57.2	43.6
11:50 PM - 11:55 PM	45.2	58.9	41.0
11:55 PM - 12:00 AM	53.9	77.8	41.4
12:00 AM - 12:05 AM	46.8	60.8	43.4
12:05 AM - 12:10 AM	48.2	65.1	43.3
12:10 AM - 12:15 AM	46.1	56.6	42.6
12:15 AM - 12:20 AM	44.1	57.1	40.0

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2417816
Date Received : Aug 21, 2024
Date Reported : Sep 09, 2024
Report No. : 2911791-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 2 of 3

Sample No. 2417816-1
Parameter Noise
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792) (Shut down)
Measurement Date Aug 20 - 21, 2024
Measurement by Nantawat Sarin
Sound Level Meter 01222716

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 12:25 AM	45.5	59.2	41.0
12:25 AM - 12:30 AM	45.3	59.1	41.4
12:30 AM - 12:35 AM	46.1	57.6	42.5
12:35 AM - 12:40 AM	47.3	63.4	44.1
12:40 AM - 12:45 AM	47.4	56.9	43.9
12:45 AM - 12:50 AM	49.0	58.7	46.3
12:50 AM - 12:55 AM	48.2	59.1	45.6
12:55 AM - 01:00 AM	46.5	60.6	43.8
01:00 AM - 01:05 AM	47.4	65.7	44.0
01:05 AM - 01:10 AM	45.6	58.1	43.3
01:10 AM - 01:15 AM	46.0	62.4	42.2
01:15 AM - 01:20 AM	45.4	62.2	41.7
01:20 AM - 01:25 AM	48.0	69.0	43.3
01:25 AM - 01:30 AM	44.7	57.3	42.7
01:30 AM - 01:35 AM	47.4	71.3	41.8
01:35 AM - 01:40 AM	44.6	53.8	42.5
01:40 AM - 01:45 AM	46.2	63.7	42.6
01:45 AM - 01:50 AM	46.1	62.6	44.1
01:50 AM - 01:55 AM	44.2	51.6	42.9
01:55 AM - 02:00 AM	48.4	65.9	43.6
02:00 AM - 02:05 AM	43.9	60.7	40.2
02:05 AM - 02:10 AM	56.0	79.6	40.7
02:10 AM - 02:15 AM	47.9	57.7	45.2
02:15 AM - 02:20 AM	47.2	61.9	44.9
02:20 AM - 02:25 AM	47.3	62.4	44.8
02:25 AM - 02:30 AM	47.8	63.0	43.7
02:30 AM - 02:35 AM	46.7	53.6	44.5
02:35 AM - 02:40 AM	48.4	61.2	46.4
02:40 AM - 02:45 AM	49.2	58.2	47.5
02:45 AM - 02:50 AM	48.7	58.5	47.1
02:50 AM - 02:55 AM	49.7	56.0	48.1
02:55 AM - 03:00 AM	49.2	61.9	48.0
03:00 AM - 03:05 AM	50.9	61.7	47.4
03:05 AM - 03:10 AM	47.7	59.3	45.7
03:10 AM - 03:15 AM	51.3	73.2	45.6
03:15 AM - 03:20 AM	48.0	57.7	46.9
03:20 AM - 03:25 AM	48.7	56.4	47.2
03:25 AM - 03:30 AM	47.9	61.4	46.2
03:30 AM - 03:35 AM	47.0	57.1	45.6
03:35 AM - 03:40 AM	47.7	70.5	45.3

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

Approved by

Wilawan Borirak
Manager



Analysis / Test Report

Client : Dow Chemical Thailand Ltd.
8, I-4 Road, Map Ta Phut Industrial Estate, Map ta phut, Muang, Rayong Thailand 21150

Lot ID: 2417816
Date Received : Aug 21, 2024
Date Reported : Sep 09, 2024
Report No. : 2911791-1

P/O : 4515498514

Project Name : Environmental Quality Monitoring

Project Location : Map Ta Phut_PU (PPTL)

Page 3 of 3

Sample No. 2417816-1
Parameter Noise
Location ชุมชนตากวน-อ่าวประดู่ (GPS 47P 0735578, 1402792) (Shut down)
Measurement Date Aug 20 - 21, 2024
Measurement by Nantawat Sarin
Sound Level Meter 01222716

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:40 AM - 03:45 AM	48.5	67.1	45.5
03:45 AM - 03:50 AM	46.6	58.9	45.0
03:50 AM - 03:55 AM	48.0	59.2	43.8
03:55 AM - 04:00 AM	44.7	53.0	42.4
04:00 AM - 04:05 AM	45.9	58.0	44.3
04:05 AM - 04:10 AM	46.1	55.6	44.4
04:10 AM - 04:15 AM	47.9	61.7	43.7
04:15 AM - 04:20 AM	45.7	59.3	43.6
04:20 AM - 04:25 AM	48.2	60.9	44.9
04:25 AM - 04:30 AM	47.3	58.6	45.1
04:30 AM - 04:35 AM	48.2	56.2	46.7
04:35 AM - 04:40 AM	49.6	62.3	46.0
04:40 AM - 04:45 AM	47.8	56.2	46.2
04:45 AM - 04:50 AM	48.6	60.3	45.6
04:50 AM - 04:55 AM	50.2	65.3	45.9
04:55 AM - 05:00 AM	48.3	58.3	45.4
05:00 AM - 05:05 AM	48.6	62.0	45.1
05:05 AM - 05:10 AM	49.2	60.4	44.4
05:10 AM - 05:15 AM	47.2	58.7	43.1
05:15 AM - 05:20 AM	47.4	58.8	43.5
05:20 AM - 05:25 AM	48.2	68.4	44.0
05:25 AM - 05:30 AM	49.2	60.8	44.0
05:30 AM - 05:35 AM	48.6	60.5	45.6
05:35 AM - 05:40 AM	52.1	72.3	45.5
05:40 AM - 05:45 AM	51.9	71.6	46.9
05:45 AM - 05:50 AM	51.2	63.0	47.1
05:50 AM - 05:55 AM	53.2	69.6	47.6
05:55 AM - 06:00 AM	53.1	68.1	48.2
06:00 AM - 07:00 AM	58.6	88.9	49.7
07:00 AM - 08:00 AM	52.9	70.6	49.5
08:00 AM - 09:00 AM	52.2	78.9	45.0
09:00 AM - 10:00 AM	48.9	69.7	45.2

Reference Method :

- ISO 1996-1
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

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

Approved by

Wilawan Borirak
Manager