

ภาคผนวกที่ 3

ใบรายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวกที่ 3-1

ใบรายงานผลการตรวจวัดคุณภาพอากาศในบรรยากาศโดยทั่วไป



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567
Job No. : PCL 1513-01/67
Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Sutthaphoch temple area
Sampling Date/Time : December 24-27, 2024/11:00 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0652533 E, 1581900 N Analytical Date : December 27, 2024
Sampling Method : US. EPA. 40 CFR 50 Sample Condition : Good
Method of Analysis : High-Volume Air Sampler/Gravimetric Method

| Item | Measure Date | Unit | Result |
|------------------------|--------------|-------------------|---|
| | | | ฝุ่นละอองขนาดไม่เกิน 100 ไมครอน (TSP) 24 Hours Average |
| 1. | 24-25/12/24 | mg/m ³ | 0.086 |
| 2. | 25-26/12/24 | | 0.088 |
| 3. | 26-27/12/24 | | 0.091 |
| Standard ^{1/} | | | ≤0.33 |

Remark : 1. ^{1/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
2. Weather : Normal





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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567
Job No. : PCL 1513-01/67
Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Sutthaphoch temple area
Sampling Date/Time : December 24-27, 2024/11:00 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0652533 E, 1581900 N Analytical Date : December 27, 2024
Parameter : Sulfur dioxide Method of Analysis : UV Fluorescence

| Interval Time | Result (ppm) | | | Standard (ppm) |
|-------------------------|--------------|-------------|-------------|------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 11:00 a.m. – 12:00 a.m. | 0.0062 | 0.0063 | 0.0058 | |
| 12:00 a.m. – 01:00 p.m. | 0.0065 | 0.0069 | 0.0066 | |
| 01:00 p.m. – 02:00 p.m. | 0.0062 | 0.0053 | 0.0064 | |
| 02:00 p.m. – 03:00 p.m. | 0.0066 | 0.0062 | 0.0065 | |
| 03:00 p.m. – 04:00 p.m. | 0.0052 | 0.0065 | 0.0050 | |
| 04:00 p.m. – 05:00 p.m. | 0.0058 | 0.0066 | 0.0053 | |
| 05:00 p.m. – 06:00 p.m. | 0.0062 | 0.0047 | 0.0060 | |
| 06:00 p.m. – 07:00 p.m. | 0.0043 | 0.0050 | 0.0046 | |
| 07:00 p.m. – 08:00 p.m. | 0.0048 | 0.0049 | 0.0045 | |
| 08:00 p.m. – 09:00 p.m. | 0.0046 | 0.0046 | 0.0047 | |
| 09:00 p.m. – 10:00 p.m. | 0.0062 | 0.0038 | 0.0045 | |
| 10:00 p.m. – 11:00 p.m. | 0.0042 | 0.0040 | 0.0050 | |
| 11:00 p.m. – 00:00 p.m. | 0.0045 | 0.0059 | 0.0046 | |
| 00:00 p.m. – 01:00 a.m. | 0.0049 | 0.0050 | 0.0050 | |
| 01:00 a.m. – 02:00 a.m. | 0.0046 | 0.0047 | 0.0049 | |
| 02:00 a.m. – 03:00 a.m. | 0.0045 | 0.0053 | 0.0044 | |
| 03:00 a.m. – 04:00 a.m. | 0.0059 | 0.0042 | 0.0042 | |
| 04:00 a.m. – 05:00 a.m. | 0.0057 | 0.0061 | 0.0052 | |
| 05:00 a.m. – 06:00 a.m. | 0.0060 | 0.0049 | 0.0065 | |
| 06:00 a.m. – 07:00 a.m. | 0.0050 | 0.0058 | 0.0054 | |
| 07:00 a.m. – 08:00 a.m. | 0.0067 | 0.0054 | 0.0052 | |
| 08:00 a.m. – 09:00 a.m. | 0.0066 | 0.0062 | 0.0063 | |
| 09:00 a.m. – 10:00 a.m. | 0.0065 | 0.0070 | 0.0068 | |
| 10:00 a.m. – 11:00 a.m. | 0.0069 | 0.0060 | 0.0059 | |
| 1 Hour Maximum | 0.0069 | 0.0070 | 0.0068 | $\leq 0.30^{1/}$ |
| 24 Hours Average | 0.0056 | 0.0055 | 0.0054 | $\leq 0.12^{2/}$ |

Remark : 1. ^{1/} Notification of National Environmental Board No. 21 (B.E. 2544) Prescription of sulfur dioxide in General Atmosphere in 1 hour
(Dated 9 April B.E. 2544)
2. ^{2/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
3. Weather : Normal

PACIFIC LABORATORY CO., LTD.
(Mr. Rnus Fakto)
Lab. Supervisor

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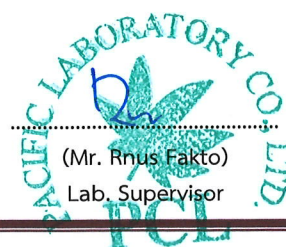
ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567
Job No. : PCL 1513-01/67
Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Sutthaphoch temple area
Sampling Date/Time : December 24-27, 2024/11:00 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0652533 E, 1581900 N Analytical Date : December 27, 2024
Parameter : Nitrogen dioxide Method of Analysis : Chemiluminescence

| Interval Time | Result (ppm) | | | Standard ^{1/} (ppm) |
|-------------------------|--------------|-------------|-------------|------------------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 11:00 a.m. – 12:00 a.m. | 0.0142 | 0.0124 | 0.0133 | |
| 12:00 a.m. – 01:00 p.m. | 0.0138 | 0.0132 | 0.0140 | |
| 01:00 p.m. – 02:00 p.m. | 0.0120 | 0.0126 | 0.0120 | |
| 02:00 p.m. – 03:00 p.m. | 0.0153 | 0.0154 | 0.0133 | |
| 03:00 p.m. – 04:00 p.m. | 0.0110 | 0.0146 | 0.0145 | |
| 04:00 p.m. – 05:00 p.m. | 0.0137 | 0.0123 | 0.0113 | |
| 05:00 p.m. – 06:00 p.m. | 0.0125 | 0.0133 | 0.0148 | |
| 06:00 p.m. – 07:00 p.m. | 0.0117 | 0.0137 | 0.0136 | |
| 07:00 p.m. – 08:00 p.m. | 0.0124 | 0.0144 | 0.0108 | |
| 08:00 p.m. – 09:00 p.m. | 0.0130 | 0.0122 | 0.0111 | |
| 09:00 p.m. – 10:00 p.m. | 0.0114 | 0.0118 | 0.0120 | |
| 10:00 p.m. – 11:00 p.m. | 0.0122 | 0.0100 | 0.0116 | |
| 11:00 p.m. – 00:00 p.m. | 0.0112 | 0.0112 | 0.0102 | |
| 00:00 p.m. – 01:00 a.m. | 0.0133 | 0.0138 | 0.0124 | |
| 01:00 a.m. – 02:00 a.m. | 0.0112 | 0.0128 | 0.0116 | |
| 02:00 a.m. – 03:00 a.m. | 0.0130 | 0.0140 | 0.0113 | |
| 03:00 a.m. – 04:00 a.m. | 0.0132 | 0.0146 | 0.0134 | |
| 04:00 a.m. – 05:00 a.m. | 0.0147 | 0.0123 | 0.0151 | |
| 05:00 a.m. – 06:00 a.m. | 0.0129 | 0.0154 | 0.0139 | |
| 06:00 a.m. – 07:00 a.m. | 0.0145 | 0.0128 | 0.0147 | |
| 07:00 a.m. – 08:00 a.m. | 0.0130 | 0.0144 | 0.0127 | |
| 08:00 a.m. – 09:00 a.m. | 0.0142 | 0.0155 | 0.0150 | |
| 09:00 a.m. – 10:00 a.m. | 0.0147 | 0.0150 | 0.0131 | |
| 10:00 a.m. – 11:00 a.m. | 0.0150 | 0.0142 | 0.0149 | |
| 1 Hour Maximum | 0.0153 | 0.0155 | 0.0151 | ≤0.17 |
| 24 Hours Average | 0.0131 | 0.0134 | 0.0129 | - |

Remark : 1. ^{1/} Notification of National Environmental Board No. 33 (B.E. 2552) Prescription of nitrogen dioxide in General Atmosphere (Dated 17 June B.E. 2552)
2. Weather : Normal



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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Marvichai temple area
Sampling Date/Time : December 24-27, 2024/10:00 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0653136 E, 1579397 N Analytical Date : December 27, 2024
Sampling Method : US. EPA. 40 CFR 50 Sample Condition : Good
Method of Analysis : High-Volume Air Sampler/Gravimetric Method

| Item | Measure Date | Unit | Result |
|------------------------|--------------|-------------------|---|
| | | | ฝุ่นละอองขนาดไม่เกิน 100 ไมครอน (TSP) 24 Hours Average |
| 1. | 24-25/12/24 | mg/m ³ | 0.074 |
| 2. | 25-26/12/24 | | 0.079 |
| 3. | 26-27/12/24 | | 0.073 |
| Standard ^{1/} | | | ≤0.33 |

Remark : 1. ^{1/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
2. Weather : Normal

(Mr. Rnus Fakto)
Lab. Supervisor



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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.

Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110

Sampling Source : Ambient Air Quality

Location : Marvichai temple area

Sampling Date/Time : December 24-27, 2024/10:00 a.m.

Received Date : December 27, 2024

GPS. Coordinate : UTM 47P 0653136 E, 1579397 N

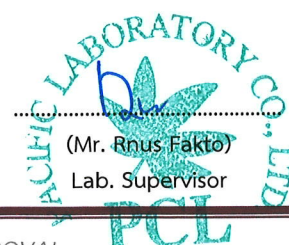
Analytical Date : December 27, 2024

Parameter : Sulfur dioxide

Method of Analysis : UV Fluorescence

| Interval Time | Result (ppm) | | | Standard (ppm) |
|-------------------------|--------------|-------------|-------------|------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 10:00 a.m. – 11:00 a.m. | 0.0059 | 0.0064 | 0.006 | |
| 11:00 a.m. – 12:00 a.m. | 0.0053 | 0.0055 | 0.0063 | |
| 12:00 a.m. – 01:00 p.m. | 0.0055 | 0.0054 | 0.0056 | |
| 01:00 p.m. – 02:00 p.m. | 0.0060 | 0.0056 | 0.0054 | |
| 02:00 p.m. – 03:00 p.m. | 0.0061 | 0.0064 | 0.0060 | |
| 03:00 p.m. – 04:00 p.m. | 0.0063 | 0.0055 | 0.0050 | |
| 04:00 p.m. – 05:00 p.m. | 0.0065 | 0.0052 | 0.0048 | |
| 05:00 p.m. – 06:00 p.m. | 0.0057 | 0.0053 | 0.0045 | |
| 06:00 p.m. – 07:00 p.m. | 0.0063 | 0.0059 | 0.0053 | |
| 07:00 p.m. – 08:00 p.m. | 0.0055 | 0.0054 | 0.0051 | |
| 08:00 p.m. – 09:00 p.m. | 0.0054 | 0.0053 | 0.0042 | |
| 09:00 p.m. – 10:00 p.m. | 0.0045 | 0.0045 | 0.0050 | |
| 10:00 p.m. – 11:00 p.m. | 0.0044 | 0.0044 | 0.0046 | |
| 11:00 p.m. – 00:00 p.m. | 0.0039 | 0.0040 | 0.0043 | |
| 00:00 p.m. – 01:00 a.m. | 0.0045 | 0.0042 | 0.0040 | |
| 01:00 a.m. – 02:00 a.m. | 0.0040 | 0.0046 | 0.0044 | |
| 02:00 a.m. – 03:00 a.m. | 0.0043 | 0.0044 | 0.0039 | |
| 03:00 a.m. – 04:00 a.m. | 0.0045 | 0.0047 | 0.0045 | |
| 04:00 a.m. – 05:00 a.m. | 0.0050 | 0.0051 | 0.0053 | |
| 05:00 a.m. – 06:00 a.m. | 0.0058 | 0.0061 | 0.0055 | |
| 06:00 a.m. – 07:00 a.m. | 0.0063 | 0.0055 | 0.0057 | |
| 07:00 a.m. – 08:00 a.m. | 0.0061 | 0.0059 | 0.0062 | |
| 08:00 a.m. – 09:00 a.m. | 0.0062 | 0.0063 | 0.0060 | |
| 09:00 a.m. – 10:00 a.m. | 0.0060 | 0.0062 | 0.0057 | |
| 1 Hour Maximum | 0.0065 | 0.0064 | 0.0063 | $\leq 0.30^{1/}$ |
| 24 Hours Average | 0.0054 | 0.0053 | 0.0051 | $\leq 0.12^{2/}$ |

- Remark :
- ^{1/} Notification of National Environmental Board No. 21 (B.E. 2544) Prescription of sulfur dioxide in General Atmosphere in 1 hour
(Dated 9 April B.E. 2544)
 - ^{2/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
 - Weather : Normal



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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.

Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110

Sampling Source : Ambient Air Quality

Location : Marvichai temple area

Sampling Date/Time : December 24-27, 2024/10:00 a.m.

Received Date : December 27, 2024

GPS. Coordinate : UTM 47P 0653136 E, 1579397 N

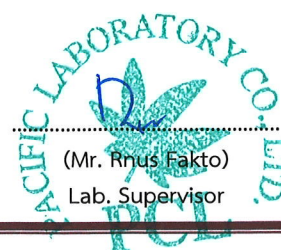
Analytical Date : December 27, 2024

Parameter : Nitrogen dioxide

Method of Analysis : Chemiluminescence

| Interval Time | Result (ppm) | | | Standard ^{1/} (ppm) |
|-------------------------|--------------|-------------|-------------|------------------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 10:00 a.m. – 11:00 a.m. | 0.0156 | 0.0147 | 0.0154 | |
| 11:00 a.m. – 12:00 a.m. | 0.0160 | 0.0154 | 0.0148 | |
| 12:00 a.m. – 01:00 p.m. | 0.0155 | 0.0149 | 0.0153 | |
| 01:00 p.m. – 02:00 p.m. | 0.0157 | 0.0160 | 0.0162 | |
| 02:00 p.m. – 03:00 p.m. | 0.0153 | 0.0146 | 0.0158 | |
| 03:00 p.m. – 04:00 p.m. | 0.0162 | 0.0142 | 0.0164 | |
| 04:00 p.m. – 05:00 p.m. | 0.0148 | 0.0160 | 0.0155 | |
| 05:00 p.m. – 06:00 p.m. | 0.0150 | 0.0133 | 0.0137 | |
| 06:00 p.m. – 07:00 p.m. | 0.0158 | 0.0145 | 0.0148 | |
| 07:00 p.m. – 08:00 p.m. | 0.0136 | 0.0132 | 0.0139 | |
| 08:00 p.m. – 09:00 p.m. | 0.0155 | 0.0149 | 0.0142 | |
| 09:00 p.m. – 10:00 p.m. | 0.0140 | 0.0142 | 0.0153 | |
| 10:00 p.m. – 11:00 p.m. | 0.0120 | 0.0132 | 0.0142 | |
| 11:00 p.m. – 00:00 p.m. | 0.0121 | 0.0131 | 0.0115 | |
| 00:00 p.m. – 01:00 a.m. | 0.0126 | 0.0113 | 0.0129 | |
| 01:00 a.m. – 02:00 a.m. | 0.0119 | 0.0122 | 0.0132 | |
| 02:00 a.m. – 03:00 a.m. | 0.0112 | 0.0129 | 0.0116 | |
| 03:00 a.m. – 04:00 a.m. | 0.0133 | 0.0120 | 0.0128 | |
| 04:00 a.m. – 05:00 a.m. | 0.0129 | 0.0134 | 0.0136 | |
| 05:00 a.m. – 06:00 a.m. | 0.0146 | 0.0142 | 0.0149 | |
| 06:00 a.m. – 07:00 a.m. | 0.0154 | 0.0140 | 0.0144 | |
| 07:00 a.m. – 08:00 a.m. | 0.0149 | 0.0162 | 0.0166 | |
| 08:00 a.m. – 09:00 a.m. | 0.0159 | 0.0163 | 0.0160 | |
| 09:00 a.m. – 10:00 a.m. | 0.0160 | 0.0161 | 0.0162 | |
| 1 Hour Maximum | 0.0162 | 0.0163 | 0.0166 | ≤0.17 |
| 24 Hours Average | 0.0144 | 0.0142 | 0.0146 | - |

Remark : 1. ^{1/} Notification of National Environmental Board No. 33 (B.E. 2552) Prescription of nitrogen dioxide in General Atmosphere (Dated 17 June B.E. 2552)
2. Weather : Normal



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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Sakleewitthaya school area
Sampling Date/Time : December 24-27, 2024/10:30 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0653110 E, 1578522 N Analytical Date : December 27, 2024
Sampling Method : US. EPA. 40 CFR 50 Sample Condition : Good
Method of Analysis : High-Volume Air Sampler/Gravimetric Method

| Item | Measure Date | Unit | Result |
|------------------------|--------------|-------------------|---|
| | | | ฝุ่นละอองขนาดไม่เกิน 100 ไมครอน (TSP) 24 Hours Average |
| 1. | 24-25/12/24 | mg/m ³ | 0.075 |
| 2. | 25-26/12/24 | | 0.077 |
| 3. | 26-27/12/24 | | 0.080 |
| Standard ^{1/} | | | ≤0.33 |

Remark : 1. ^{1/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
2. Weather : Normal





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ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.

Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110

Sampling Source : Ambient Air Quality

Location : Sakleewitthaya school area

Sampling Date/Time : December 24-27, 2024/11:00 a.m.

Received Date : December 27, 2024

GPS. Coordinate : UTM 47P 0653110 E, 1578522 N

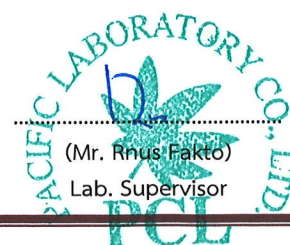
Analytical Date : December 27, 2024

Parameter : Sulfur dioxide

Method of Analysis : UV Fluorescence

| Interval Time | Result (ppm) | | | Standard (ppm) |
|-------------------------|--------------|-------------|-------------|------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 11:00 a.m. – 12:00 a.m. | 0.0069 | 0.0071 | 0.0070 | |
| 12:00 a.m. – 01:00 p.m. | 0.0067 | 0.0067 | 0.0068 | |
| 01:00 p.m. – 02:00 p.m. | 0.0060 | 0.0069 | 0.0064 | |
| 02:00 p.m. – 03:00 p.m. | 0.0071 | 0.0065 | 0.0058 | |
| 03:00 p.m. – 04:00 p.m. | 0.0062 | 0.0059 | 0.0069 | |
| 04:00 p.m. – 05:00 p.m. | 0.0069 | 0.0068 | 0.0057 | |
| 05:00 p.m. – 06:00 p.m. | 0.0058 | 0.0067 | 0.0062 | |
| 06:00 p.m. – 07:00 p.m. | 0.0057 | 0.0054 | 0.0059 | |
| 07:00 p.m. – 08:00 p.m. | 0.0065 | 0.0060 | 0.0057 | |
| 08:00 p.m. – 09:00 p.m. | 0.0054 | 0.0054 | 0.0068 | |
| 09:00 p.m. – 10:00 p.m. | 0.0053 | 0.0043 | 0.0064 | |
| 10:00 p.m. – 11:00 p.m. | 0.0053 | 0.0051 | 0.0048 | |
| 11:00 p.m. – 00:00 p.m. | 0.0050 | 0.0047 | 0.0046 | |
| 00:00 p.m. – 01:00 a.m. | 0.0048 | 0.0053 | 0.0048 | |
| 01:00 a.m. – 02:00 a.m. | 0.0047 | 0.0050 | 0.0054 | |
| 02:00 a.m. – 03:00 a.m. | 0.0052 | 0.0048 | 0.0054 | |
| 03:00 a.m. – 04:00 a.m. | 0.0058 | 0.0055 | 0.0052 | |
| 04:00 a.m. – 05:00 a.m. | 0.0049 | 0.0045 | 0.0055 | |
| 05:00 a.m. – 06:00 a.m. | 0.0053 | 0.0063 | 0.0067 | |
| 06:00 a.m. – 07:00 a.m. | 0.0064 | 0.0065 | 0.0059 | |
| 07:00 a.m. – 08:00 a.m. | 0.0066 | 0.0070 | 0.0073 | |
| 08:00 a.m. – 09:00 a.m. | 0.0072 | 0.0061 | 0.0069 | |
| 09:00 a.m. – 10:00 a.m. | 0.0068 | 0.0068 | 0.0070 | |
| 10:00 a.m. – 11:00 a.m. | 0.0069 | 0.0069 | 0.0068 | |
| 1 Hour Maximum | 0.0072 | 0.0071 | 0.0073 | $\leq 0.30^{1/}$ |
| 24 Hours Average | 0.0060 | 0.0059 | 0.0061 | $\leq 0.12^{2/}$ |

- Remark :
- ^{1/} Notification of National Environmental Board No. 21 (B.E. 2544) Prescription of sulfur dioxide in General Atmosphere in 1 hour
(Dated 9 April B.E. 2544)
 - ^{2/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
(Dated 9 August B.E. 2547)
 - Weather : Normal



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REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-AB 192/2567

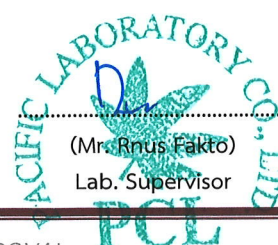
Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Ambient Air Quality
Location : Sakleewitthaya school area
Sampling Date/Time : December 24-27, 2024/11:00 a.m. Received Date : December 27, 2024
GPS. Coordinate : UTM 47P 0653110 E, 1578522 N Analytical Date : December 27, 2024
Parameter : Nitrogen dioxide Method of Analysis : Chemiluminescence

| Interval Time | Result (ppm) | | | Standard ^{1/} (ppm) |
|-------------------------|--------------|-------------|-------------|------------------------------|
| | 24-25/12/24 | 25-26/12/24 | 26-27/12/24 | |
| 11:00 a.m. – 12:00 a.m. | 0.0158 | 0.0160 | 0.0159 | |
| 12:00 a.m. – 01:00 p.m. | 0.0160 | 0.0155 | 0.0157 | |
| 01:00 p.m. – 02:00 p.m. | 0.0151 | 0.0157 | 0.0148 | |
| 02:00 p.m. – 03:00 p.m. | 0.0157 | 0.0164 | 0.0137 | |
| 03:00 p.m. – 04:00 p.m. | 0.0136 | 0.0155 | 0.0143 | |
| 04:00 p.m. – 05:00 p.m. | 0.0144 | 0.0135 | 0.0138 | |
| 05:00 p.m. – 06:00 p.m. | 0.0142 | 0.0147 | 0.0149 | |
| 06:00 p.m. – 07:00 p.m. | 0.0148 | 0.0134 | 0.0138 | |
| 07:00 p.m. – 08:00 p.m. | 0.0126 | 0.0103 | 0.0128 | |
| 08:00 p.m. – 09:00 p.m. | 0.0137 | 0.0125 | 0.0151 | |
| 09:00 p.m. – 10:00 p.m. | 0.0126 | 0.0115 | 0.0122 | |
| 10:00 p.m. – 11:00 p.m. | 0.0115 | 0.0132 | 0.0113 | |
| 11:00 p.m. – 00:00 p.m. | 0.0132 | 0.0114 | 0.0122 | |
| 00:00 p.m. – 01:00 a.m. | 0.0125 | 0.0126 | 0.0134 | |
| 01:00 a.m. – 02:00 a.m. | 0.0147 | 0.0125 | 0.0123 | |
| 02:00 a.m. – 03:00 a.m. | 0.0120 | 0.0131 | 0.0142 | |
| 03:00 a.m. – 04:00 a.m. | 0.0138 | 0.0145 | 0.0150 | |
| 04:00 a.m. – 05:00 a.m. | 0.0150 | 0.0153 | 0.0158 | |
| 05:00 a.m. – 06:00 a.m. | 0.0157 | 0.0148 | 0.0145 | |
| 06:00 a.m. – 07:00 a.m. | 0.0155 | 0.0156 | 0.0138 | |
| 07:00 a.m. – 08:00 a.m. | 0.0160 | 0.0159 | 0.0155 | |
| 08:00 a.m. – 09:00 a.m. | 0.0156 | 0.0158 | 0.0156 | |
| 09:00 a.m. – 10:00 a.m. | 0.0163 | 0.0159 | 0.0162 | |
| 10:00 a.m. – 11:00 a.m. | 0.0157 | 0.0160 | 0.0159 | |
| 1 Hour Maximum | 0.0163 | 0.0164 | 0.0162 | ≤0.17 |
| 24 Hours Average | 0.0144 | 0.0142 | 0.0143 | - |

Remark : 1. ^{1/} Notification of National Environmental Board No. 33 (B.E. 2552) Prescription of nitrogen dioxide in General Atmosphere (Dated 17 June B.E. 2552)
2. Weather : Normal



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ภาคผนวกที่ 3-2

ใบรายงานผลการตรวจวัดความเร็วและทิศทางการไหล



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

Wind Speed and Wind Direction Monitoring Report

Analysis No. : WS 126/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Location : Sakleewitthaya school area
Between : December 24-27, 2024
Measured Instrument : Wind speed and wind direction Type Weather Wizard III Product No. 7425
Serial Number WC91006A06

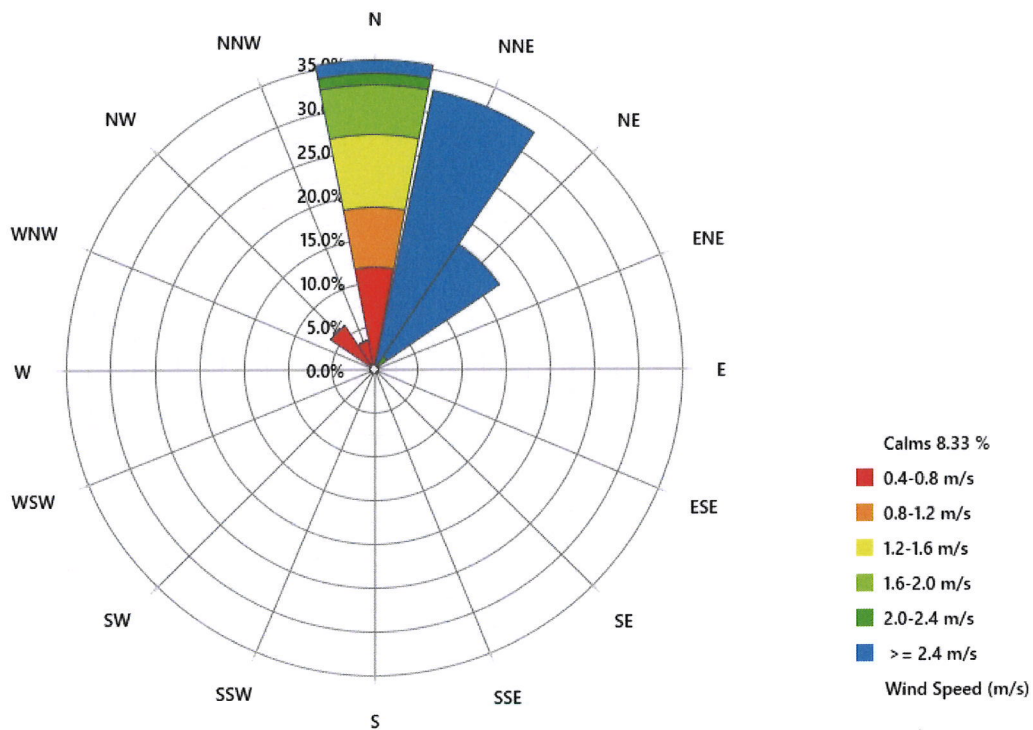
| Direction | | Speed (m/s) | | | | | | TOTAL | % |
|-----------------|-----|-------------|---------|---------|---------|---------|--------|-------|--------|
| | | 0.4-0.8 | 0.8-1.2 | 1.2-1.6 | 1.6-2.0 | 2.0-2.4 | >= 2.4 | | |
| N | 0 | 8 | 5 | 6 | 4 | 1 | 1 | 25 | 34.72 |
| NNE | 22 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 31.94 |
| NE | 45 | 0 | 0 | 0 | 0 | 1 | 11 | 12 | 16.67 |
| ENE | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 225 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 270 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 292 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 315 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 5.56 |
| NNW | 337 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 2.78 |
| TOTAL | | 14 | 5 | 6 | 4 | 2 | 35 | 66 | 91.67 |
| CALM (<0.4 m/s) | | | | | | | | 6 | 8.33 |
| TOTAL | | | | | | | | 72 | 100.00 |

PACIFIC LABORATORY CO., LTD.
(Mr. Rnus Fakto)
Lab. Supervisor
PCL

Wind Diagram

Analysis No. : WS 126/2567
Job No. : PCL 1513-01/67
Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Location : Sakleewitthaya school area
Between : December 24-27, 2024
Measured Instrument : Wind speed and wind direction Type Weather Wizard III Product No. 7425
Serial Number WC91006A06



ภาคผนวกที่ 3-3
ใบรายงานผลการตรวจวัดปริมาณสารเจือปนในอากาศที่
ระบายออกจากปล่อง

ANALYSIS REPORT

Analysis No. : Lab-S 418/2567

Job No. : PCL 1513-01/67

Report Date : January 16, 2025

Customer Name : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11 Sam Khok-Sena Road, Bang Nom Ko, Sena, Phra Nakhon Si Ayutthaya 13110
Sampling Source : Stack of Biomass Boiler
GPS. Coordinate : UTM 47P 0653704 E, 1579239 N
Air Pollution Control System : Multi-Cyclone+Wet Scrubber
Sampling Time : 10:00 a.m. - 10:30 a.m.
Sampling Condition : Good
Sampling Method : US. EPA. Method
Sample ID No. : 007/01/68 (1)
Sampling By : Mr. Surasak Saosung License No. ๓-272-๓-0008
Analyzed By : Ms. Anothai Suebnueang License No. ๓-272-๓-0008

Fuel Type : Biomass : Rice husk pellet
(Open system)
Sampling Date : December 27, 2024
Received Date : December 27, 2024
Analytical Date : December 27, 2024

| Item | Description | Unit | Method of Analysis ^{3/} | Result | Standard ^{1/} | Evaluation ^{1/} |
|------|--|-------------------|---|--------|------------------------|--------------------------|
| 1. | Stack Height | m | Measuring Tape | 30.00 | - | - |
| 2. | Stack Diameter | m | Measuring Tape | 0.80 | - | - |
| 3. | Temperature in Stack | °C | US. EPA Method 2 | 130.00 | - | - |
| 4. | Pressure Stack | mm.Hg | US. EPA Method 2 | 758.94 | - | - |
| 5. | Air Velocity | m/s | US. EPA Method 2 | 16.44 | - | - |
| 6. | Flow Rate | m ³ /s | US. EPA Method 2 | 8.26 | - | - |
| 7. | Oxygen Rate | % | US. EPA Method 3 | 16.12 | - | - |
| 8. | Carbon dioxide Rate | % | US. EPA Method 3 | 4.61 | - | - |
| 9. | Moisture Rate | % | US. EPA Method 4 | 5.16 | - | - |
| 10. | Percent of Isokinetic Rate | % | US. EPA Method 5 | 106.32 | - | - |
| 11. | Particulate ^{4/} | mg/m ³ | Isokinetic Sampling, Gravimetric Method | 53.72 | ≤320 | pass |
| 12. | Sulfur dioxide ^{4/} | ppm | Absorption Sampling, Barium-Thorin Titrimetric Method | <1.3 | ≤60 | pass |
| 13. | Oxide of Nitrogen as Nitrogen dioxide ^{4/} | ppm | Absorption Sampling, Phenoldisulfonic Acid Method | 55.94 | ≤200 | pass |
| 14. | Carbon monoxide ^{4/} | ppm | Instrumental Analyzer Method | 210 | ≤690 | pass |
| 15. | Opacity | % | Ringelmann's Method | 5.00 | ≤10 ^{2/} | pass ^{2/} |

- Remark : 1.^{1/} Notification of Ministry of Industry on the Prescription of the Content Values of Air Contaminants Emitted from the Factory B.E. 2549 (Dated 31 October B.E. 2549)
2.^{2/} Notification of Ministry of Industry on the Prescription of the Smoke Value of Air Contaminants Emitted from the Boiler Stack of the Factory B.E. 2549 (Dated 31 October B.E. 2549)
3.^{3/} United States Environmental Protection Agency. Standards of Performance for New Stationary Sources.
4.^{4/} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis

(Mr. Rnus Fakto)
Lab. Supervisor No. ๓-272-๓-0001

ภาคผนวกที่ 3-4

ใบรายงานผลการตรวจวิเคราะห์คุณภาพน้ำทิ้ง



TEST REPORT

Report : ALS. (AY.) No. 0126/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

Reported Date : February 5, 2025
Sampling Date : January 14, 2025
Analytical Date : Jan. 14 - Feb. 5, 2025
Analysis NO. : AY.W/ 123-127/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

| Sadesa (Thailand) CO.,LTD. | | | | | | | | |
|--------------------------------|-----------|--------------------------------------|---------|------------------------|-----------------------|-----------------------|------------|-------------|
| Parameter | unit | Method | INF. | INF.AT. | AT.1 | RAS. | EFF. | Std. Eff. * |
| pH (at 25 °C) | - | Electrometric | 7.2 | - | - | - | 7.2 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 5,633 | 484 | - | - | 67 | 250 |
| BOD | mg/l | 5 Day BOD Test | 688 | 181 | - | - | 6.8 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 2,909 | - | - | - | < 10 | 50 |
| TDS | mg/l | Dried at 180 °C | 2,598 | - | - | - | 2,464 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 153.4 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 16.8 | - | - | 2.3 | 100 |
| Formaldehyde | mg/l | Colorimetric | < 0.10 | - | - | - | < 0.10 | 1 |
| Sulphide as H ₂ S | mg/l | Iodometric | 10.0 | - | - | - | < 0.05 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | < 0.02 | - | - | 0.93 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 3,204 | 5,694 | - | - |
| Color ** | (pH 7.41) | ADMI | - | - | - | - | 37.74 | 300 |
| | (pH 7.00) | | - | - | - | - | 35.10 | |
| Chloride as Cl ^[1] | mg/l | Argentometric | 275.9 | - | - | - | 497.7 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 38.98 | - | - | - | 0.09 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | 0.004 | - | - | - | < 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 35 | 40 |
| Sample Condition | | Observation | ค่าขุ่น | น้ำตาล ค่อนข้างขุ่น | น้ำตาลเข้ม ขุ่นมาก | น้ำตาลเข้ม ขุ่นมาก | ค่อนข้างใส | - |

* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอก

ขัดหรือเคลือบสีหนังสือ พ.ศ. ๒๕๖๒

** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026

[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

Remark : Reported results refer to submitted samples only.

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Tapkesorn Sripadaya

Analyst

ว - 026/1 - ค - 0002



Chanthip Aunlum

Laboratory Manager

ว - 026/1 - ค - 0001

Supornphan Bunlusein

Managing Director

"THINK OF LAB, THINK OF QUALITY AND SERVICES, CHOOSE ALS"



TEST REPORT

Report : ALS. (AY.) No. 0260/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

Reported Date : March 8, 2025
Sampling Date : February 13, 2025
Analytical Date : Feb. 13 - Mar. 8, 2025
Analysis NO. : AY.W/ 497-501/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

Sadesa (Thailand) CO.,LTD.

| Parameter | unit | Method | INF. | INF.AT. | AT.1 | RAS. | EFF. | Std. Eff. * |
|--------------------------------|-----------|--------------------------------------|--------|-------------------|------------------|------------------|------------|-------------|
| pH (at 25 °C) | - | Electrometric | 6.9 | - | - | - | 7.2 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 6,373 | 652 | - | - | 101 | 250 |
| BOD | mg/l | 5 Day BOD Test | 558 | 59.5 | - | - | 3.5 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 3,075 | - | - | - | 21 | 50 |
| TDS | mg/l | Dried at 180 °C | 3,860 | - | - | - | 2,752 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 216.5 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 1.4 | - | - | < 1.0 | 100 |
| Formaldehyde | mg/l | Colorimetric | < 0.10 | - | - | - | < 0.10 | 1 |
| Sulphide as H ₂ S | mg/l | Iodometric | 10.0 | - | - | - | < 0.05 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | < 0.02 | - | - | 0.90 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 3,014 | 5,952 | - | - |
| Color ** | (pH 7.63) | ADMI | - | - | - | - | 57.42 | 300 |
| | (pH 7.00) | | - | - | - | - | 54.79 | |
| Chloride as Cl ^[1] | mg/l | Argentometric | 256.23 | - | - | - | 473.04 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 59.70 | - | - | - | 0.15 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | 0.001 | - | - | - | < 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 35 | 40 |
| Sample Condition | | Observation | ค่าสูง | น้ำตาลค่อนข้างสูง | น้ำตาลเข้มข้นมาก | น้ำตาลเข้มข้นมาก | ค่อนข้างใส | - |

* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานความคุ้มครองการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอก
ขัดหรือเคลือบสีหนังสือ พ.ศ. ๒๕๖๒

** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026

[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

Remark : Reported results refer to submitted samples only.

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Tapkesorn Sripaoraya

Tapkesorn Sripaoraya
Analyst

ว - 026/1 - ค - 0002



Chanthip Aunlum

Chanthip Aunlum
Laboratory Manager

ว - 026/1 - ค - 0001

Supornphan Bunlusein

Supornphan Bunlusein
Managing Director

บริษัท แอนาไลติกอล ลาบอราทอรี เซอร์วิส จำกัด
ได้ขึ้นทะเบียนกรมโรงงาน เลขทะเบียน ว.026/1

"THINK OF LAB, THINK OF QUALITY AND SERVICES, CHOOSE ALS"

BANGKOK : 611/277-279 Soi Watchan Nai, Charoenkrung Road, Bangkok, Bangkoklaem, Bangkok, Thailand 10120 TEL : 02-292-1645, 02-292-1648, 02-689-8164-5, 02-689-8600
FAX : (662) 02-292-1646, 02-689-8652 E-mail address : als@samarts.com / marketingals@gmail.com , www.als-lab.com

AYUTTHAYA: 90 Moo 11, Samkok-Sena Road, Bangnom Ko, Sena, Ayutthaya 13110 E-mail address : als-analysis@pan-group.com Tel : (035) 743-574 Fax : (035) 743-574



TEST REPORT

Report : ALS. (AY.) No. 0416/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

Reported Date : April 10, 2025
Sampling Date : March 24, 2025
Analytical Date : Mar. 24 - Apr. 10, 2025
Analysis NO. : AY.WI/ 864-868/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

| Sadesa (Thailand) CO.,LTD. | | | | | | | | |
|--------------------------------|-----------|--------------------------------------|---------|------------------------|-----------------------|-----------------------|------------------------|-------------|
| Parameter | unit | Method | INF. | INF.AT. | AT.1 | RAS. | EFF. | Std. Eff. * |
| pH (at 25 °C) | - | Electrometric | 7.0 | - | - | - | 7.0 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 4,974 | 468 | - | - | 126 | 250 |
| BOD | mg/l | 5 Day BOD Test | 509 | 53.4 | - | - | 2.8 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 2,400 | - | - | - | 10 | 50 |
| TDS | mg/l | Dried at 180 °C | 2,118 | - | - | - | 2,886 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 250.0 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 9.6 | - | - | 5.5 | 100 |
| Formaldehyde | mg/l | Colorimetric | < 0.10 | - | - | - | < 0.10 | 1 |
| Sulphide as H ₂ S | mg/l | Iodometric | 11.1 | - | - | - | 0.16 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | 0.21 | - | - | 1.06 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 2,317 | 5,983 | - | - |
| Color ** | (pH 7.62) | ADMI | - | - | - | - | 223.48 | 300 |
| | (pH 7.00) | | - | - | - | - | 238.75 | |
| Chloride as Cl ^[1] | mg/l | Argentometric | 463.2 | - | - | - | 852.5 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 34.39 | - | - | - | 0.17 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | 0.017 | - | - | - | 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 30 | 40 |
| Sample Condition | | Observation | ค่าขุ่น | น้ำตาล ค่อนข้างขุ่น | น้ำตาลเข้ม ขุ่นมาก | น้ำตาลเข้ม ขุ่นมาก | น้ำตาล ค่อนข้างขุ่น | - |


* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอก
ขัดหรือเคลือบสีหนังสัตว์ พ.ศ. ๒๕๖๒

** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026

[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

Remark : Reported results refer to submitted samples only.

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Tapkesorn Sripaoraya
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ว - 026/1 - ค - 0002




Chanthip Aunlum
Laboratory Manager
ว - 026/1 - ค - 0001


Supornphan Bunlusein
Managing Director

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FAX : (662) 02-292-1646, 02-689-8652 E-mail address : als@samarts.com / marketing@als.com , www.als-lab.com

AYUTTHAYA: 90 Moo 11, Samkok-Sena Road, Bangnom Ko, Sena, Ayutthaya 13110 E-mail address : als-analysis@pan-group.com Tel : (035) 743-674 Fax : (035) 743-674



TEST REPORT

Report : ALS. (AY.) No. 0558/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

Reported Date : May 20 , 2025
Sampling Date : April 29 , 2025
Analytical Date : Apr. 29 - May 20 , 2025
Analysis NO. : AY.W/ 1467-1471/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

| Sadesa (Thailand) CO.,LTD. | | | | | | | | |
|---------------------------------|-----------|--------------------------------------|---------|------------------------|-----------------------|-----------------------|------------|-------------|
| Parameter | unit | Method | INF. | INF.MBBR | AT.1 | RAS. | EFF. | Std. Eff. * |
| pH (at 25 °C) | - | Electrometric | 6.9 | - | - | - | 7.1 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 5,667 | 614 | - | - | 126 | 250 |
| BOD | mg/l | 5 Day BOD Test | 812 | 157.0 | - | - | 6.9 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 1,550 | - | - | - | < 10 | 50 |
| TDS | mg/l | Dried at 180 °C | 2,973 | - | - | - | 2,654 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 231.8 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 1.7 | - | - | 14.0 | 100 |
| Sulphide as H ₂ S | mg/l | Iodometric | 13.0 | - | - | - | < 0.02 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | 0.20 | - | - | 0.92 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 4,994 | 2,488 | - | - |
| Color ** | (pH 6.97) | ADMI | ADMI | - | - | - | 163.32 | 300 |
| | (pH 7.00) | | | - | - | - | 165.87 | |
| Chloride as Cl ⁻ [1] | mg/l | Argentometric | 379.4 | - | - | - | 556.8 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 80.20 | - | - | - | < 0.02 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | < 0.001 | - | - | - | < 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 35 | 40 |
| Sample Condition | | Observation | สาขุ่น | น้ำตาล ค่อนข้างขุ่น | น้ำตาลเข้ม ขุ่นมาก | น้ำตาลเข้ม ขุ่นมาก | ค่อนข้างใส | - |

* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอก
ขัดหรือเคลือบสีหนังสือ พ.ศ. ๒๕๖๒


** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026


[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

Remark : Reported results refer to submitted samples only.

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บริษัท แอนาไลติกอล ลาบอราทอรี เซอร์วิส จำกัด
ได้ขึ้นทะเบียนกรมโรงงาน เลขทะเบียน ว.026/1


Tapkesorn Sriporaya
Analyst
ว - 026/1 - ค - 0002


Chanthip Aunlum
Laboratory Manager
ว - 026/1 - ค - 0001


Supornphan Bunluesin
Managing Director

"THINK OF LAB, THINK OF QUALITY AND SERVICES, CHOOSE ALS"



บริษัท แอนาไลติกอล ลาบอราทอรี เซอร์วิส จำกัด
ANALYTICAL LABORATORY SERVICE CO.,LTD.

Report : ALS. (AY.) No. 0686/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

TEST REPORT

Reported Date : June 18, 2025
Sampling Date : May 31, 2025
Analytical Date : May 31 - Jun. 18, 2025
Analysis NO. : AY.W/ 1894-1898/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

| Sadesa (Thailand) CO.,LTD. | | | | | | | | |
|--------------------------------|-----------|--------------------------------------|---------|-------------------|------------------|------------------|------------|-------------|
| Parameter | unit | Method | INF. | INF.MBBR | AT.1 | RAS. | EFF. | Std. Eff. * |
| pH (at 25 °C) | - | Electrometric | 7.0 | - | - | - | 7.3 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 3,783 | 806 | - | - | 112 | 250 |
| BOD | mg/l | 5 Day BOD Test | 775 | 236 | - | - | 6.6 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 1,242 | - | - | - | < 10 | 50 |
| TDS | mg/l | Dried at 180 °C | 3,710 | - | - | - | 2,900 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 165.4 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 15.1 | - | - | 6.1 | 100 |
| Sulphide as H ₂ S | mg/l | Iodometric | 13.0 | - | - | - | < 0.05 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | 0.24 | - | - | 0.97 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 2,386 | 4,827 | - | - |
| Color ** | (pH 7.36) | ADMI | ADMI | - | - | - | 110.26 | 300 |
| | (pH 7.00) | | | - | - | - | 111.45 | |
| Chloride as Cl ^[1] | mg/l | Argentometric | 394.2 | - | - | - | 788.4 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 52.67 | - | - | - | < 0.02 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | < 0.001 | - | - | - | < 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 35 | 40 |
| Sample Condition | | Observation | ค่าสูง | น้ำตาลค่อนข้างสูง | น้ำตาลเข้มข้นมาก | น้ำตาลเข้มข้นมาก | ค่อนข้างใส | - |

* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอกขัดหรือเคลือบสีหนังสือ พ.ศ. ๒๕๖๒

** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026

[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

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บริษัท แอนาไลติกอล ลาบอราทอรี เซอร์วิส จำกัด
ได้ขึ้นทะเบียนกรมโรงงาน เลขทะเบียน ว.026/1



Tapkesorn Sripaoraya

Tapkesorn Sripaoraya
Analyst

ว - 026 / 1 - ค - 0002

Chanthip Aunlum

Chanthip Aunlum
Laboratory Manager

ว - 026 / 1 - ค - 0001

Supomphan Bunluesin

Supomphan Bunluesin
Managing Director

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FAX 0621 02-292-1646, 02-689-8652 E-mail address als@samarts.com / marketing@samarts.com, www.als-lab.com

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TEST REPORT

Report : ALS. (AY.) No. 0816/25
Client : Sadesa (Thailand) Co., Ltd.
Address : 89 Moo 11, Samkok - Sena
Road, Bangnomko Sena,
Ayutthaya 13110

Reported Date : July 19 , 2025
Sampling Date : June 27 , 2025
Analytical Date : Jun. 27 - Jul. 19 , 2025
Analysis NO. : AY.W/ 2258-2262/25
Sample Description : Wastewater
Collected By : Anantaya Meethuan

P. 1/1

| Sadesa (Thailand) CO.,LTD. | | | | | | | | |
|--|-----------|--------------------------------------|---------|--------------------|-------------------|-------------------|------------|-------------|
| Parameter | unit | Method | INF. | INF.MBBR | AT.1 | RAS. | EFF. | Std. Eff. * |
| pH (at 25 °C) | - | Electrometric | 6.9 | - | - | - | 6.9 | 6.0 - 9.0 |
| COD | mg/l | Closed Reflux | 6,109 | 794 | - | - | 114 | 250 |
| BOD | mg/l | 5 Day BOD Test | 600 | 82.5 | - | - | 3.5 | 50 |
| SS | mg/l | Dried at 103 - 105 °C | 515 | - | - | - | < 10 | 50 |
| TDS | mg/l | Dried at 180 °C | 3,918 | - | - | - | 2,720 | 3,000 |
| Oil & Grease | mg/l | Liquid-Liquid, Partition-Gravimetric | 414.7 | - | - | - | < 2.0 | 5 |
| TKN | mg/l | Macro - Kjeldahl | - | 26.4 | - | - | 4.9 | 100 |
| Sulphide as H ₂ S | mg/l | Iodometric | 16.9 | - | - | - | < 0.05 | 1 |
| Chromium as Cr ⁶⁺ | mg/l | Colorimetric | - | - | - | - | < 0.02 | 0.1 |
| Phosphorus as P ^[1] | mg/l | Ascorbic Acid | - | < 0.02 | - | - | 0.90 | 2 |
| MLSS ^[1] | mg/l | Dried at 103 - 105 °C | - | - | 1,341 | 3,678 | - | - |
| Color ** | (pH 6.91) | ADMI | - | - | - | - | 127.66 | 300 |
| | (pH 7.00) | | - | - | - | - | 127.73 | |
| Chloride as Cl ⁻ ^[1] | mg/l | Argentometric | 537.1 | - | - | - | 606.1 | - |
| Chromium as Cr | mg/l | Direct Air-Acetylene Flame, AAS | 74.99 | - | - | - | 0.47 | 0.8 |
| Phenol ** | mg/l | Direct Photometric | < 0.001 | - | - | - | < 0.001 | 0.5 |
| Temperature | °C | Thermometer | - | - | - | - | 30 | 40 |
| Sample Condition | | Observation | สาขุ่น | น้ำตาลค่อนข้างขุ่น | น้ำตาลเข้มขุ่นมาก | น้ำตาลเข้มขุ่นมาก | ค่อนข้างใส | - |

* ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากโรงงานที่ประกอบกิจการเกี่ยวกับการฟอก
ขัดหรือเคลือบสีหนังสือ พ.ศ. ๒๕๖๒

** Analysed By Analytical Laboratory Service Co., Ltd. (BKK) ว. 026

[1] ไม่อยู่ในขอบข่ายที่กรมโรงงานรับขึ้นทะเบียน

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Tapkesorn Sripaoraya

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ว - 026/1 - ค - 0002



Chanthip Aunlum

Laboratory Manager

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Supornphan Bunlusein

Managing Director

"THINK OF LAB, THINK OF QUALITY AND SERVICES, CHOOSE ALS"

ภาคผนวกที่ 3-5

ใบรายงานผลการตรวจวัดระดับความดังเสียง (Sound Level Meter)

ANALYSIS REPORT

Analysis No. : NM 017/2568
Job No. : PCL 0687/68
Report Date : March 21, 2025

Customer Name : บริษัท ซาเคซ่า (ประเทศไทย) จำกัด
Address : เลขที่ 89 หมู่ที่ 11 ถนนสามโคก-เสนา ตำบลบางนมโค อำเภอสนา จังหวัดพระนครศรีอยุธยา 13110
Measured By : Pacific Laboratory Co., Ltd.
Sampling Source : Work Place Noise
Measured Date : March 17, 2025

| Item | Location | Measured Instrument | Time Work | Noise Level (dBA) | | Evaluation | |
|----------|--------------------------|-------------------------------|-------------------------------------|-------------------|--------------------|--------------------------|--------------------|
| | | | | Leq 8 hrs. | Lmax | Leq 8 hrs. ^{1/} | Lmax ^{2/} |
| 1. | Staking Finishing | ACO/ Model 6236 S/N 222017 | 8 hrs. (08:22 a.m. – 04:22 p.m.) | 79.4 | 96.7 | pass | pass |
| 2. | Buffing Machine | ACO/ Model 6236 S/N 222171 | 8 hrs. (08:15 a.m. – 04:15 p.m.) | 79.1 | 98.6 | pass | pass |
| 3. | Air Compressor | ACO/ Model 6236 S/N 222016 | 8 hrs. (08:20 a.m. – 04:20 p.m.) | 81.1 | 99.8 | pass | pass |
| 4. | Shaving Machine | ACO/ Model 6236 S/N 222015 | 8 hrs. (08:28 a.m. – 04:28 p.m.) | 82.5 | 99.0 | pass | pass |
| 5. | Staking Small Production | ACO/ Model 6236 S/N 222018 | 8 hrs. (08:16 a.m. – 04:16 p.m.) | 82.4 | 92.6 | pass | pass |
| 6. | Staking Crust | ACO/ Model 6236 S/N 222023 | 8 hrs. (08:25 a.m. – 04:25 p.m.) | 83.1 | 92.9 | pass | pass |
| 7. | Staking Sort Crust | ACO/ Model 6236 S/N 222046 | 8 hrs. (08:30 a.m. – 04:30 p.m.) | 72.0 | 93.4 | pass | pass |
| 8. | Spray Machine No. 12 | ACO/ Model 6236 S/N 222170 | 8 hrs. (08:19 a.m. – 04:19 p.m.) | 77.7 | 90.8 | pass | pass |
| Standard | | | | ≤90 ^{1/} | ≤115 ^{2/} | - | - |

Remark : 1. ^{1/} ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัยในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. 2546 (ลงวันที่ 6 พฤศจิกายน พ.ศ. 2546)
2. ^{2/} กฎกระทรวง กำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับความร้อน แสงสว่าง และเสียง พ.ศ. 2559 (หมวด 3 เสียง)


(Mr. Rnus Fakto)
Lab. Supervisor



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/5358 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : NM 022/2568
Job No. : PCL 0943-01/68
Report Date : July 10, 2025

Customer Name : บริษัท ซาเดซ่า (ประเทศไทย) จำกัด
Address : เลขที่ 89 หมู่ที่ 11 ถนนสามโคก-เสนา ตำบลบางนมโค อำเภอสนา จังหวัดพระนครศรีอยุธยา 13110
Measured By : Pacific Laboratory Co., Ltd.
Sampling Source : Work Place Noise
Measured Date : June 30 – July 1, 2025

| Item | Location | Measure Date | Measured Instrument | Time Work | Noise Level (dBA) | | Evaluation | |
|----------|--------------------------|-----------------|-------------------------------|-------------------------------------|-------------------|--------------------|--------------------------|--------------------|
| | | | | | Leq 8 hrs. | Lmax | Leq 8 hrs. ^{1/} | Lmax ^{2/} |
| 1. | Staking Finishing | 30/06/25 | ACO/ Model 6236 S/N 222136 | 8 hrs. (08:25 a.m. – 04:25 p.m.) | 81.7 | 103.5 | pass | pass |
| 2. | Buffing Machine | 1/07/25 | ACO/ Model 6236 S/N 222166 | 8 hrs. (08:25 a.m. – 04:25 p.m.) | 83.5 | 99.2 | pass | pass |
| 3. | Air Compressor | 30/06/25 | ACO/ Model 6236 S/N 222134 | 8 hrs. (08:24 a.m. – 04:24 p.m.) | 84.8 | 95.8 | pass | pass |
| 4. | Shaving Machine | 30/06/25 | ACO/ Model 6236 S/N 222046 | 8 hrs. (08:29 a.m. – 04:29 p.m.) | 80.5 | 97.2 | pass | pass |
| 5. | Staking Small Production | 30/06/25 | ACO/ Model 6236 S/N 222043 | 8 hrs. (08:21 a.m. – 04:21 p.m.) | 81.0 | 89.8 | pass | pass |
| 6. | Staking Crust | 1/07/25 | ACO/ Model 6236 S/N 222018 | 8 hrs. (08:20 a.m. – 04:20 p.m.) | 78.8 | 88.2 | pass | pass |
| 7. | Staking Sort Crust | 1/07/25 | ACO/ Model 6236 S/N 222046 | 8 hrs. (08:21 a.m. – 05:21 p.m.) | 75.4 | 95.2 | pass | pass |
| 8. | Spray Machine No. 12 | 30/06/25 | ACO/ Model 6236 S/N 222166 | 8 hrs. (08:20 a.m. – 05:20 p.m.) | 79.8 | 111.0 | pass | pass |
| Standard | | | | | ≤90 ^{1/} | ≤115 ^{2/} | - | - |

Remark : 1. ^{1/} ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัยในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ. 2546 (ลงวันที่ 6 พฤศจิกายน พ.ศ. 2546)
2. ^{2/} กฎกระทรวง กำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับความร้อน แสงสว่าง และเสียง พ.ศ. 2559 (หมวด 3 เสียง)



(Mr. Rnus Fakto)
Lab. Supervisor