

# ภาคผนวก ค

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ใบรับรองผลการตรวจวิเคราะห์

# ภาคผนวก ค-1

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คุณภาพอากาศจากแหล่งกำเนิด



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454678**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992750-1 Rev. No.1



TESTING  
No.0042

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454678-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Boiler Stack No.1 (S1)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |             |      |                   |        |    |                       |      |        |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757         | mmHg | Diameter          | 0.46   | m  | Oxygen                | 5.3  | %      |
| Ambient Temperature | 30.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 9.1  | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 107    | °C | Gas Velocity          | 4.6  | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 5.04   | %  | Flow Rate (Actual O2) | 2029 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 %O <sub>2</sub> | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|-----------------------------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |                             |               |               |  |                  |
| Carbon Monoxide *           | 10:20 AM - 10:30 AM | ppm   | -   | 1.0       | <1.0                        | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 10:05 AM - 10:20 AM | ppm   | -   | 1.06      | 10.7                        | 200           | 40            | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 10:00 AM - 10:30 AM | ppm   | -   | 2.0       | <2.0                        | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 10:00 AM - 10:48 AM | mg/m3 | -   | 0.5       | <0.5                        | 240           | 7.5           | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

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Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-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.  
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S:\Reports\Air Stack\_2GL.rpt (11:58AM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454678**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992750-1 Rev. No.1



TESTING  
No.0042

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454678-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Boiler Stack No.1 (S1)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |             |      |                   |        |    |                       |      |        |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757         | mmHg | Diameter          | 0.46   | m  | Oxygen                | 5.3  | %      |
| Ambient Temperature | 30.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 9.1  | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 107    | °C | Gas Velocity          | 4.6  | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 5.04   | %  | Flow Rate (Actual O2) | 2029 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 10:20 AM - 10:30 AM | g/s  | -   | -         | <0.001               | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 10:05 AM - 10:20 AM | g/s  | -   | -         | 0.013                | -             | 0.0510        | Calculated | Rayong           |
| Sulfur dioxide *              | 10:00 AM - 10:30 AM | g/s  | -   | -         | <0.003               | -             | 0.0177        | Calculated | Rayong           |
| Total Suspended Particulate * | 10:00 AM - 10:48 AM | g/s  | -   | -         | <0.0003              | -             | 0.0051        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992750-1, Date Reported : Jun 04, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

### 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

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Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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S:\Reports\Air Stack\_2GL.rpt (11:58AM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454680**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992753-1 Rev. No.1



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No.0042

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454680-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Boiler Stack No.2 (S2)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |             |      |                   |        |    |                       |     |        |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|-----|--------|
| Ambient Pressure    | 757         | mmHg | Diameter          | 0.31   | m  | Oxygen                | 4.8 | %      |
| Ambient Temperature | 30.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 9.2 | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 113    | °C | Gas Velocity          | 4.6 | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 5.18   | %  | Flow Rate (Actual O2) | 914 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result at 7 %O <sub>2</sub> | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|-----------------------------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |                             |               |               |  |                  |
| Carbon Monoxide *           | 11:20 AM - 11:30 AM | ppm   | -   | 1.0       | 1.1                         | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 11:00 AM - 11:15 AM | ppm   | -   | 1.06      | 9.59                        | 200           | 40            | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 11:00 AM - 11:30 AM | ppm   | -   | 2.0       | <2.0                        | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 11:00 AM - 11:48 AM | mg/m3 | -   | 0.5       | <0.5                        | 240           | 7.5           | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

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Dej Changchon  
Senior Manager  
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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454680**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992753-1 Rev. No.1



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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454680-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Boiler Stack No.2 (S2)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |             |      |                   |        |    |                       |     |        |
|---------------------|-------------|------|-------------------|--------|----|-----------------------|-----|--------|
| Ambient Pressure    | 757         | mmHg | Diameter          | 0.31   | m  | Oxygen                | 4.8 | %      |
| Ambient Temperature | 30.0        | °C   | Shape             | Circle |    | Carbon Dioxide        | 9.2 | %      |
| Type of Process     | Combustion  |      | Stack Temperature | 113    | °C | Gas Velocity          | 4.6 | m/s    |
| Type of Fuel        | Natural Gas |      | Moisture          | 5.18   | %  | Flow Rate (Actual O2) | 914 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 11:20 AM - 11:30 AM | g/s  | -   | -         | 0.0004               | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 11:00 AM - 11:15 AM | g/s  | -   | -         | 0.005                | -             | 0.0263        | Calculated | Rayong           |
| Sulfur dioxide *              | 11:00 AM - 11:30 AM | g/s  | -   | -         | <0.001               | -             | 0.0092        | Calculated | Rayong           |
| Total Suspended Particulate * | 11:00 AM - 11:48 AM | g/s  | -   | -         | <0.0001              | -             | 0.0026        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
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### Note:

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**Sampled By :** Suphanut Pisaipan

### Remark :

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

Technical Management

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Approved by

*D. Changchon*

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ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454681**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 3010050-1 Rev. No.1



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No.0042

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454681-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Heating Furnace Stack No.1 (S5)  |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 13.2 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 3.2  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 209    | °C | Gas Velocity          | 6.5  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 4.38   | %  | Flow Rate (Actual O2) | 2605 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |  |                  |
| Carbon Monoxide *           | 03:10 PM - 03:20 PM | ppm   | -   | 1.0       | 12.6   | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 03:05 PM - 03:20 PM | ppm   | -   | 1.06      | 8.0    | 200           | 8             | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 03:00 PM - 03:30 PM | ppm   | -   | 2.0       | <2.0   | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 03:00 PM - 03:48 PM | mg/m3 | -   | 0.5       | <0.5   | 240           | 5             | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

*Thanita K.*

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ทะเบียนเลขที่ ว-323-จ-9447

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Senior Manager  
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S:\Reports\_Air Stack\_2GL.rpt ( 1:15PM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454681**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 3010050-1 Rev. No.1



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No.0042

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454681-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Heating Furnace Stack No.1 (S5)  |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 13.2 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 3.2  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 209    | °C | Gas Velocity          | 6.5  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 4.38   | %  | Flow Rate (Actual O2) | 2605 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 03:10 PM - 03:20 PM | g/s  | -   | -         | 0.006                | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 03:05 PM - 03:20 PM | g/s  | -   | -         | 0.011                | -             | 0.0136        | Calculated | Rayong           |
| Sulfur dioxide *              | 03:00 PM - 03:30 PM | g/s  | -   | -         | <0.004               | -             | 0.0236        | Calculated | Rayong           |
| Total Suspended Particulate * | 03:00 PM - 03:48 PM | g/s  | -   | -         | <0.0004              | -             | 0.0045        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.3010050-1, Date Reported : Jun 03, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

### 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

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
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Life Sciences

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10731-22/ EMAIL

S:\Reports\_Air Stack\_2GL.rpt ( 1:15PM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454682**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992766-1 Rev. No.1

TESTING  
No.0042

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454682-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Furnace Stack No.1 (S6)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 14.1 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 3.1  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 396    | °C | Gas Velocity          | 9.6  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.93   | %  | Flow Rate (Actual O2) | 2711 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |  |                  |
| Carbon Monoxide *           | 04:10 PM - 04:20 PM | ppm   | -   | 1.0       | 10.0   | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 04:05 PM - 04:20 PM | ppm   | -   | 1.06      | <1.06  | 200           | 8             | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 04:00 PM - 04:30 PM | ppm   | -   | 2.0       | <2.0   | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 04:00 PM - 04:40 PM | mg/m3 | -   | 0.5       | 3.0    | 240           | 10            | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

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ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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S:\Reports\_Air Stack\_2GL.rpt ( 1:17PM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454682**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992766-1 Rev. No.1

TESTING  
No.0042

Page 2 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454682-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 23, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Furnace Stack No.1 (S6)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 14.1 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 3.1  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 396    | °C | Gas Velocity          | 9.6  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.93   | %  | Flow Rate (Actual O2) | 2711 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 04:10 PM - 04:20 PM | g/s  | -   | -         | 0.004                | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 04:05 PM - 04:20 PM | g/s  | -   | -         | <0.002               | -             | 0.0219        | Calculated | Rayong           |
| Sulfur dioxide *              | 04:00 PM - 04:30 PM | g/s  | -   | -         | <0.004               | -             | 0.0381        | Calculated | Rayong           |
| Total Suspended Particulate * | 04:00 PM - 04:40 PM | g/s  | -   | -         | 0.002                | -             | 0.0145        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992766-1, Date Reported : Jun 03, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

### 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

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Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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S:\Reports\_Air Stack\_2GL.rpt ( 1:17PM)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454683**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992768-1 Rev. No.1



TESTING  
No.0042

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454683-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 24, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Diffusion Furnace Stack No.1 (S7)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 14.2 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 406    | °C | Gas Velocity          | 9.3  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.56   | %  | Flow Rate (Actual O2) | 2610 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |  |                  |
| Carbon Monoxide *           | 10:20 AM - 10:30 AM | ppm   | -   | 1.0       | <1.0   | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 10:05 AM - 10:20 AM | ppm   | -   | 1.06      | 6.45   | 200           | 20            | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 10:00 AM - 10:30 AM | ppm   | -   | 2.0       | <2.0   | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 10:00 AM - 10:48 AM | mg/m3 | -   | 0.5       | 2.2    | 240           | 10            | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

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Approved by

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Senior Manager  
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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454683**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992768-1 Rev. No.1



TESTING  
No.0042

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454683-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 24, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Diffusion Furnace Stack No.1 (S7)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 14.2 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.2  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 406    | °C | Gas Velocity          | 9.3  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.56   | %  | Flow Rate (Actual O2) | 2610 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 10:20 AM - 10:30 AM | g/s  | -   | -         | <0.001               | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 10:05 AM - 10:20 AM | g/s  | -   | -         | 0.009                | -             | 0.0385        | Calculated | Rayong           |
| Sulfur dioxide *              | 10:00 AM - 10:30 AM | g/s  | -   | -         | <0.004               | -             | 0.0268        | Calculated | Rayong           |
| Total Suspended Particulate * | 10:00 AM - 10:48 AM | g/s  | -   | -         | 0.002                | -             | 0.0102        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992768-1, Date Reported : Jun 03, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

### Remark :

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

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Senior Manager  
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S:\Reports\\_Air Stack\\_2GL.rpt ( 1:28PM)



## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454684**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992770-1 Rev. No.1

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454684-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 24, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Diffusion Furnace Stack No.2 (S8)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 13.1 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.4  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 438    | °C | Gas Velocity          | 9.8  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.67   | %  | Flow Rate (Actual O2) | 2628 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |  |                  |
| Carbon Monoxide *           | 11:10 AM - 11:20 AM | ppm   | -   | 1.0       | 1.8    | 690           | -             | United States Environmental Protection Agency, EPA Method 10 | Rayong           |
| Oxides of Nitrogen *        | 11:05 AM - 11:20 AM | ppm   | -   | 1.06      | 9.34   | 200           | 20            | United States Environmental Protection Agency, EPA Method 7  | Rayong           |
| Sulfur dioxide *            | 11:00 AM - 11:30 AM | ppm   | -   | 2.0       | <2.0   | 60            | 10            | United States Environmental Protection Agency, EPA Method 6  | Rayong           |
| Total Suspended Particulate | 11:00 AM - 11:48 AM | mg/m3 | -   | 0.5       | 2.2    | 240           | 10            | United States Environmental Protection Agency, EPA Method 5  | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454684**  
Date Received : May 24, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992770-1 Rev. No.1

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2454684-1   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 24, 2024  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Emission from Stationary Source   |  |  |  |  |  |  |
| <b>Location</b>                | PT_Dust Collector Diffusion Furnace Stack No.2 (S8)   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 25, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Extracted into two 2-L collection flasks, one filter paper placed in plastic petri dish, one plastic bottle, one 10-L air sampling bag and one amber plastic bottle, refrigerated |  |  |  |  |  |  |

### Stack Description

|                     |                          |      |                   |        |    |                       |      |        |
|---------------------|--------------------------|------|-------------------|--------|----|-----------------------|------|--------|
| Ambient Pressure    | 757                      | mmHg | Diameter          | 0.49   | m  | Oxygen                | 13.1 | %      |
| Ambient Temperature | 30.0                     | °C   | Shape             | Circle |    | Carbon Dioxide        | 4.4  | %      |
| Type of Process     | Combustion (Open System) |      | Stack Temperature | 438    | °C | Gas Velocity          | 9.8  | m/s    |
| Type of Fuel        | Natural Gas              |      | Moisture          | 5.67   | %  | Flow Rate (Actual O2) | 2628 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Carbon Monoxide *             | 11:10 AM - 11:20 AM | g/s  | -   | -         | 0.002                | -             | -             | Calculated | Rayong           |
| Oxides of Nitrogen *          | 11:05 AM - 11:20 AM | g/s  | -   | -         | 0.013                | -             | 0.0385        | Calculated | Rayong           |
| Sulfur dioxide *              | 11:00 AM - 11:30 AM | g/s  | -   | -         | <0.004               | -             | 0.0268        | Calculated | Rayong           |
| Total Suspended Particulate * | 11:00 AM - 11:48 AM | g/s  | -   | -         | 0.002                | -             | 0.0102        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992770-1, Date Reported : Jun 03, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

### 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

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454689

Date Received : May 27, 2024

Date Reported : Jun 11, 2024

Report Number: 2992773-1 Rev. No.1

Page 1 of 2

|                         |   |
|-------------------------|---|
| Sample Number           | 2454689-1   |
| Sampled Date            | May 27, 2024  |
| Sample Description      | Emission from Stationary Source   |
| Location                | DD_Dry Drawing Process Stack No.1 (S9)  |
| Date Analysis Commenced | May 28, 2024  |
| Condition of Sample     | Extracted into one filter paper placed in plastic petri dish and one plastic bottle |

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.55   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 33.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 68.0   | °C | Gas Velocity          | 13.9  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.83   | %  | Flow Rate (Actual O2) | 10040 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|---|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |   |                  |
| Total Suspended Particulate | 11:00 AM - 11:48 AM | mg/m3 | -   | 0.5       | 5.0    | 300           | 21            | United States Environmental Protection Agency, EPA Method 5 | Rayong           |

Guideline : Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. Chamon.

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454689

Date Received : May 27, 2024

Date Reported : Jun 11, 2024

Report Number: 2992773-1 Rev. No.1

Page 2 of 2

|                         |   |
|-------------------------|---|
| Sample Number           | 2454689-1   |
| Sampled Date            | May 27, 2024  |
| Sample Description      | Emission from Stationary Source   |
| Location                | DD_Dry Drawing Process Stack No.1 (S9)  |
| Date Analysis Commenced | May 28, 2024  |
| Condition of Sample     | Extracted into one filter paper placed in plastic petri dish and one plastic bottle |

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.55   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 33.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 68.0   | °C | Gas Velocity          | 13.9  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.83   | %  | Flow Rate (Actual O2) | 10040 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Total Suspended Particulate * | 11:00 AM - 11:48 AM | g/s  | -   | -         | 0.01                 | -             | 0.0586        | Calculated | Rayong           |

Guideline : Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992773-1, Date Reported : Jun 04, 2024 due to revise guideline/specification

Sampled By : Suphanut Pisaipan

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

Thanita K.

Thanita Kulsuriwong  
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Approved by

D. Chamon.

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454691**  
Date Received : May 27, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992775-1 Rev. No.1

Page 1 of 2

**Sample Number** 2454691-1  
**Sampled Date** May 27, 2024  
**Sample Description** Emission from Stationary Source  
**Location** DD\_Dry Drawing Process Stack No.2 (S10)  
**Date Analysis Commenced** May 28, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one plastic bottle

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.55   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 33.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 70.0   | °C | Gas Velocity          | 15.1  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.70   | %  | Flow Rate (Actual O2) | 10879 | Nm3/hr |

| Analyte                     | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method  | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|---|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |               |               |   |                  |
| Total Suspended Particulate | 10:00 AM - 10:48 AM | mg/m3 | -   | 0.5       | <0.5   | 300           | 21            | United States Environmental Protection Agency, EPA Method 5 | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

*Thanita K.*  
Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Chongchon*  
Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454691**  
Date Received : May 27, 2024  
Date Reported : Jun 11, 2024  
Report Number: 2992775-1 Rev. No.1

Page 2 of 2

**Sample Number** 2454691-1  
**Sampled Date** May 27, 2024  
**Sample Description** Emission from Stationary Source  
**Location** DD\_Dry Drawing Process Stack No.2 (S10)  
**Date Analysis Commenced** May 28, 2024  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one plastic bottle

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.55   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 33.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 70.0   | °C | Gas Velocity          | 15.1  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.70   | %  | Flow Rate (Actual O2) | 10879 | Nm3/hr |

| Analyte                       | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|-------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b>            |                     |      |     |           |                      |               |               |            |                  |
| Total Suspended Particulate * | 10:00 AM - 10:48 AM | g/s  | -   | -         | <0.002               | -             | 0.0733        | Calculated | Rayong           |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

### Note:

This Analysis test report is issued to supersede report No.2992775-1, Date Reported : Jun 04, 2024 due to revise guideline/specification

**Sampled By :** Suphanut Pisaipan

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

*Thanita K.*  
Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

*D. Chongchon*  
Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454694**  
Date Received : Jun 26, 2024  
Date Reported : Jul 08, 2024  
Report Number: 2992798-1

Page 1 of 2

**Sample Number** 2454694-1  
**Sampled Date** Jun 26, 2024  
**Sample Description** Emission from Stationary Source  
**Location** PK\_Pickling Line Stack No.1 (S11)  
**Date Analysis Commenced** Jun 28, 2024  
**Condition of Sample** Extracted into one amber plastic bottle, refrigerated

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 756     | mmHg | Diameter          | 1.25   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 27.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 37.0   | °C | Gas Velocity          | 7.1   | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.26   | %  | Flow Rate (Actual O2) | 29390 | Nm3/hr |

| Analyte            | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |               |               |  |                  |
| Hydrogen Chloride  | 10:40 AM - 11:40 AM | mg/m3 | -   | 0.01      | 0.09   | 200           | 3             | United States Environmental Protection Agency, EPA Method 26 | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

Saranya C.

Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek

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

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454694**  
Date Received : Jun 26, 2024  
Date Reported : Jul 08, 2024  
Report Number: 2992798-1

Page 2 of 2

**Sample Number** 2454694-1  
**Sampled Date** Jun 26, 2024  
**Sample Description** Emission from Stationary Source  
**Location** PK\_Pickling Line Stack No.1 (S11)  
**Date Analysis Commenced** Jun 28, 2024  
**Condition of Sample** Extracted into one amber plastic bottle, refrigerated

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 756     | mmHg | Diameter          | 1.25   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 27.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 37.0   | °C | Gas Velocity          | 7.1   | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.26   | %  | Flow Rate (Actual O2) | 29390 | Nm3/hr |

| Analyte            | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|--------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b> |                     |      |     |           |                      |               |               |            |                  |
| Hydrogen Chloride  | 10:40 AM - 11:40 AM | g/s  | -   | -         | 0.0007               | -             | 0.0404        | Calculated | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

**Sampled By :** Naratip Thueakchaikam

Remark :

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

Technical Management

Saranya C.

Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek

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

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454695**  
Date Received : Jun 26, 2024  
Date Reported : Jul 08, 2024  
Report Number: 2992800-1

Page 1 of 2

**Sample Number** 2454695-1  
**Sampled Date** Jun 26, 2024  
**Sample Description** Emission from Stationary Source  
**Location** PK\_Pickling Line Stack No.2 (S12)  
**Date Analysis Commenced** Jun 28, 2024  
**Condition of Sample** Extracted into one amber plastic bottle, refrigerated

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 756     | mmHg | Diameter          | 0.80   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 27.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 38.0   | °C | Gas Velocity          | 14.4  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.48   | %  | Flow Rate (Actual O2) | 24272 | Nm3/hr |

| Analyte            | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |               |               |  |                  |
| Hydrogen Chloride  | 09:30 AM - 10:30 AM | mg/m3 | -   | 0.01      | 0.06   | 200           | 3             | United States Environmental Protection Agency, EPA Method 26 | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

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Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek

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

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454695**  
Date Received : Jun 26, 2024  
Date Reported : Jul 08, 2024  
Report Number: 2992800-1

Page 2 of 2

**Sample Number** 2454695-1  
**Sampled Date** Jun 26, 2024  
**Sample Description** Emission from Stationary Source  
**Location** PK\_Pickling Line Stack No.2 (S12)  
**Date Analysis Commenced** Jun 28, 2024  
**Condition of Sample** Extracted into one amber plastic bottle, refrigerated

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 756     | mmHg | Diameter          | 0.80   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 27.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 38.0   | °C | Gas Velocity          | 14.4  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 2.48   | %  | Flow Rate (Actual O2) | 24272 | Nm3/hr |

| Analyte            | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|--------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b> |                     |      |     |           |                      |               |               |            |                  |
| Hydrogen Chloride  | 09:30 AM - 10:30 AM | g/s  | -   | -         | 0.0004               | -             | 0.0211        | Calculated | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)  
Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

**Sampled By :** Naratip Thueakchaikam

Remark :

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

Technical Management

Saranya C.

Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-0011

Approved by

Kanokkorn Anek

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

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S:\Reports\_Air Stack\_2GL.rpt ( 6:48PM)



## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454696

Date Received : May 24, 2024

Date Reported : Jun 04, 2024

Report Number: 2992801-1

Page 1 of 2

|                         |   |
|-------------------------|---|
| Sample Number           | 2454696-1   |
| Sampled Date            | May 24, 2024  |
| Sample Description      | Emission from Stationary Source                       |
| Location                | PT_Plating Line Stack No.1 (S13)                      |
| Date Analysis Commenced | May 27, 2024  |
| Condition of Sample     | Extracted into one amber plastic bottle, refrigerated |

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.60   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 30.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 34.0   | °C | Gas Velocity          | 11.3  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 3.75   | %  | Flow Rate (Actual O2) | 10731 | Nm3/hr |

| Analyte            | Sampled Time        | Unit | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method  | Testing Location |
|--------------------|---------------------|------|-----|-----------|--------|---------------|---------------|---|------------------|
| <b>Air Testing</b> |                     |      |     |           |        |               |               |   |                  |
| Sulfuric acid      | 01:20 PM - 02:16 PM | ppm  | -   | 0.01      | <0.01  | 25            | 1             | United States Environmental Protection Agency, EPA Method 8 | Rayong           |

Guideline : Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. J. J.

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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S:\Reports\\_Air Stack\\_2GL.rpt ( 2:08PM)



## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454696

Date Received : May 24, 2024

Date Reported : Jun 04, 2024

Report Number: 2992801-1

Page 2 of 2

|                         |   |
|-------------------------|---|
| Sample Number           | 2454696-1   |
| Sampled Date            | May 24, 2024  |
| Sample Description      | Emission from Stationary Source                       |
| Location                | PT_Plating Line Stack No.1 (S13)                      |
| Date Analysis Commenced | May 27, 2024  |
| Condition of Sample     | Extracted into one amber plastic bottle, refrigerated |

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.60   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 30.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 34.0   | °C | Gas Velocity          | 11.3  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 3.75   | %  | Flow Rate (Actual O2) | 10731 | Nm3/hr |

| Analyte            | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|--------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <b>Air Testing</b> |                     |      |     |           |                      |               |               |            |                  |
| Sulfuric acid      | 01:20 PM - 02:16 PM | g/s  | -   | -         | <0.0001              | -             | 0.0121        | Calculated | Rayong           |

Guideline : Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Sampled By : Suphanut Pisaipan

Remark :

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)  
ทะเบียนเลขที่ ว-323-จ-9447

Approved by

D. J. J.

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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S:\Reports\\_Air Stack\\_2GL.rpt ( 2:08PM)



## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454697

Date Received : May 24, 2024

Date Reported : Jun 05, 2024

Report Number: 2992802-1

Page 1 of 2

Sample Number 2454697-1  
Sample Description Emission from Stationary Source  
Location PT\_Plating Line Stack No.2 (S14)  
Date Analysis Commenced May 27, 2024

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.90   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 30.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 37.0   | °C | Gas Velocity          | 12.5  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 4.14   | %  | Flow Rate (Actual O2) | 26360 | Nm3/hr |

| Analyte                         | Sampled Time        | Unit  | LOD | LOQ (LOR) | Result | Guideline (1) | Guideline (2) | Method   | Testing Location |
|---------------------------------|---------------------|-------|-----|-----------|--------|---------------|---------------|--|------------------|
| <strong>Metals Testing</strong> |                     |       |     |           |        |               |               |  |                  |
| Copper                          | 02.30 PM - 03.18 PM | mg/m3 | -   | 0.01      | 0.13   | 30            | 1             | United States Environmental Protection Agency, EPA Method 29 | Bangkok          |
| Zinc                            | 02.30 PM - 03.18 PM | mg/m3 | -   | 0.02      | 0.53   | -             | 1             | United States Environmental Protection Agency, EPA Method 29 | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Technical Management

*Orawan R.*  
Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454697

Date Received : May 24, 2024

Date Reported : Jun 05, 2024

Report Number: 2992802-1

Page 2 of 2

Sample Number 2454697-1  
Sample Description Emission from Stationary Source  
Location PT\_Plating Line Stack No.2 (S14)  
Date Analysis Commenced May 27, 2024

### Stack Description

|                     |         |      |                   |        |    |                       |       |        |
|---------------------|---------|------|-------------------|--------|----|-----------------------|-------|--------|
| Ambient Pressure    | 757     | mmHg | Diameter          | 0.90   | m  | Oxygen                | 20.9  | %      |
| Ambient Temperature | 30.0    | °C   | Shape             | Circle |    | Carbon Dioxide        | 0.0   | %      |
| Type of Process     | Process |      | Stack Temperature | 37.0   | °C | Gas Velocity          | 12.5  | m/s    |
| Type of Fuel        | -       |      | Moisture          | 4.14   | %  | Flow Rate (Actual O2) | 26360 | Nm3/hr |

| Analyte                         | Sampled Time        | Unit | LOD | LOQ (LOR) | Result Emission Rate | Guideline (1) | Guideline (2) | Method     | Testing Location |
|---------------------------------|---------------------|------|-----|-----------|----------------------|---------------|---------------|------------|------------------|
| <strong>Metals Testing</strong> |                     |      |     |           |                      |               |               |            |                  |
| Copper                          | 02.30 PM - 03.18 PM | g/s  | -   | -         | 0.0009               | -             | 0.0065        | Calculated | Bangkok          |
| Zinc                            | 02.30 PM - 03.18 PM | g/s  | -   | -         | 0.004                | -             | 0.0065        | Calculated | Bangkok          |

**Guideline :** Guideline (1) Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Guideline (2) Environmental Impact Assessment Report of Sumiden Steel Wire (Thailand) Co., Ltd.

Remark :

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

Technical Management

*Orawan R.*  
Orawan Rakyong  
Scientist (3)  
ทะเบียนเลขที่ ว-204-จ-0027

Approved by

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-จ-0004

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# ภาคผนวก ค-2

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คุณภาพอากาศในบรรยากาศ



## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 1 of 14

**Sample Number** 2454658-1  
**Sampled Date** May 23, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุไรพร (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 29.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|--------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |        |                 |  |                  |                  |
| Hydrogen chloride *         | 23/05/24 - 24/05/24 | ppm   | -   | 0.05      | <0.05  | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.002     | 0.018  | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.05      | <0.05  | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.002     | 0.034  | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |        |                 |  |                  |                  |
| Copper *                    | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.00001   | 0.0001 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.00001   | 0.0003 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 2 of 14

**Sample Number** 2454658-2  
**Sampled Date** May 24, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุไรพร (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 30.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 24/05/24 - 25/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.002     | 0.022   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.002     | 0.050   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.00001   | 0.00008 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.00001   | 0.00010 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 3 of 14

**Sample Number** 2454658-3  
**Sampled Date** May 25, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุโหร (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 31.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 25/05/24 - 26/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.002     | 0.021   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.002     | 0.042   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.00001   | 0.00009 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.00001   | 0.0003  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-4  
**Sampled Date** May 26, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุโหร (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 31.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 26/05/24 - 27/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.002     | 0.023   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.002     | 0.052   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.00001   | 0.00007 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.00001   | 0.0002  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

**Remark :**  
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Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-5  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุโหล (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 27/05/24 - 28/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.002     | 0.019   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.002     | 0.041   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.00001   | 0.00005 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.00001   | 0.00004 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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Approved by

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Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-6  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 บ้านอุโหล (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 28/05/24 - 29/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.002     | 0.022   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.002     | 0.054   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.00001   | 0.00006 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.00001   | 0.00002 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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**Sampled By :** Nantawat Sarin

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## Analysis / Test Report



TESTING  
No.0042

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-7  
**Sampled Date** May 29, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 5 ตำบลบึงพระ (A1) (GPS 47P 0725750, 1434297)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 29/05/24 - 30/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.002     | 0.023   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.002     | 0.048   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 29/05/24 - 30-05/24 | mg/m3 | -   | 0.00001   | 0.00006 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 29/05/24 - 30-05/24 | mg/m3 | -   | 0.00001   | 0.00002 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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**Sampled By :** Nantawat Sarin

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## Analysis / Test Report



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No.0042

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
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**Sample Number** 2454658-8  
**Sampled Date** May 23, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลบึงพระ (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 29.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 23/05/24 - 24/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.002     | 0.024   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.002     | 0.059   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.00001   | 0.00005 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 23/05/24 - 24/05/24 | mg/m3 | -   | 0.00001   | 0.0002  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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**Sampled By :** Nantawat Sarin

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Approved by

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Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-9  
**Sampled Date** May 24, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายังปอ (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 30.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 24/05/24 - 25/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.002     | 0.043   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.002     | 0.112   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.00001   | 0.00007 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 24/05/24 - 25/05/24 | mg/m3 | -   | 0.00001   | 0.0002  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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**Sampled By :** Nantawat Sarin

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Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-10  
**Sampled Date** May 25, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายังปอ (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 41.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 25/05/24 - 26/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.002     | 0.036   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.002     | 0.098   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.00001   | 0.00009 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 25/05/24 - 26/05/24 | mg/m3 | -   | 0.00001   | 0.0002  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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**Sampled By :** Nantawat Sarin

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Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

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**Sample Number** 2454658-11  
**Sampled Date** May 26, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายังปอ (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 31.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 26/05/24 - 27/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.002     | 0.044   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.002     | 0.121   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.00001   | 0.00008 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 26/05/24 - 27/05/24 | mg/m3 | -   | 0.00001   | 0.0003  | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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

Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 12 of 14

**Sample Number** 2454658-12  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายังปอ (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 27/05/24 - 28/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.002     | 0.019   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.002     | 0.046   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.00001   | 0.00007 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 27/05/24 - 28/05/24 | mg/m3 | -   | 0.00001   | 0.00006 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

**Remark :**  
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Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 13 of 14

**Sample Number** 2454658-13  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายางพร (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 28/05/24 - 29/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.002     | 0.019   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.002     | 0.047   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.00001   | 0.00008 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 28/05/24 - 29/05/24 | mg/m3 | -   | 0.00001   | 0.00006 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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Approved by

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report



TESTING  
No.0042

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454658**  
Date Received : May 30, 2024  
Date Reported : Jun 11, 2024  
Report Number : 2992721-1

Page 14 of 14

**Sample Number** 2454658-14  
**Sampled Date** May 29, 2024  
**Sample Description** Air Quality  
**Location** หมู่ที่ 3 ตำบลมายางพร (A2) (GPS 47P 0737742, 1438163)  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one glass filter paper (8x10 inch) placed in plastic bag, one quartz filter paper (8x10 inch) placed in plastic bag and one sorbent tube, refrigerated  
**Barometric Pressure** 754 mmHg  
**Atmospheric Temperature** 32.0 °C

| Analyte                     | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result  | Guideline Limit | Method   | Guideline        | Testing Location |
|-----------------------------|---------------------|-------|-----|-----------|---------|-----------------|--|------------------|------------------|
| <b>Air Testing</b>          |                     |       |     |           |         |                 |  |                  |                  |
| Hydrogen chloride *         | 29/05/24 - 30/05/24 | ppm   | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Particulate matter as PM 10 | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.002     | 0.020   | 0.12            | US EPA 40 CFR Part 50, Appendix J  | NEB No.24 Rayong |                  |
| Sulfuric acid *             | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.05      | <0.05   | No Standard     | Based on OSHA, ID-174-SG   | -                | Bangkok          |
| Total Suspended Particulate | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.002     | 0.055   | 0.33            | US EPA 40 CFR Part 50, Appendix B  | NEB No.24 Rayong |                  |
| <b>Metals Testing</b>       |                     |       |     |           |         |                 |  |                  |                  |
| Copper *                    | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.00001   | 0.00009 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |
| Zinc *                      | 29/05/24 - 30/05/24 | mg/m3 | -   | 0.00001   | 0.00007 | No Standard     | United States Environmental Protection Agency, EPA IO Compendium Method IO-3.4 | -                | Bangkok          |

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

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

*Thanita K.*

Thanita Kulsuriwong  
Scientist (4)

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454660

Date Received : May 30, 2024

Date Reported : Jun 05, 2024

Report Number: 2992725-1

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|                        |   |                           |                           |                           |                           |                           |                           |
|------------------------|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Sample Description     | Air Quality                                       |                           |                           |                           |                           |                           |                           |
| Location               | พิกัด 5 มบ.ทอ.ทอ. (A1) (GPS 47P 0725750, 1434297) |                           |                           |                           |                           |                           |                           |
| Parameter              | Nitrogen dioxide (ppm)                            |                           |                           |                           |                           |                           |                           |
| Measurement Date       | May 23, 2024 - May 30, 2024                       |                           |                           |                           |                           |                           |                           |
| Measurement by         | Nontachai Uppathamp                               |                           |                           |                           |                           |                           |                           |
| Time                   | 2454660-1<br>May 23, 2024                         | 2454660-2<br>May 24, 2024 | 2454660-3<br>May 25, 2024 | 2454660-4<br>May 26, 2024 | 2454660-5<br>May 27, 2024 | 2454660-6<br>May 28, 2024 | 2454660-7<br>May 29, 2024 |
| 09:00 AM - 10:00 AM    | 0.001   | 0.002                     | <0.001                    | 0.001                     | 0.003                     | 0.001                     | 0.010                     |
| 10:00 AM - 11:00 AM    | 0.002   | 0.002                     | 0.002                     | <0.001                    | 0.003                     | 0.001                     | 0.010                     |
| 11:00 AM - 12:00 PM    | 0.002   | 0.002                     | 0.002                     | <0.001                    | 0.002                     | 0.001                     | 0.004                     |
| 12:00 PM - 01:00 PM    | 0.002   | 0.001                     | 0.001                     | <0.001                    | 0.001                     | 0.002                     | 0.004                     |
| 01:00 PM - 02:00 PM    | 0.003   | 0.001                     | <0.001                    | <0.001                    | 0.001                     | 0.006                     | 0.004                     |
| 02:00 PM - 03:00 PM    | 0.002   | 0.001                     | <0.001                    | <0.001                    | <0.001                    | 0.002                     | 0.003                     |
| 03:00 PM - 04:00 PM    | 0.002   | 0.001                     | <0.001                    | <0.001                    | <0.001                    | 0.002                     | 0.002                     |
| 04:00 PM - 05:00 PM    | 0.003   | <0.001                    | 0.001                     | 0.001                     | <0.001                    | 0.002                     | 0.002                     |
| 05:00 PM - 06:00 PM    | 0.002   | <0.001                    | 0.001                     | <0.001                    | <0.001                    | 0.002                     | 0.002                     |
| 06:00 PM - 07:00 PM    | 0.002   | 0.001                     | <0.001                    | <0.001                    | <0.001                    | 0.002                     | 0.002                     |
| 07:00 PM - 08:00 PM    | 0.002   | 0.002                     | <0.001                    | 0.001                     | <0.001                    | 0.002                     | 0.002                     |
| 08:00 PM - 09:00 PM    | 0.002   | <0.001                    | <0.001                    | <0.001                    | <0.001                    | 0.002                     | 0.002                     |
| 09:00 PM - 10:00 PM    | 0.003   | 0.001                     | 0.002                     | 0.001                     | 0.002                     | 0.003                     | 0.002                     |
| 10:00 PM - 11:00 PM    | 0.006   | 0.002                     | 0.004                     | 0.002                     | 0.003                     | 0.004                     | 0.003                     |
| 11:00 PM - 12:00 AM    | 0.003   | 0.002                     | 0.002                     | 0.001                     | 0.003                     | 0.003                     | 0.003                     |
| 12:00 AM - 01:00 AM    | 0.003   | 0.001                     | 0.001                     | 0.001                     | 0.003                     | 0.002                     | <0.001                    |
| 01:00 AM - 02:00 AM    | 0.002   | <0.001                    | 0.001                     | 0.001                     | 0.002                     | 0.002                     | 0.001                     |
| 02:00 AM - 03:00 AM    | 0.001   | <0.001                    | <0.001                    | 0.001                     | 0.001                     | 0.001                     | 0.001                     |
| 03:00 AM - 04:00 AM    | 0.001   | <0.001                    | <0.001                    | <0.001                    | 0.001                     | 0.002                     | 0.001                     |
| 04:00 AM - 05:00 AM    | 0.001   | <0.001                    | <0.001                    | <0.001                    | 0.001                     | 0.004                     | <0.001                    |
| 05:00 AM - 06:00 AM    | 0.002   | 0.001                     | 0.001                     | 0.002                     | 0.002                     | 0.002                     | <0.001                    |
| 06:00 AM - 07:00 AM    | 0.001   | <0.001                    | <0.001                    | 0.001                     | 0.001                     | 0.002                     | 0.002                     |
| 07:00 AM - 08:00 AM    | 0.002   | 0.001                     | 0.002                     | 0.001                     | 0.002                     | 0.003                     | 0.002                     |
| 08:00 AM - 09:00 AM    | 0.001   | <0.001                    | 0.001                     | 0.001                     | 0.001                     | 0.002                     | 0.002                     |
| Average                | 0.002   | 0.001                     | 0.001                     | 0.001                     | 0.002                     | 0.002                     | 0.003                     |
| 1hr - Maximum          | 0.006   | 0.002                     | 0.004                     | 0.002                     | 0.003                     | 0.006                     | 0.010                     |
| Standard 1hr - Average | 0.170   | 0.170                     | 0.170                     | 0.170                     | 0.170                     | 0.170                     | 0.170                     |

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

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

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454660

Date Received : May 30, 2024

Date Reported : Jun 05, 2024

Report Number: 3013969-1

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|                        |  |                           |                            |                            |                            |                            |                            |
|------------------------|--|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Sample Description     | Air Quality  |                           |                            |                            |                            |                            |                            |
| Location               | พิกัด 3 มบ.ทอ.ทอ.ทอ. (A2) (GPS 47P 0737742, 1438163) |                           |                            |                            |                            |                            |                            |
| Parameter              | Nitrogen dioxide (ppm)                               |                           |                            |                            |                            |                            |                            |
| Measurement Date       | May 23, 2024 - May 30, 2024                          |                           |                            |                            |                            |                            |                            |
| Measurement by         | Nontachai Uppathamp                                  |                           |                            |                            |                            |                            |                            |
| Time                   | 2454660-8<br>May 23, 2024                            | 2454660-9<br>May 24, 2024 | 2454660-10<br>May 25, 2024 | 2454660-11<br>May 26, 2024 | 2454660-12<br>May 27, 2024 | 2454660-13<br>May 28, 2024 | 2454660-14<br>May 29, 2024 |
| 11:00 AM - 12:00 PM    | 0.002  | 0.004                     | 0.008                      | 0.003                      | 0.012                      | 0.005                      | 0.002                      |
| 12:00 PM - 01:00 PM    | 0.003  | 0.002                     | 0.013                      | 0.002                      | 0.002                      | 0.006                      | 0.003                      |
| 01:00 PM - 02:00 PM    | 0.002  | 0.001                     | 0.018                      | 0.002                      | 0.001                      | 0.002                      | 0.004                      |
| 02:00 PM - 03:00 PM    | 0.003  | 0.001                     | 0.006                      | 0.001                      | 0.001                      | 0.005                      | 0.001                      |
| 03:00 PM - 04:00 PM    | 0.003  | 0.002                     | 0.002                      | 0.001                      | 0.001                      | 0.005                      | 0.007                      |
| 04:00 PM - 05:00 PM    | 0.005  | 0.002                     | 0.002                      | 0.001                      | 0.001                      | 0.016                      | 0.007                      |
| 05:00 PM - 06:00 PM    | 0.004  | 0.004                     | 0.002                      | 0.002                      | 0.003                      | 0.006                      | 0.011                      |
| 06:00 PM - 07:00 PM    | 0.006  | 0.020                     | 0.016                      | 0.016                      | 0.013                      | 0.016                      | 0.017                      |
| 07:00 PM - 08:00 PM    | 0.006  | 0.016                     | 0.016                      | 0.010                      | 0.009                      | 0.007                      | 0.017                      |
| 08:00 PM - 09:00 PM    | 0.006  | 0.017                     | 0.016                      | 0.006                      | 0.004                      | 0.007                      | 0.014                      |
| 09:00 PM - 10:00 PM    | 0.006  | 0.007                     | 0.003                      | 0.003                      | 0.007                      | 0.006                      | 0.008                      |
| 10:00 PM - 11:00 PM    | 0.003  | 0.002                     | 0.002                      | 0.002                      | 0.007                      | 0.003                      | 0.009                      |
| 11:00 PM - 12:00 AM    | 0.005  | 0.001                     | 0.004                      | 0.003                      | 0.006                      | 0.004                      | 0.002                      |
| 12:00 AM - 01:00 AM    | 0.002  | <0.001                    | 0.002                      | 0.001                      | 0.002                      | 0.003                      | 0.002                      |
| 01:00 AM - 02:00 AM    | 0.002  | 0.001                     | 0.001                      | 0.003                      | 0.001                      | 0.002                      | 0.003                      |
| 02:00 AM - 03:00 AM    | 0.002  | 0.001                     | 0.001                      | 0.003                      | 0.001                      | 0.001                      | 0.002                      |
| 03:00 AM - 04:00 AM    | 0.002  | 0.004                     | 0.002                      | 0.003                      | 0.001                      | 0.002                      | 0.002                      |
| 04:00 AM - 05:00 AM    | 0.002  | 0.001                     | 0.001                      | 0.003                      | 0.001                      | 0.007                      | 0.003                      |
| 05:00 AM - 06:00 AM    | 0.003  | 0.004                     | 0.001                      | 0.008                      | 0.002                      | 0.009                      | 0.003                      |
| 06:00 AM - 07:00 AM    | 0.007  | 0.004                     | 0.004                      | 0.006                      | 0.005                      | 0.004                      | 0.005                      |
| 07:00 AM - 08:00 AM    | 0.008  | 0.004                     | 0.005                      | 0.010                      | 0.004                      | 0.001                      | 0.002                      |
| 08:00 AM - 09:00 AM    | 0.010  | 0.002                     | 0.010                      | 0.008                      | 0.004                      | 0.011                      | 0.002                      |
| 09:00 AM - 10:00 AM    | 0.012  | 0.003                     | 0.003                      | 0.009                      | 0.004                      | 0.013                      | 0.003                      |
| 10:00 AM - 11:00 AM    | 0.006  | 0.013                     | 0.007                      | 0.006                      | 0.007                      | 0.013                      | 0.002                      |
| Average                | 0.005  | 0.005                     | 0.006                      | 0.005                      | 0.004                      | 0.006                      | 0.006                      |
| 1hr - Maximum          | 0.012  | 0.020                     | 0.018                      | 0.016                      | 0.013                      | 0.016                      | 0.017                      |
| Standard 1hr - Average | 0.170  | 0.170                     | 0.170                      | 0.170                      | 0.170                      | 0.170                      | 0.170                      |

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

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

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

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454662**

Date Received : May 30, 2024

Date Reported : Jun 05, 2024

Report Number: 2992729-1

Page 1 of 1

|                           |  |              |              |              |              |              |              |
|---------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Sample Description</b> | Air Quality  |              |              |              |              |              |              |
| <b>Location</b>           | หมู่ที่ 5 ตำบลหนองหว้า (A1) (GPS 47P 0725750, 1434297)   |              |              |              |              |              |              |
| <b>Parameter</b>          | Sulfur Dioxide (ppm)   |              |              |              |              |              |              |
| <b>Measurement Date</b>   | May 23, 2024 - May 30, 2024  |              |              |              |              |              |              |
| <b>Measurement by</b>     | Nontachai Uppathamp  |              |              |              |              |              |              |
|                           | 2454662-1  | 2454662-2    | 2454662-3    | 2454662-4    | 2454662-5    | 2454662-6    | 2454662-7    |
| Time                      | May 23, 2024   | May 24, 2024 | May 25, 2024 | May 26, 2024 | May 27, 2024 | May 28, 2024 | May 29, 2024 |
| 09:00 AM - 10:00 AM       | 0.003  | 0.002        | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        |
| 10:00 AM - 11:00 AM       | 0.003  | 0.002        | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        |
| 11:00 AM - 12:00 PM       | 0.003  | 0.002        | 0.003        | 0.002        | 0.003        | 0.003        | 0.004        |
| 12:00 PM - 01:00 PM       | 0.003  | 0.002        | 0.003        | 0.002        | 0.003        | 0.003        | 0.004        |
| 01:00 PM - 02:00 PM       | 0.002  | 0.002        | 0.003        | 0.002        | 0.003        | 0.003        | 0.004        |
| 02:00 PM - 03:00 PM       | 0.002  | 0.002        | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        |
| 03:00 PM - 04:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.002        | 0.003        | 0.004        |
| 04:00 PM - 05:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.002        | 0.003        | 0.004        |
| 05:00 PM - 06:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 06:00 PM - 07:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.003        |
| 07:00 PM - 08:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        | 0.003        |
| 08:00 PM - 09:00 PM       | 0.002  | 0.002        | 0.002        | 0.002        | 0.003        | 0.004        | 0.004        |
| 09:00 PM - 10:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        | 0.004        |
| 10:00 PM - 11:00 PM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        | 0.004        |
| 11:00 PM - 12:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        | 0.004        |
| 12:00 AM - 01:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.002        | 0.004        | 0.004        |
| 01:00 AM - 02:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.004        | 0.004        |
| 02:00 AM - 03:00 AM       | 0.002  | 0.002        | 0.003        | 0.003        | 0.003        | 0.003        | 0.004        |
| 03:00 AM - 04:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 04:00 AM - 05:00 AM       | 0.003  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 05:00 AM - 06:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.003        |
| 06:00 AM - 07:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 07:00 AM - 08:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 08:00 AM - 09:00 AM       | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.003        |
| Average                   | 0.002  | 0.002        | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        |
| 1hr - Maximum             | 0.003  | 0.002        | 0.003        | 0.003        | 0.003        | 0.004        | 0.004        |
| Standard 1hr - Average    | 0.3  | 0.3          | 0.3          | 0.3          | 0.3          | 0.3          | 0.3          |
| Standard 24 hrs - Average | 0.12   | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         |
| Standard                  | Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547). |              |              |              |              |              |              |
| Reference Method          | US EPA Method Part 53 and 58   |              |              |              |              |              |              |

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

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454662**

Date Received : May 30, 2024

Date Reported : Jun 05, 2024

Report Number: 3013971-1

Page 1 of 1

|                           |  |              |              |              |              |              |              |
|---------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Sample Description</b> | Air Quality  |              |              |              |              |              |              |
| <b>Location</b>           | หมู่ที่ 3 ตำบลหนองหว้า (A2) (GPS 47P 0737742, 1438163)   |              |              |              |              |              |              |
| <b>Parameter</b>          | Sulfur Dioxide (ppm)   |              |              |              |              |              |              |
| <b>Measurement Date</b>   | May 23, 2024 - May 30, 2024  |              |              |              |              |              |              |
| <b>Measurement by</b>     | Nontachai Uppathamp  |              |              |              |              |              |              |
|                           | 2454662-8  | 2454662-9    | 2454662-10   | 2454662-11   | 2454662-12   | 2454662-13   | 2454662-14   |
| Time                      | May 23, 2024   | May 24, 2024 | May 25, 2024 | May 26, 2024 | May 27, 2024 | May 28, 2024 | May 29, 2024 |
| 11:00 AM - 12:00 PM       | 0.003  | 0.004        | 0.004        | 0.003        | 0.003        | 0.004        | 0.004        |
| 12:00 PM - 01:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 01:00 PM - 02:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.003        | 0.004        | 0.004        |
| 02:00 PM - 03:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.003        |
| 03:00 PM - 04:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 04:00 PM - 05:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 05:00 PM - 06:00 PM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 06:00 PM - 07:00 PM       | 0.004  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 07:00 PM - 08:00 PM       | 0.004  | 0.003        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 08:00 PM - 09:00 PM       | 0.004  | 0.004        | 0.003        | 0.004        | 0.003        | 0.004        | 0.004        |
| 09:00 PM - 10:00 PM       | 0.004  | 0.004        | 0.004        | 0.004        | 0.003        | 0.004        | 0.004        |
| 10:00 PM - 11:00 PM       | 0.003  | 0.004        | 0.004        | 0.003        | 0.003        | 0.004        | 0.004        |
| 11:00 PM - 12:00 AM       | 0.003  | 0.004        | 0.003        | 0.004        | 0.003        | 0.004        | 0.004        |
| 12:00 AM - 01:00 AM       | 0.004  | 0.004        | 0.003        | 0.003        | 0.003        | 0.004        | 0.004        |
| 01:00 AM - 02:00 AM       | 0.004  | 0.004        | 0.003        | 0.004        | 0.003        | 0.004        | 0.004        |
| 02:00 AM - 03:00 AM       | 0.004  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 03:00 AM - 04:00 AM       | 0.004  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 04:00 AM - 05:00 AM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 05:00 AM - 06:00 AM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 06:00 AM - 07:00 AM       | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 07:00 AM - 08:00 AM       | 0.003  | 0.004        | 0.003        | 0.003        | 0.004        | 0.004        | 0.004        |
| 08:00 AM - 09:00 AM       | 0.003  | 0.004        | 0.004        | 0.003        | 0.004        | 0.004        | 0.004        |
| 09:00 AM - 10:00 AM       | 0.003  | 0.004        | 0.003        | 0.004        | 0.004        | 0.004        | 0.004        |
| 10:00 AM - 11:00 AM       | 0.004  | 0.004        | 0.003        | 0.003        | 0.004        | 0.004        | 0.004        |
| Average                   | 0.003  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| 1hr - Maximum             | 0.004  | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        | 0.004        |
| Standard 1hr - Average    | 0.3  | 0.3          | 0.3          | 0.3          | 0.3          | 0.3          | 0.3          |
| Standard 24 hrs - Average | 0.12   | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         |
| Standard                  | Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547). |              |              |              |              |              |              |
| Reference Method          | US EPA Method Part 53 and 58   |              |              |              |              |              |              |

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

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S:\Reports\Air SOxNOx.rpt ( 2:35PM)





## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454663

Date Received : May 30, 2024

Date Reported : Jun 03, 2024

Report Number : 2992733-1

Sample Number : 2454663-1 to 7

Parameter : Wind Speed / Wind Direction

Location : หมู่ที่ 5 ตำบลโพธิ์ (A1) (GPS 47P 0725750, 1434297)

Sampling Date : May 23 - May 30, 2024

Sampling by : Nontachai Uppathamp

| Time                | May 23 - May 24, 2024 |             |     | May 24 - May 25, 2024 |             |     | May 25 - May 26, 2024 |             |     | May 26 - May 27, 2024 |             |     | May 27 - May 28, 2024 |             |     | May 28 - May 29, 2024 |             |     | May 29 - May 30, 2024 |             |     |
|---------------------|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     |
| 09:00 AM - 10:00 AM | 2.0                   | 79.0        | E   | 0.8                   | 223.0       | SW  | 1.9                   | 92.0        | E   | 2.0                   | 150.0       | SSE | 3.1                   | 211.0       | SSW | 4.1                   | 252.0       | WSW | 3.4                   | 215.0       | SW  |
| 10:00 AM - 11:00 AM | 2.2                   | 115.0       | ESE | 2.7                   | 110.0       | ESE | 1.5                   | 131.0       | SE  | 2.5                   | 242.0       | WSW | 3.0                   | 217.0       | SW  | 2.9                   | 232.0       | SW  | 6.6                   | 215.0       | SW  |
| 11:00 AM - 12:00 PM | 3.0                   | 96.0        | E   | 1.7                   | 189.0       | S   | 1.7                   | 198.0       | SSW | 2.2                   | 214.0       | SW  | 1.0                   | 254.0       | WSW | 3.0                   | 243.0       | WSW | 3.1                   | 219.0       | SW  |
| 12:00 PM - 01:00 PM | 3.7                   | 183.0       | S   | 1.4                   | 229.0       | SW  | 3.8                   | 262.0       | W   | 4.1                   | 196.0       | SSW | 1.1                   | 230.0       | SW  | 1.8                   | 236.0       | SW  | 2.9                   | 246.0       | WSW |
| 01:00 PM - 02:00 PM | 0.6                   | 90.0        | E   | 3.7                   | 182.0       | S   | 1.9                   | 345.0       | NNW | 1.1                   | 198.0       | SSW | 2.9                   | 220.0       | SW  | 2.3                   | 226.0       | SW  | 3.3                   | 235.0       | SW  |
| 02:00 PM - 03:00 PM | 1.0                   | 28.0        | NNE | 1.1                   | 247.0       | WSW | 0.8                   | 3.0         | N   | 0.9                   | 169.0       | S   | 4.1                   | 241.0       | WSW | 2.4                   | 259.0       | W   | 2.5                   | 266.0       | W   |
| 03:00 PM - 04:00 PM | 0.5                   | 220.0       | SW  | 2.6                   | 179.0       | S   | 0.6                   | 27.0        | NNE | 2.7                   | 201.0       | SSW | 1.3                   | 161.0       | SSE | 2.3                   | 260.0       | W   | 2.6                   | 249.0       | WSW |
| 04:00 PM - 05:00 PM | 2.3                   | 104.0       | ESE | 1.0                   | 240.0       | WSW | 0.2                   | -           | -   | 2.6                   | 165.0       | SSE | 2.0                   | 226.0       | SW  | 2.7                   | 271.0       | W   | 1.8                   | 245.0       | WSW |
| 05:00 PM - 06:00 PM | 1.9                   | 107.0       | ESE | 1.2                   | 202.0       | SSW | 2.5                   | 214.0       | SW  | 2.8                   | 166.0       | SSE | 1.4                   | 212.0       | SSW | 3.3                   | 187.0       | S   | 0.9                   | 244.0       | WSW |
| 06:00 PM - 07:00 PM | 0.6                   | 112.0       | ESE | 2.4                   | 176.0       | S   | 0.3                   | 227.0       | SW  | 1.2                   | 167.0       | SSE | 1.2                   | 212.0       | SSW | 1.5                   | 225.0       | SW  | 0.0                   | -           | -   |
| 07:00 PM - 08:00 PM | 0.8                   | 182.0       | S   | 1.2                   | 203.0       | SSW | 0.8                   | 208.0       | SSW | 0.0                   | -           | -   | 0.5                   | 241.0       | WSW | 1.3                   | 220.0       | SW  | 0.7                   | 210.0       | SSW |
| 08:00 PM - 09:00 PM | 0.5                   | 143.0       | SE  | 0.0                   | -           | -   | 3.4                   | 191.0       | S   | 3.9                   | 346.0       | NNW | 0.4                   | 217.0       | SW  | 1.1                   | 228.0       | SW  | 0.5                   | 256.0       | WSW |
| 09:00 PM - 10:00 PM | 0.8                   | 124.0       | SE  | 0.0                   | -           | -   | 1.7                   | 191.0       | S   | 0.0                   | -           | -   | 0.3                   | 215.0       | SW  | 0.7                   | 215.0       | SW  | 0.2                   | -           | -   |
| 10:00 PM - 11:00 PM | 0.9                   | 107.0       | ESE | 0.0                   | -           | -   | 0.5                   | 106.0       | ESE | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.2                   | 209.0       | SSW | 0.2                   | -           | -   |
| 11:00 PM - 12:00 AM | 0.3                   | 96.0        | E   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.1                   | 202.0       | SSW | 0.0                   | -           | -   |
| 12:00 AM - 01:00 AM | 1.0                   | 172.0       | S   | 0.4                   | 291.0       | WNW | 0.3                   | 13.0        | NNE | 0.0                   | -           | -   | 1.0                   | 208.0       | SSW | 0.5                   | 208.0       | SSW | 0.0                   | -           | -   |
| 01:00 AM - 02:00 AM | 2.4                   | 99.0        | E   | 0.0                   | -           | -   | 0.4                   | 310.0       | NW  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.6                   | 218.0       | SW  | 0.0                   | -           | -   |
| 02:00 AM - 03:00 AM | 0.4                   | 163.0       | SSE | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 1.0                   | 245.0       | WSW | 0.7                   | 232.0       | SW  |
| 03:00 AM - 04:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.0                   | -           | -   |
| 04:00 AM - 05:00 AM | 0.5                   | 349.0       | N   | 0.3                   | 133.0       | SE  | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.5                   | 206.0       | SSW | 0.6                   | 196.0       | SSW | 0.9                   | 226.0       | SW  |
| 05:00 AM - 06:00 AM | 1.2                   | 235.0       | SW  | 0.1                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.6                   | 229.0       | SW  | 1.3                   | 225.0       | SW  |
| 06:00 AM - 07:00 AM | 0.2                   | -           | -   | 0.8                   | 114.0       | ESE | 1.0                   | 9.0         | N   | 0.0                   | -           | -   | 1.2                   | 225.0       | SW  | 0.4                   | 228.0       | SW  | 0.4                   | 226.0       | SW  |
| 07:00 AM - 08:00 AM | 0.7                   | 107.0       | ESE | 1.6                   | 104.0       | ESE | 2.0                   | 90.0        | E   | 1.5                   | 217.0       | SW  | 4.3                   | 215.0       | SW  | 2.1                   | 255.0       | WSW | 2.0                   | 214.0       | SW  |
| 08:00 AM - 09:00 AM | 1.6                   | 228.0       | SW  | 2.0                   | 200.0       | SSW | 2.7                   | 89.0        | E   | 2.0                   | 172.0       | S   | 2.1                   | 241.0       | WSW | 2.9                   | 240.0       | WSW | 1.0                   | 222.0       | SW  |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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

Approved by

Sarayuth Jitranont  
Assistant General Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

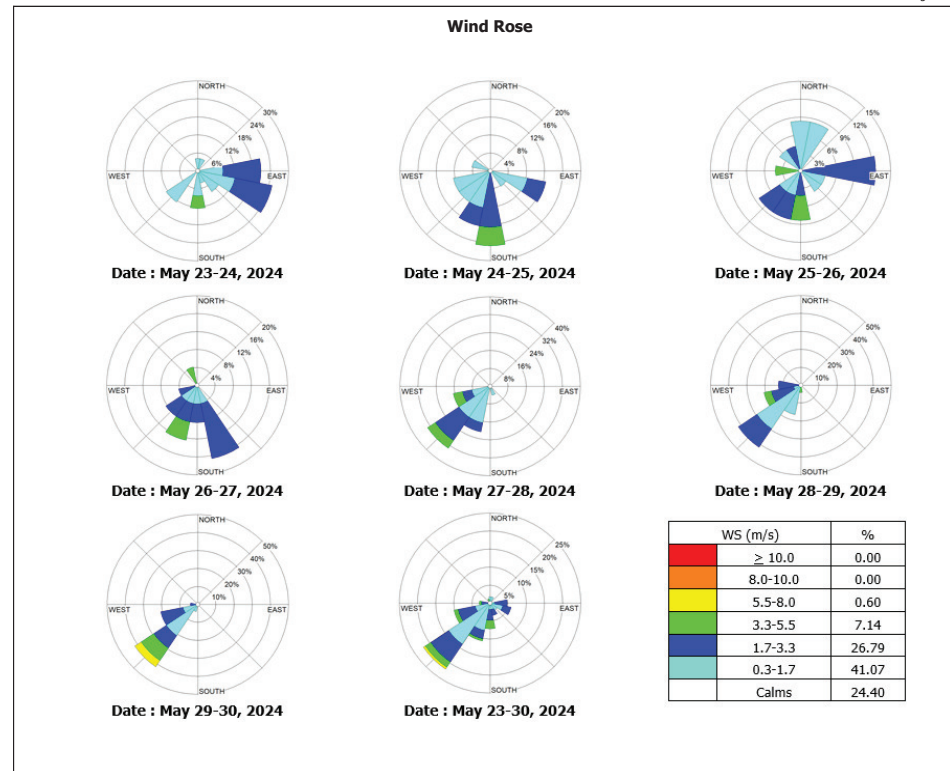
Lot ID: 2454663

Date Received : May 30, 2024

Date Reported : Jun 03, 2024

Report Number : 2992733-1

Page 2 of 2



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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454663

Date Received : May 30, 2024

Date Reported : Jun 03, 2024

Report Number : 2992733-1

Page 1 of 2

Sample Number : 2454663-8 to 14

Parameter : Wind Speed / Wind Direction

Location : หมู่ที่ 3 ตำบลมายางพร (A2) (GPS 47P 0737742, 1438163)

Sampling Date : May 23 - May 30, 2024

Sampling by : Nontachai Uppathamp

| Time                | May 23 - May 24, 2024 |             |     | May 24 - May 25, 2024 |             |     | May 25 - May 26, 2024 |             |     | May 26 - May 27, 2024 |             |     | May 27 - May 28, 2024 |             |     | May 28 - May 29, 2024 |             |     | May 29 - May 30, 2024 |             |     |
|---------------------|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|-----------------------|-------------|-----|
|                     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     | WS<br>(m/s)           | WD<br>(deg) |     |
| 11:00 AM - 12:00 PM | 1.5                   | 215.0       | SW  | 0.6                   | 178.0       | S   | 2.5                   | 200.0       | SSW | 2.9                   | 189.0       | S   | 0.0                   | -           | -   | 0.6                   | 307.0       | NW  | 1.5                   | 182.0       | S   |
| 12:00 PM - 01:00 PM | 1.6                   | 188.0       | S   | 1.6                   | 196.0       | SSW | 2.7                   | 181.0       | S   | 0.0                   | -           | -   | 0.4                   | 210.0       | SSW | 1.2                   | 54.0        | NE  | 2.2                   | 281.0       | W   |
| 01:00 PM - 02:00 PM | 0.4                   | 195.0       | SSW | 2.3                   | 171.0       | S   | 0.2                   | -           | -   | 0.8                   | 168.0       | SSE | 1.5                   | 336.0       | NNW | 1.0                   | 18.0        | NNE | 1.6                   | 217.0       | SW  |
| 02:00 PM - 03:00 PM | 1.1                   | 178.0       | S   | 1.1                   | 275.0       | W   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.5                   | 303.0       | WNW | 1.1                   | 297.0       | WNW | 1.2                   | 17.0        | NNE |
| 03:00 PM - 04:00 PM | 1.8                   | 193.0       | SSW | 0.7                   | 177.0       | S   | 0.0                   | -           | -   | 0.6                   | 168.0       | SSE | 1.2                   | 195.0       | SSW | 0.4                   | 290.0       | WNW | 1.2                   | 213.0       | SSW |
| 04:00 PM - 05:00 PM | 3.3                   | 206.0       | SSW | 0.0                   | -           | -   | 0.2                   | -           | -   | 2.0                   | 172.0       | S   | 0.8                   | 226.0       | SW  | 0.4                   | 162.0       | SSE | 1.8                   | 254.0       | WSW |
| 05:00 PM - 06:00 PM | 0.5                   | 177.0       | S   | 0.0                   | -           | -   | 0.9                   | 12.0        | NNE | 0.7                   | 267.0       | W   | 0.2                   | -           | -   | 0.7                   | 315.0       | NW  | 0.0                   | -           | -   |
| 06:00 PM - 07:00 PM | 0.8                   | 193.0       | SSW | 0.5                   | 178.0       | S   | 0.0                   | -           | -   | 1.0                   | 180.0       | S   | 0.0                   | -           | -   | 2.4                   | 204.0       | SSW | 0.0                   | -           | -   |
| 07:00 PM - 08:00 PM | 0.0                   | -           | -   | 1.1                   | 189.0       | S   | 0.0                   | -           | -   | 0.9                   | 179.0       | S   | 0.4                   | 242.0       | WSW | 0.5                   | 197.0       | SSW | 0.0                   | -           | -   |
| 08:00 PM - 09:00 PM | 0.8                   | 186.0       | S   | 0.0                   | -           | -   | 0.5                   | 179.0       | S   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 09:00 PM - 10:00 PM | 0.5                   | 186.0       | S   | 0.0                   | -           | -   | 1.4                   | 173.0       | S   | 0.0                   | -           | -   | 0.4                   | 221.0       | SW  | 0.0                   | -           | -   | 0.5                   | 190.0       | S   |
| 10:00 PM - 11:00 PM | 0.7                   | 190.0       | S   | 0.0                   | -           | -   | 1.6                   | 192.0       | SSW | 0.0                   | -           | -   | 0.8                   | 186.0       | S   | 0.0                   | -           | -   | 0.8                   | 203.0       | SSW |
| 11:00 PM - 12:00 AM | 0.4                   | 184.0       | S   | 0.0                   | -           | -   | 0.3                   | 190.0       | S   | 0.0                   | -           | -   | 0.2                   | -           | -   | 0.3                   | 231.0       | SW  | 0.0                   | -           | -   |
| 12:00 AM - 01:00 AM | 0.7                   | 186.0       | S   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.7                   | 322.0       | NW  | 0.0                   | -           | -   |
| 01:00 AM - 02:00 AM | 1.2                   | 187.0       | S   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.4                   | 280.0       | W   |
| 02:00 AM - 03:00 AM | 0.6                   | 195.0       | SSW | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.4                   | 259.0       | W   | 0.1                   | -           | -   |
| 03:00 AM - 04:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 04:00 AM - 05:00 AM | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.4                   | 218.0       | SW  | 0.0                   | -           | -   |
| 05:00 AM - 06:00 AM | 3.0                   | 349.0       | N   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.1                   | -           | -   | 0.3                   | 258.0       | WSW | 0.9                   | 214.0       | SW  |
| 06:00 AM - 07:00 AM | 0.2                   | -           | -   | 0.2                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 07:00 AM - 08:00 AM | 0.9                   | 197.0       | SSW | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   | 0.0                   | -           | -   |
| 08:00 AM - 09:00 AM | 0.2                   | -           | -   | 2.8                   | 191.0       | S   | 1.3                   | 184.0       | S   | 0.0                   | -           | -   | 0.0                   | -           | -   | 2.0                   | 264.0       | W   | 1.9                   | 272.0       | W   |
| 09:00 AM - 10:00 AM | 0.0                   | -           | -   | 0.7                   | 203.0       | SSW | 1.8                   | 197.0       | SSW | 0.0                   | -           | -   | 2.3                   | 175.0       | S   | 2.1                   | 317.0       | NW  | 2.1                   | 235.0       | SW  |
| 10:00 AM - 11:00 AM | 0.6                   | 180.0       | S   | 2.8                   | 180.0       | S   | 1.7                   | 174.0       | S   | 1.8                   | 248.0       | WSW | 2.3                   | 327.0       | NNW | 0.6                   | 254.0       | WSW | 1.0                   | 256.0       | WSW |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

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Assistant General Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

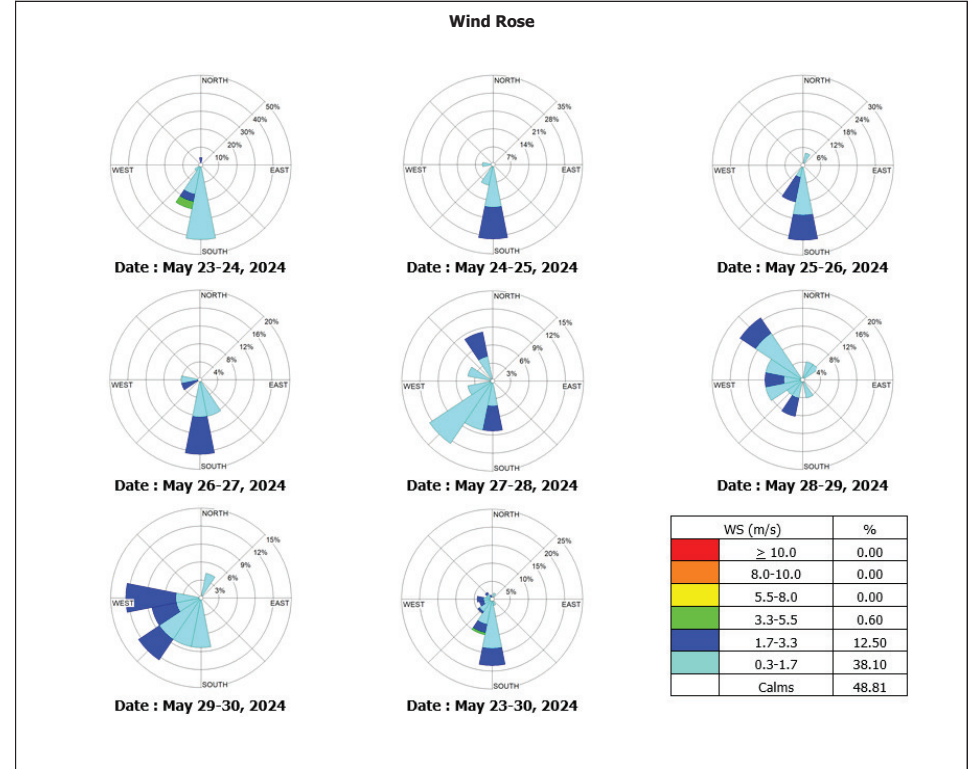
Lot ID: 2454663

Date Received : May 30, 2024

Date Reported : Jun 03, 2024

Report Number : 2992733-1

Page 2 of 2



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# ภาคผนวก ค-3

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ระดับเสียง



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012628-1

Page 1 of 1

Sample Number 2454677-1  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 23 - May 24, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 60.3        | 78.0         | 55.5        |
| 09:00 AM - 10:00 AM | 60.1        | 76.1         | 55.2        |
| 10:00 AM - 11:00 AM | 59.6        | 74.2         | 55.2        |
| 11:00 AM - 12:00 PM | 59.9        | 78.1         | 56.1        |
| 12:00 PM - 01:00 PM | 59.6        | 72.1         | 55.2        |
| 01:00 PM - 02:00 PM | 58.5        | 76.1         | 55.0        |
| 02:00 PM - 03:00 PM | 60.9        | 78.1         | 57.1        |
| 03:00 PM - 04:00 PM | 60.3        | 75.3         | 56.3        |
| 04:00 PM - 05:00 PM | 61.6        | 77.6         | 57.8        |
| 05:00 PM - 06:00 PM | 62.1        | 81.9         | 57.4        |
| 06:00 PM - 07:00 PM | 59.6        | 81.2         | 54.8        |
| 07:00 PM - 08:00 PM | 57.5        | 73.0         | 54.9        |
| 08:00 PM - 09:00 PM | 56.7        | 75.4         | 54.2        |
| 09:00 PM - 10:00 PM | 55.9        | 72.7         | 53.1        |
| 10:00 PM - 11:00 PM | 55.7        | 75.3         | 53.4        |
| 11:00 PM - 12:00 AM | 55.8        | 75.1         | 53.3        |
| 12:00 AM - 01:00 AM | 54.8        | 68.2         | 52.9        |
| 01:00 AM - 02:00 AM | 55.1        | 69.2         | 52.3        |
| 02:00 AM - 03:00 AM | 56.0        | 72.6         | 53.0        |
| 03:00 AM - 04:00 AM | 58.8        | 72.4         | 55.0        |
| 04:00 AM - 05:00 AM | 62.6        | 82.8         | 58.9        |
| 05:00 AM - 06:00 AM | 63.0        | 77.9         | 58.3        |
| 06:00 AM - 07:00 AM | 60.5        | 75.2         | 56.1        |
| 07:00 AM - 08:00 AM | 60.0        | 74.4         | 56.0        |

Leq Average 24 hrs. (dB(A)) 59.6  
Lmax (dB(A)) 82.8  
L90 (dB(A)) 55.2  
Ldn (dB(A)) 65.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:39PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012629-1

Page 1 of 1

Sample Number 2454677-2  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 24 - May 25, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 60.5        | 81.8         | 56.0        |
| 09:00 AM - 10:00 AM | 58.3        | 73.2         | 53.4        |
| 10:00 AM - 11:00 AM | 59.0        | 78.4         | 53.9        |
| 11:00 AM - 12:00 PM | 58.0        | 76.1         | 53.2        |
| 12:00 PM - 01:00 PM | 58.9        | 80.3         | 53.7        |
| 01:00 PM - 02:00 PM | 59.0        | 87.9         | 54.2        |
| 02:00 PM - 03:00 PM | 59.9        | 79.8         | 56.0        |
| 03:00 PM - 04:00 PM | 59.3        | 80.0         | 56.0        |
| 04:00 PM - 05:00 PM | 61.9        | 78.0         | 57.5        |
| 05:00 PM - 06:00 PM | 62.2        | 81.5         | 57.1        |
| 06:00 PM - 07:00 PM | 58.8        | 77.7         | 54.6        |
| 07:00 PM - 08:00 PM | 57.0        | 75.0         | 54.1        |
| 08:00 PM - 09:00 PM | 56.6        | 72.3         | 54.2        |
| 09:00 PM - 10:00 PM | 55.8        | 72.4         | 53.8        |
| 10:00 PM - 11:00 PM | 56.0        | 79.0         | 52.6        |
| 11:00 PM - 12:00 AM | 55.2        | 75.3         | 52.4        |
| 12:00 AM - 01:00 AM | 55.2        | 68.9         | 52.7        |
| 01:00 AM - 02:00 AM | 54.2        | 72.3         | 52.6        |
| 02:00 AM - 03:00 AM | 56.4        | 68.3         | 53.3        |
| 03:00 AM - 04:00 AM | 59.1        | 79.8         | 54.3        |
| 04:00 AM - 05:00 AM | 63.4        | 79.6         | 57.9        |
| 05:00 AM - 06:00 AM | 62.9        | 81.1         | 57.4        |
| 06:00 AM - 07:00 AM | 59.6        | 75.6         | 54.6        |
| 07:00 AM - 08:00 AM | 59.2        | 74.7         | 54.2        |

Leq Average 24 hrs. (dB(A)) 59.3  
Lmax (dB(A)) 87.9  
L90 (dB(A)) 54.2  
Ldn (dB(A)) 65.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:39PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012630-1

Page 1 of 1

Sample Number 2454677-3  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 25 - May 26, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 58.8        | 78.3         | 54.2        |
| 09:00 AM - 10:00 AM | 58.6        | 75.7         | 52.7        |
| 10:00 AM - 11:00 AM | 60.3        | 73.9         | 52.8        |
| 11:00 AM - 12:00 PM | 58.3        | 74.8         | 53.5        |
| 12:00 PM - 01:00 PM | 58.4        | 75.4         | 53.1        |
| 01:00 PM - 02:00 PM | 59.3        | 78.6         | 53.1        |
| 02:00 PM - 03:00 PM | 60.9        | 80.3         | 54.7        |
| 03:00 PM - 04:00 PM | 58.1        | 73.6         | 53.6        |
| 04:00 PM - 05:00 PM | 61.2        | 78.0         | 56.6        |
| 05:00 PM - 06:00 PM | 62.0        | 83.5         | 56.2        |
| 06:00 PM - 07:00 PM | 57.6        | 73.7         | 53.1        |
| 07:00 PM - 08:00 PM | 55.4        | 69.9         | 52.7        |
| 08:00 PM - 09:00 PM | 55.2        | 71.4         | 52.6        |
| 09:00 PM - 10:00 PM | 55.7        | 72.3         | 51.9        |
| 10:00 PM - 11:00 PM | 54.5        | 73.0         | 51.3        |
| 11:00 PM - 12:00 AM | 53.3        | 69.9         | 50.6        |
| 12:00 AM - 01:00 AM | 52.4        | 66.9         | 50.4        |
| 01:00 AM - 02:00 AM | 52.6        | 72.7         | 50.8        |
| 02:00 AM - 03:00 AM | 55.8        | 75.8         | 50.9        |
| 03:00 AM - 04:00 AM | 57.3        | 84.2         | 50.8        |
| 04:00 AM - 05:00 AM | 62.5        | 81.5         | 55.6        |
| 05:00 AM - 06:00 AM | 61.3        | 79.5         | 55.1        |
| 06:00 AM - 07:00 AM | 58.0        | 80.0         | 50.3        |
| 07:00 AM - 08:00 AM | 56.4        | 74.7         | 48.7        |

Leq Average 24 hrs. (dB(A)) 58.5  
Lmax (dB(A)) 84.2  
L90 (dB(A)) 52.7  
Ldn (dB(A)) 64.5  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:39PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012631-1

Page 1 of 1

Sample Number 2454677-4  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 26 - May 27, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 57.7        | 75.7         | 49.5        |
| 09:00 AM - 10:00 AM | 55.6        | 70.3         | 49.1        |
| 10:00 AM - 11:00 AM | 58.1        | 77.2         | 48.4        |
| 11:00 AM - 12:00 PM | 55.6        | 75.3         | 48.5        |
| 12:00 PM - 01:00 PM | 58.7        | 74.9         | 51.3        |
| 01:00 PM - 02:00 PM | 56.6        | 74.6         | 49.9        |
| 02:00 PM - 03:00 PM | 59.8        | 88.7         | 53.2        |
| 03:00 PM - 04:00 PM | 58.5        | 81.8         | 51.2        |
| 04:00 PM - 05:00 PM | 59.1        | 78.7         | 53.2        |
| 05:00 PM - 06:00 PM | 59.6        | 81.0         | 53.0        |
| 06:00 PM - 07:00 PM | 55.2        | 74.9         | 49.8        |
| 07:00 PM - 08:00 PM | 53.9        | 75.3         | 48.4        |
| 08:00 PM - 09:00 PM | 58.4        | 78.0         | 50.2        |
| 09:00 PM - 10:00 PM | 55.8        | 72.8         | 48.2        |
| 10:00 PM - 11:00 PM | 53.9        | 72.7         | 48.1        |
| 11:00 PM - 12:00 AM | 50.6        | 65.2         | 48.2        |
| 12:00 AM - 01:00 AM | 50.1        | 67.6         | 48.1        |
| 01:00 AM - 02:00 AM | 52.6        | 73.2         | 48.1        |
| 02:00 AM - 03:00 AM | 55.7        | 75.4         | 49.0        |
| 03:00 AM - 04:00 AM | 58.1        | 78.0         | 50.8        |
| 04:00 AM - 05:00 AM | 62.4        | 81.6         | 56.6        |
| 05:00 AM - 06:00 AM | 62.7        | 83.4         | 56.6        |
| 06:00 AM - 07:00 AM | 58.7        | 76.0         | 53.9        |
| 07:00 AM - 08:00 AM | 58.0        | 77.6         | 52.9        |

Leq Average 24 hrs. (dB(A)) 57.9  
Lmax (dB(A)) 88.7  
L90 (dB(A)) 49.8  
Ldn (dB(A)) 64.6  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:40PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012632-1

Page 1 of 1

Sample Number 2454677-5  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 27 - May 28, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 57.8        | 79.1         | 52.2        |
| 09:00 AM - 10:00 AM | 57.2        | 73.7         | 51.5        |
| 10:00 AM - 11:00 AM | 55.7        | 73.7         | 50.7        |
| 11:00 AM - 12:00 PM | 56.6        | 73.5         | 51.1        |
| 12:00 PM - 01:00 PM | 56.8        | 73.1         | 52.1        |
| 01:00 PM - 02:00 PM | 57.4        | 76.6         | 51.9        |
| 02:00 PM - 03:00 PM | 57.3        | 77.8         | 52.9        |
| 03:00 PM - 04:00 PM | 58.6        | 73.7         | 54.7        |
| 04:00 PM - 05:00 PM | 60.9        | 79.3         | 55.1        |
| 05:00 PM - 06:00 PM | 60.8        | 75.2         | 55.9        |
| 06:00 PM - 07:00 PM | 58.2        | 73.6         | 53.6        |
| 07:00 PM - 08:00 PM | 54.8        | 69.4         | 52.1        |
| 08:00 PM - 09:00 PM | 54.1        | 65.7         | 51.9        |
| 09:00 PM - 10:00 PM | 55.7        | 74.1         | 52.1        |
| 10:00 PM - 11:00 PM | 54.0        | 70.5         | 50.5        |
| 11:00 PM - 12:00 AM | 54.2        | 72.0         | 51.0        |
| 12:00 AM - 01:00 AM | 53.2        | 66.3         | 51.2        |
| 01:00 AM - 02:00 AM | 52.8        | 66.0         | 51.2        |
| 02:00 AM - 03:00 AM | 55.6        | 79.9         | 51.9        |
| 03:00 AM - 04:00 AM | 58.2        | 73.1         | 53.1        |
| 04:00 AM - 05:00 AM | 60.9        | 78.5         | 56.5        |
| 05:00 AM - 06:00 AM | 62.5        | 79.1         | 56.9        |
| 06:00 AM - 07:00 AM | 58.5        | 78.4         | 53.6        |
| 07:00 AM - 08:00 AM | 57.1        | 76.1         | 52.2        |

Leq Average 24 hrs. (dB(A)) 57.8

Lmax (dB(A)) 79.9

L90 (dB(A)) 52.1

Ldn (dB(A)) 64.3

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\\_Air Noise.rpt ( 2:40PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012633-1

Page 1 of 1

Sample Number 2454677-6  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 28 - May 29, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 58.0        | 78.0         | 52.8        |
| 09:00 AM - 10:00 AM | 57.0        | 74.4         | 51.7        |
| 10:00 AM - 11:00 AM | 55.4        | 71.8         | 50.8        |
| 11:00 AM - 12:00 PM | 56.8        | 73.9         | 52.3        |
| 12:00 PM - 01:00 PM | 57.6        | 72.8         | 53.2        |
| 01:00 PM - 02:00 PM | 56.6        | 71.3         | 52.6        |
| 02:00 PM - 03:00 PM | 58.5        | 78.3         | 53.6        |
| 03:00 PM - 04:00 PM | 58.6        | 78.2         | 54.8        |
| 04:00 PM - 05:00 PM | 60.6        | 80.7         | 55.6        |
| 05:00 PM - 06:00 PM | 61.4        | 76.9         | 56.7        |
| 06:00 PM - 07:00 PM | 58.6        | 73.8         | 53.4        |
| 07:00 PM - 08:00 PM | 55.4        | 70.1         | 51.5        |
| 08:00 PM - 09:00 PM | 53.9        | 68.3         | 50.5        |
| 09:00 PM - 10:00 PM | 54.7        | 74.2         | 50.4        |
| 10:00 PM - 11:00 PM | 53.9        | 68.2         | 50.9        |
| 11:00 PM - 12:00 AM | 52.9        | 71.4         | 50.5        |
| 12:00 AM - 01:00 AM | 53.3        | 68.5         | 51.1        |
| 01:00 AM - 02:00 AM | 52.9        | 64.4         | 51.5        |
| 02:00 AM - 03:00 AM | 55.0        | 74.0         | 52.4        |
| 03:00 AM - 04:00 AM | 57.1        | 72.8         | 53.5        |
| 04:00 AM - 05:00 AM | 60.8        | 75.4         | 56.4        |
| 05:00 AM - 06:00 AM | 62.4        | 81.2         | 56.7        |
| 06:00 AM - 07:00 AM | 58.4        | 75.6         | 54.1        |
| 07:00 AM - 08:00 AM | 58.2        | 74.5         | 53.4        |

Leq Average 24 hrs. (dB(A)) 57.8

Lmax (dB(A)) 81.2

L90 (dB(A)) 52.6

Ldn (dB(A)) 64.1

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\\_Air Noise.rpt ( 2:40PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012634-1

Page 1 of 1

Sample Number 2454677-7  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการทางทิศตะวันออก (N1) (GPS 47P 729205, 1433615)  
Measurement Date May 29 - May 30, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900071

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 58.0        | 75.2         | 53.2        |
| 09:00 AM - 10:00 AM | 57.1        | 74.6         | 52.4        |
| 10:00 AM - 11:00 AM | 56.2        | 76.5         | 51.7        |
| 11:00 AM - 12:00 PM | 57.2        | 75.6         | 52.8        |
| 12:00 PM - 01:00 PM | 56.2        | 69.0         | 51.9        |
| 01:00 PM - 02:00 PM | 56.6        | 72.5         | 51.7        |
| 02:00 PM - 03:00 PM | 57.1        | 71.1         | 53.5        |
| 03:00 PM - 04:00 PM | 57.1        | 71.2         | 53.8        |
| 04:00 PM - 05:00 PM | 60.0        | 75.0         | 54.6        |
| 05:00 PM - 06:00 PM | 61.2        | 78.9         | 57.2        |
| 06:00 PM - 07:00 PM | 57.9        | 75.5         | 52.9        |
| 07:00 PM - 08:00 PM | 54.9        | 68.6         | 52.2        |
| 08:00 PM - 09:00 PM | 55.3        | 74.6         | 52.2        |
| 09:00 PM - 10:00 PM | 55.1        | 70.5         | 51.8        |
| 10:00 PM - 11:00 PM | 53.2        | 65.3         | 51.6        |
| 11:00 PM - 12:00 AM | 54.2        | 75.3         | 50.8        |
| 12:00 AM - 01:00 AM | 53.2        | 69.9         | 50.4        |
| 01:00 AM - 02:00 AM | 53.1        | 65.3         | 51.4        |
| 02:00 AM - 03:00 AM | 55.9        | 74.4         | 51.3        |
| 03:00 AM - 04:00 AM | 56.9        | 75.7         | 52.9        |
| 04:00 AM - 05:00 AM | 61.2        | 76.7         | 56.6        |
| 05:00 AM - 06:00 AM | 61.9        | 75.4         | 57.5        |
| 06:00 AM - 07:00 AM | 62.1        | 85.4         | 55.3        |
| 07:00 AM - 08:00 AM | 63.5        | 76.2         | 58.4        |

Leq Average 24 hrs. (dB(A)) 58.4

Lmax (dB(A))

85.4

L90 (dB(A))

52.4

Ldn (dB(A))

64.8

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

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Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:41PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012635-1

Page 1 of 1

Sample Number 2454677-8  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 23 - May 24, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.4        | 80.7         | 62.2        |
| 09:00 AM - 10:00 AM | 63.9        | 73.8         | 62.3        |
| 10:00 AM - 11:00 AM | 65.8        | 73.5         | 64.9        |
| 11:00 AM - 12:00 PM | 76.2        | 103.5        | 65.8        |
| 12:00 PM - 01:00 PM | 66.0        | 82.0         | 64.7        |
| 01:00 PM - 02:00 PM | 65.5        | 73.3         | 64.6        |
| 02:00 PM - 03:00 PM | 65.6        | 72.0         | 64.9        |
| 03:00 PM - 04:00 PM | 65.9        | 72.8         | 65.1        |
| 04:00 PM - 05:00 PM | 68.9        | 77.9         | 65.0        |
| 05:00 PM - 06:00 PM | 72.0        | 81.6         | 66.4        |
| 06:00 PM - 07:00 PM | 66.5        | 75.0         | 65.5        |
| 07:00 PM - 08:00 PM | 66.1        | 71.3         | 65.4        |
| 08:00 PM - 09:00 PM | 66.4        | 72.5         | 65.4        |
| 09:00 PM - 10:00 PM | 67.3        | 74.7         | 65.6        |
| 10:00 PM - 11:00 PM | 66.9        | 72.9         | 65.7        |
| 11:00 PM - 12:00 AM | 66.0        | 73.5         | 65.0        |
| 12:00 AM - 01:00 AM | 65.8        | 70.0         | 65.0        |
| 01:00 AM - 02:00 AM | 65.6        | 73.4         | 64.8        |
| 02:00 AM - 03:00 AM | 66.4        | 74.7         | 65.1        |
| 03:00 AM - 04:00 AM | 66.5        | 70.2         | 65.8        |
| 04:00 AM - 05:00 AM | 66.2        | 76.3         | 65.2        |
| 05:00 AM - 06:00 AM | 65.8        | 70.6         | 65.1        |
| 06:00 AM - 07:00 AM | 65.8        | 77.1         | 64.9        |
| 07:00 AM - 08:00 AM | 65.5        | 72.5         | 64.7        |

Leq Average 24 hrs. (dB(A)) 67.9

Lmax (dB(A))

103.5

L90 (dB(A))

65.0

Ldn (dB(A))

73.0

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

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:46PM)





## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012636-1

Page 1 of 1

Sample Number 2454677-9  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 24 - May 25, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 65.1        | 74.6         | 64.2        |
| 09:00 AM - 10:00 AM | 65.0        | 74.0         | 64.0        |
| 10:00 AM - 11:00 AM | 65.1        | 72.5         | 64.2        |
| 11:00 AM - 12:00 PM | 65.1        | 75.3         | 64.2        |
| 12:00 PM - 01:00 PM | 65.2        | 69.4         | 64.4        |
| 01:00 PM - 02:00 PM | 65.4        | 74.1         | 64.4        |
| 02:00 PM - 03:00 PM | 65.2        | 71.8         | 64.4        |
| 03:00 PM - 04:00 PM | 65.4        | 71.7         | 64.5        |
| 04:00 PM - 05:00 PM | 68.9        | 76.0         | 64.9        |
| 05:00 PM - 06:00 PM | 69.9        | 79.3         | 64.6        |
| 06:00 PM - 07:00 PM | 73.7        | 79.4         | 66.2        |
| 07:00 PM - 08:00 PM | 67.3        | 78.9         | 64.9        |
| 08:00 PM - 09:00 PM | 65.4        | 73.4         | 64.6        |
| 09:00 PM - 10:00 PM | 65.7        | 72.1         | 64.5        |
| 10:00 PM - 11:00 PM | 65.6        | 69.5         | 64.9        |
| 11:00 PM - 12:00 AM | 66.2        | 72.0         | 65.0        |
| 12:00 AM - 01:00 AM | 66.3        | 70.4         | 65.2        |
| 01:00 AM - 02:00 AM | 65.9        | 72.4         | 65.0        |
| 02:00 AM - 03:00 AM | 65.4        | 72.9         | 64.7        |
| 03:00 AM - 04:00 AM | 65.4        | 69.2         | 64.6        |
| 04:00 AM - 05:00 AM | 64.9        | 72.4         | 64.1        |
| 05:00 AM - 06:00 AM | 64.9        | 73.6         | 64.1        |
| 06:00 AM - 07:00 AM | 64.9        | 74.5         | 64.1        |
| 07:00 AM - 08:00 AM | 64.9        | 69.8         | 64.1        |

Leq Average 24 hrs. (dB(A)) 66.8

Lmax (dB(A)) 79.4

L90 (dB(A)) 64.5

Ldn (dB(A)) 72.3

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

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:53PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012637-1

Page 1 of 1

Sample Number 2454677-10  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 25 - May 26, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.7        | 75.2         | 63.8        |
| 09:00 AM - 10:00 AM | 66.0        | 75.4         | 63.8        |
| 10:00 AM - 11:00 AM | 66.3        | 73.2         | 65.3        |
| 11:00 AM - 12:00 PM | 66.0        | 75.6         | 65.1        |
| 12:00 PM - 01:00 PM | 65.4        | 69.4         | 64.5        |
| 01:00 PM - 02:00 PM | 65.3        | 76.3         | 64.4        |
| 02:00 PM - 03:00 PM | 65.7        | 73.6         | 64.8        |
| 03:00 PM - 04:00 PM | 65.8        | 70.6         | 64.8        |
| 04:00 PM - 05:00 PM | 65.7        | 73.8         | 64.6        |
| 05:00 PM - 06:00 PM | 66.1        | 70.3         | 65.0        |
| 06:00 PM - 07:00 PM | 71.4        | 78.7         | 65.6        |
| 07:00 PM - 08:00 PM | 66.1        | 71.2         | 65.3        |
| 08:00 PM - 09:00 PM | 65.9        | 74.5         | 65.0        |
| 09:00 PM - 10:00 PM | 65.6        | 75.1         | 64.7        |
| 10:00 PM - 11:00 PM | 66.4        | 71.2         | 65.3        |
| 11:00 PM - 12:00 AM | 66.3        | 74.6         | 65.1        |
| 12:00 AM - 01:00 AM | 65.9        | 69.8         | 65.0        |
| 01:00 AM - 02:00 AM | 65.8        | 74.1         | 65.0        |
| 02:00 AM - 03:00 AM | 65.6        | 72.0         | 64.9        |
| 03:00 AM - 04:00 AM | 65.4        | 70.2         | 64.7        |
| 04:00 AM - 05:00 AM | 65.2        | 73.2         | 64.4        |
| 05:00 AM - 06:00 AM | 65.0        | 72.3         | 64.2        |
| 06:00 AM - 07:00 AM | 64.9        | 73.8         | 64.1        |
| 07:00 AM - 08:00 AM | 64.9        | 69.5         | 64.0        |

Leq Average 24 hrs. (dB(A)) 66.1

Lmax (dB(A)) 78.7

L90 (dB(A)) 64.8

Ldn (dB(A)) 72.2

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:54PM)





## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012638-1

Page 1 of 1

Sample Number 2454677-11  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 26 - May 27, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.7        | 72.4         | 63.8        |
| 09:00 AM - 10:00 AM | 64.7        | 74.7         | 63.7        |
| 10:00 AM - 11:00 AM | 64.7        | 70.8         | 63.9        |
| 11:00 AM - 12:00 PM | 64.8        | 74.8         | 63.9        |
| 12:00 PM - 01:00 PM | 64.7        | 69.2         | 63.9        |
| 01:00 PM - 02:00 PM | 64.8        | 75.6         | 63.9        |
| 02:00 PM - 03:00 PM | 64.8        | 74.1         | 63.9        |
| 03:00 PM - 04:00 PM | 65.2        | 81.6         | 64.1        |
| 04:00 PM - 05:00 PM | 65.3        | 74.3         | 64.1        |
| 05:00 PM - 06:00 PM | 66.4        | 76.8         | 64.6        |
| 06:00 PM - 07:00 PM | 67.5        | 77.9         | 64.8        |
| 07:00 PM - 08:00 PM | 67.6        | 76.3         | 64.6        |
| 08:00 PM - 09:00 PM | 68.2        | 79.1         | 64.5        |
| 09:00 PM - 10:00 PM | 67.1        | 77.8         | 64.4        |
| 10:00 PM - 11:00 PM | 68.8        | 76.5         | 64.9        |
| 11:00 PM - 12:00 AM | 67.1        | 75.6         | 64.9        |
| 12:00 AM - 01:00 AM | 67.0        | 74.9         | 65.0        |
| 01:00 AM - 02:00 AM | 65.3        | 72.3         | 64.5        |
| 02:00 AM - 03:00 AM | 65.3        | 72.0         | 64.6        |
| 03:00 AM - 04:00 AM | 65.1        | 69.5         | 64.4        |
| 04:00 AM - 05:00 AM | 64.6        | 72.6         | 63.8        |
| 05:00 AM - 06:00 AM | 64.7        | 70.3         | 63.9        |
| 06:00 AM - 07:00 AM | 64.6        | 73.4         | 63.7        |
| 07:00 AM - 08:00 AM | 64.6        | 68.8         | 63.8        |

Leq Average 24 hrs. (dB(A)) 65.9

Lmax (dB(A)) 81.6

L90 (dB(A)) 64.1

Ldn (dB(A)) 72.5

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:47PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012639-1

Page 1 of 1

Sample Number 2454677-12  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 27 - May 28, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.4        | 73.6         | 63.5        |
| 09:00 AM - 10:00 AM | 64.4        | 73.2         | 63.5        |
| 10:00 AM - 11:00 AM | 64.3        | 84.3         | 63.5        |
| 11:00 AM - 12:00 PM | 64.3        | 73.2         | 63.3        |
| 12:00 PM - 01:00 PM | 64.3        | 72.6         | 63.4        |
| 01:00 PM - 02:00 PM | 64.3        | 74.8         | 63.3        |
| 02:00 PM - 03:00 PM | 64.3        | 68.4         | 63.5        |
| 03:00 PM - 04:00 PM | 64.8        | 70.3         | 63.9        |
| 04:00 PM - 05:00 PM | 64.7        | 71.8         | 63.7        |
| 05:00 PM - 06:00 PM | 64.7        | 70.8         | 63.9        |
| 06:00 PM - 07:00 PM | 65.1        | 73.4         | 64.1        |
| 07:00 PM - 08:00 PM | 65.0        | 73.7         | 64.0        |
| 08:00 PM - 09:00 PM | 65.0        | 72.6         | 64.0        |
| 09:00 PM - 10:00 PM | 64.7        | 72.9         | 63.9        |
| 10:00 PM - 11:00 PM | 64.7        | 68.8         | 64.0        |
| 11:00 PM - 12:00 AM | 65.0        | 72.9         | 64.2        |
| 12:00 AM - 01:00 AM | 65.1        | 69.6         | 64.4        |
| 01:00 AM - 02:00 AM | 64.9        | 71.6         | 64.1        |
| 02:00 AM - 03:00 AM | 64.8        | 68.7         | 64.1        |
| 03:00 AM - 04:00 AM | 64.7        | 76.7         | 63.9        |
| 04:00 AM - 05:00 AM | 64.5        | 72.3         | 63.6        |
| 05:00 AM - 06:00 AM | 64.6        | 69.3         | 63.8        |
| 06:00 AM - 07:00 AM | 64.5        | 74.7         | 63.7        |
| 07:00 AM - 08:00 AM | 64.4        | 68.7         | 63.6        |

Leq Average 24 hrs. (dB(A)) 64.7

Lmax (dB(A)) 84.3

L90 (dB(A)) 63.8

Ldn (dB(A)) 71.1

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:48PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012640-1

Page 1 of 1

Sample Number 2454677-13  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 28 - May 29, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.3        | 74.4         | 63.5        |
| 09:00 AM - 10:00 AM | 64.2        | 72.3         | 63.3        |
| 10:00 AM - 11:00 AM | 64.2        | 68.6         | 63.4        |
| 11:00 AM - 12:00 PM | 66.0        | 79.9         | 63.4        |
| 12:00 PM - 01:00 PM | 64.2        | 68.9         | 63.3        |
| 01:00 PM - 02:00 PM | 64.1        | 74.1         | 63.1        |
| 02:00 PM - 03:00 PM | 63.9        | 68.5         | 63.0        |
| 03:00 PM - 04:00 PM | 64.3        | 68.9         | 63.4        |
| 04:00 PM - 05:00 PM | 64.4        | 73.2         | 63.5        |
| 05:00 PM - 06:00 PM | 64.6        | 72.4         | 63.7        |
| 06:00 PM - 07:00 PM | 64.7        | 73.4         | 63.7        |
| 07:00 PM - 08:00 PM | 64.6        | 72.6         | 63.8        |
| 08:00 PM - 09:00 PM | 64.6        | 74.3         | 63.6        |
| 09:00 PM - 10:00 PM | 64.7        | 72.4         | 63.9        |
| 10:00 PM - 11:00 PM | 64.7        | 70.8         | 63.9        |
| 11:00 PM - 12:00 AM | 64.6        | 71.1         | 63.8        |
| 12:00 AM - 01:00 AM | 64.4        | 68.6         | 63.7        |
| 01:00 AM - 02:00 AM | 64.5        | 72.6         | 63.6        |
| 02:00 AM - 03:00 AM | 64.6        | 70.2         | 63.9        |
| 03:00 AM - 04:00 AM | 64.5        | 70.5         | 63.7        |
| 04:00 AM - 05:00 AM | 64.2        | 72.3         | 63.2        |
| 05:00 AM - 06:00 AM | 64.3        | 73.2         | 63.4        |
| 06:00 AM - 07:00 AM | 64.3        | 72.0         | 63.4        |
| 07:00 AM - 08:00 AM | 64.1        | 70.6         | 63.2        |

Leq Average 24 hrs. (dB(A)) 64.5  
Lmax (dB(A)) 79.9  
L90 (dB(A)) 63.5  
Ldn (dB(A)) 70.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 3:02PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012641-1

Page 1 of 1

Sample Number 2454677-14  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศใต้ (N2) (GPS 47P 0728962, 1433470)  
Measurement Date May 29 - May 30, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900073

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.0        | 72.8         | 63.0        |
| 09:00 AM - 10:00 AM | 64.0        | 72.8         | 63.0        |
| 10:00 AM - 11:00 AM | 64.1        | 68.8         | 63.2        |
| 11:00 AM - 12:00 PM | 64.1        | 73.7         | 63.2        |
| 12:00 PM - 01:00 PM | 64.2        | 68.5         | 63.4        |
| 01:00 PM - 02:00 PM | 64.3        | 73.9         | 63.4        |
| 02:00 PM - 03:00 PM | 64.1        | 75.0         | 63.2        |
| 03:00 PM - 04:00 PM | 63.9        | 70.0         | 63.1        |
| 04:00 PM - 05:00 PM | 64.1        | 72.3         | 63.2        |
| 05:00 PM - 06:00 PM | 64.4        | 69.0         | 63.6        |
| 06:00 PM - 07:00 PM | 64.5        | 71.8         | 63.6        |
| 07:00 PM - 08:00 PM | 64.5        | 68.1         | 63.8        |
| 08:00 PM - 09:00 PM | 64.3        | 70.7         | 63.5        |
| 09:00 PM - 10:00 PM | 64.5        | 73.7         | 63.8        |
| 10:00 PM - 11:00 PM | 64.7        | 68.3         | 63.9        |
| 11:00 PM - 12:00 AM | 64.6        | 72.5         | 63.8        |
| 12:00 AM - 01:00 AM | 64.7        | 68.6         | 64.0        |
| 01:00 AM - 02:00 AM | 64.6        | 73.0         | 63.8        |
| 02:00 AM - 03:00 AM | 64.5        | 68.2         | 63.7        |
| 03:00 AM - 04:00 AM | 64.3        | 68.4         | 63.5        |
| 04:00 AM - 05:00 AM | 64.1        | 84.3         | 63.2        |
| 05:00 AM - 06:00 AM | 63.9        | 80.3         | 62.8        |
| 06:00 AM - 07:00 AM | 64.2        | 70.3         | 63.4        |
| 07:00 AM - 08:00 AM | 64.4        | 72.6         | 63.5        |

Leq Average 24 hrs. (dB(A)) 64.3  
Lmax (dB(A)) 84.3  
L90 (dB(A)) 63.4  
Ldn (dB(A)) 70.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:56PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012642-1

Page 1 of 1

Sample Number 2454677-15  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 23 - May 24, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 66.4        | 102.8        | 64.7        |
| 09:00 AM - 10:00 AM | 66.2        | 77.8         | 65.2        |
| 10:00 AM - 11:00 AM | 66.5        | 80.3         | 65.6        |
| 11:00 AM - 12:00 PM | 66.3        | 84.5         | 65.4        |
| 12:00 PM - 01:00 PM | 64.5        | 73.7         | 63.8        |
| 01:00 PM - 02:00 PM | 65.4        | 79.1         | 64.2        |
| 02:00 PM - 03:00 PM | 65.0        | 79.0         | 64.2        |
| 03:00 PM - 04:00 PM | 65.1        | 67.9         | 64.5        |
| 04:00 PM - 05:00 PM | 65.4        | 80.5         | 64.6        |
| 05:00 PM - 06:00 PM | 65.4        | 72.6         | 64.7        |
| 06:00 PM - 07:00 PM | 65.6        | 81.0         | 64.7        |
| 07:00 PM - 08:00 PM | 65.4        | 73.9         | 64.7        |
| 08:00 PM - 09:00 PM | 65.5        | 80.2         | 64.5        |
| 09:00 PM - 10:00 PM | 65.5        | 79.1         | 64.5        |
| 10:00 PM - 11:00 PM | 65.1        | 73.4         | 64.5        |
| 11:00 PM - 12:00 AM | 65.3        | 78.7         | 64.4        |
| 12:00 AM - 01:00 AM | 65.2        | 74.2         | 64.6        |
| 01:00 AM - 02:00 AM | 65.3        | 78.3         | 64.4        |
| 02:00 AM - 03:00 AM | 65.8        | 78.4         | 64.1        |
| 03:00 AM - 04:00 AM | 66.2        | 71.8         | 65.4        |
| 04:00 AM - 05:00 AM | 65.9        | 84.6         | 64.3        |
| 05:00 AM - 06:00 AM | 65.5        | 86.5         | 63.9        |
| 06:00 AM - 07:00 AM | 64.6        | 80.9         | 63.5        |
| 07:00 AM - 08:00 AM | 63.9        | 84.2         | 62.7        |

Leq Average 24 hrs. (dB(A)) 65.5  
Lmax (dB(A)) 102.8  
L90 (dB(A)) 64.5  
Ldn (dB(A)) 71.9  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

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Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:56PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012643-1

Page 1 of 1

Sample Number 2454677-16  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 24 - May 25, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.4        | 80.1         | 62.2        |
| 09:00 AM - 10:00 AM | 63.2        | 78.9         | 62.1        |
| 10:00 AM - 11:00 AM | 63.2        | 80.5         | 62.2        |
| 11:00 AM - 12:00 PM | 64.4        | 82.7         | 62.3        |
| 12:00 PM - 01:00 PM | 65.3        | 74.3         | 63.0        |
| 01:00 PM - 02:00 PM | 64.2        | 78.6         | 62.8        |
| 02:00 PM - 03:00 PM | 64.0        | 79.7         | 63.0        |
| 03:00 PM - 04:00 PM | 64.0        | 67.8         | 63.3        |
| 04:00 PM - 05:00 PM | 64.3        | 79.7         | 63.4        |
| 05:00 PM - 06:00 PM | 64.0        | 75.7         | 63.3        |
| 06:00 PM - 07:00 PM | 64.4        | 79.8         | 63.3        |
| 07:00 PM - 08:00 PM | 64.1        | 72.6         | 63.4        |
| 08:00 PM - 09:00 PM | 64.2        | 79.3         | 63.2        |
| 09:00 PM - 10:00 PM | 64.5        | 79.8         | 63.5        |
| 10:00 PM - 11:00 PM | 64.4        | 73.5         | 63.6        |
| 11:00 PM - 12:00 AM | 64.5        | 80.1         | 63.6        |
| 12:00 AM - 01:00 AM | 64.2        | 73.0         | 63.5        |
| 01:00 AM - 02:00 AM | 64.3        | 79.3         | 63.2        |
| 02:00 AM - 03:00 AM | 64.0        | 80.0         | 63.1        |
| 03:00 AM - 04:00 AM | 63.7        | 70.0         | 62.9        |
| 04:00 AM - 05:00 AM | 63.4        | 79.4         | 62.4        |
| 05:00 AM - 06:00 AM | 63.3        | 78.7         | 62.4        |
| 06:00 AM - 07:00 AM | 63.7        | 80.0         | 62.4        |
| 07:00 AM - 08:00 AM | 63.9        | 76.2         | 62.6        |

Leq Average 24 hrs. (dB(A)) 64.1  
Lmax (dB(A)) 82.7  
L90 (dB(A)) 63.0  
Ldn (dB(A)) 70.4  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:57PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012644-1

Page 1 of 1

Sample Number 2454677-17  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 25 - May 26, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.0        | 80.6         | 59.0        |
| 09:00 AM - 10:00 AM | 66.1        | 78.4         | 60.2        |
| 10:00 AM - 11:00 AM | 65.3        | 75.3         | 64.4        |
| 11:00 AM - 12:00 PM | 66.2        | 78.6         | 64.8        |
| 12:00 PM - 01:00 PM | 65.3        | 78.7         | 64.5        |
| 01:00 PM - 02:00 PM | 64.9        | 77.8         | 63.5        |
| 02:00 PM - 03:00 PM | 64.8        | 77.6         | 63.3        |
| 03:00 PM - 04:00 PM | 65.2        | 71.6         | 64.7        |
| 04:00 PM - 05:00 PM | 65.6        | 80.1         | 64.8        |
| 05:00 PM - 06:00 PM | 65.9        | 84.1         | 65.1        |
| 06:00 PM - 07:00 PM | 66.2        | 81.2         | 65.3        |
| 07:00 PM - 08:00 PM | 66.3        | 75.2         | 65.7        |
| 08:00 PM - 09:00 PM | 66.3        | 80.7         | 65.6        |
| 09:00 PM - 10:00 PM | 66.4        | 80.0         | 65.6        |
| 10:00 PM - 11:00 PM | 66.1        | 74.3         | 65.6        |
| 11:00 PM - 12:00 AM | 66.1        | 80.1         | 65.4        |
| 12:00 AM - 01:00 AM | 66.1        | 74.3         | 65.5        |
| 01:00 AM - 02:00 AM | 66.2        | 81.1         | 65.4        |
| 02:00 AM - 03:00 AM | 65.8        | 80.7         | 65.2        |
| 03:00 AM - 04:00 AM | 65.2        | 70.5         | 64.6        |
| 04:00 AM - 05:00 AM | 65.0        | 79.6         | 64.2        |
| 05:00 AM - 06:00 AM | 65.2        | 71.4         | 64.6        |
| 06:00 AM - 07:00 AM | 65.3        | 79.2         | 64.4        |
| 07:00 AM - 08:00 AM | 65.0        | 77.9         | 64.4        |

Leq Average 24 hrs. (dB(A)) 65.6

Lmax (dB(A)) 84.1

L90 (dB(A)) 64.7

Ldn (dB(A)) 72.1

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:58PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012645-1

Page 1 of 1

Sample Number 2454677-18  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 26 - May 27, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.7        | 80.0         | 63.9        |
| 09:00 AM - 10:00 AM | 64.6        | 78.0         | 63.8        |
| 10:00 AM - 11:00 AM | 64.8        | 75.4         | 64.1        |
| 11:00 AM - 12:00 PM | 64.9        | 78.9         | 64.1        |
| 12:00 PM - 01:00 PM | 64.9        | 74.1         | 64.3        |
| 01:00 PM - 02:00 PM | 65.3        | 80.3         | 64.4        |
| 02:00 PM - 03:00 PM | 65.5        | 78.6         | 64.8        |
| 03:00 PM - 04:00 PM | 65.9        | 68.8         | 65.4        |
| 04:00 PM - 05:00 PM | 65.9        | 78.5         | 65.0        |
| 05:00 PM - 06:00 PM | 65.4        | 79.3         | 64.8        |
| 06:00 PM - 07:00 PM | 65.6        | 81.1         | 64.6        |
| 07:00 PM - 08:00 PM | 65.6        | 76.6         | 65.1        |
| 08:00 PM - 09:00 PM | 66.0        | 81.9         | 65.3        |
| 09:00 PM - 10:00 PM | 65.9        | 80.3         | 65.2        |
| 10:00 PM - 11:00 PM | 65.7        | 74.6         | 65.2        |
| 11:00 PM - 12:00 AM | 65.9        | 81.6         | 65.1        |
| 12:00 AM - 01:00 AM | 65.7        | 74.4         | 65.2        |
| 01:00 AM - 02:00 AM | 66.1        | 80.6         | 65.2        |
| 02:00 AM - 03:00 AM | 65.7        | 80.1         | 65.0        |
| 03:00 AM - 04:00 AM | 65.6        | 91.6         | 64.0        |
| 04:00 AM - 05:00 AM | 64.4        | 77.9         | 63.6        |
| 05:00 AM - 06:00 AM | 65.1        | 81.4         | 64.4        |
| 06:00 AM - 07:00 AM | 65.4        | 78.6         | 64.4        |
| 07:00 AM - 08:00 AM | 65.0        | 79.3         | 64.2        |

Leq Average 24 hrs. (dB(A)) 65.4

Lmax (dB(A)) 91.6

L90 (dB(A)) 64.6

Ldn (dB(A)) 71.9

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:58PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012646-1

Page 1 of 1

Sample Number 2454677-19  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 27 - May 28, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.6        | 77.3         | 63.8        |
| 09:00 AM - 10:00 AM | 64.5        | 79.0         | 63.7        |
| 10:00 AM - 11:00 AM | 64.9        | 79.9         | 64.1        |
| 11:00 AM - 12:00 PM | 65.0        | 80.0         | 64.2        |
| 12:00 PM - 01:00 PM | 65.0        | 76.4         | 64.3        |
| 01:00 PM - 02:00 PM | 65.4        | 79.8         | 64.5        |
| 02:00 PM - 03:00 PM | 65.4        | 78.6         | 64.8        |
| 03:00 PM - 04:00 PM | 65.5        | 70.5         | 64.8        |
| 04:00 PM - 05:00 PM | 65.3        | 79.6         | 64.5        |
| 05:00 PM - 06:00 PM | 65.5        | 77.1         | 64.9        |
| 06:00 PM - 07:00 PM | 65.9        | 87.3         | 64.8        |
| 07:00 PM - 08:00 PM | 65.7        | 77.9         | 65.1        |
| 08:00 PM - 09:00 PM | 65.7        | 81.0         | 64.9        |
| 09:00 PM - 10:00 PM | 65.9        | 82.9         | 65.1        |
| 10:00 PM - 11:00 PM | 65.9        | 82.1         | 65.2        |
| 11:00 PM - 12:00 AM | 65.8        | 80.6         | 65.1        |
| 12:00 AM - 01:00 AM | 65.5        | 73.8         | 65.0        |
| 01:00 AM - 02:00 AM | 65.9        | 80.8         | 65.1        |
| 02:00 AM - 03:00 AM | 65.6        | 81.6         | 64.9        |
| 03:00 AM - 04:00 AM | 65.1        | 73.6         | 64.5        |
| 04:00 AM - 05:00 AM | 65.0        | 79.2         | 64.1        |
| 05:00 AM - 06:00 AM | 65.2        | 77.2         | 64.5        |
| 06:00 AM - 07:00 AM | 69.0        | 87.4         | 64.2        |
| 07:00 AM - 08:00 AM | 73.6        | 93.3         | 64.7        |

Leq Average 24 hrs. (dB(A))

66.5

Lmax (dB(A))

93.3

L90 (dB(A))

64.7

Ldn (dB(A))

72.6

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

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

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Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 3:00PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012647-1

Page 1 of 1

Sample Number 2454677-20  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 28 - May 29, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 65.0        | 78.2         | 64.0        |
| 09:00 AM - 10:00 AM | 65.0        | 80.4         | 64.1        |
| 10:00 AM - 11:00 AM | 65.1        | 76.7         | 64.4        |
| 11:00 AM - 12:00 PM | 65.0        | 79.9         | 64.1        |
| 12:00 PM - 01:00 PM | 65.2        | 79.7         | 64.5        |
| 01:00 PM - 02:00 PM | 65.5        | 81.1         | 64.6        |
| 02:00 PM - 03:00 PM | 65.4        | 77.1         | 64.7        |
| 03:00 PM - 04:00 PM | 65.8        | 71.7         | 65.2        |
| 04:00 PM - 05:00 PM | 66.3        | 79.1         | 65.6        |
| 05:00 PM - 06:00 PM | 66.5        | 79.4         | 65.8        |
| 06:00 PM - 07:00 PM | 66.5        | 78.8         | 65.8        |
| 07:00 PM - 08:00 PM | 66.5        | 81.5         | 65.9        |
| 08:00 PM - 09:00 PM | 66.3        | 79.4         | 65.5        |
| 09:00 PM - 10:00 PM | 66.3        | 80.4         | 65.6        |
| 10:00 PM - 11:00 PM | 66.3        | 75.0         | 65.7        |
| 11:00 PM - 12:00 AM | 66.2        | 79.7         | 65.4        |
| 12:00 AM - 01:00 AM | 66.3        | 74.3         | 65.7        |
| 01:00 AM - 02:00 AM | 66.6        | 80.3         | 65.6        |
| 02:00 AM - 03:00 AM | 66.1        | 80.2         | 65.4        |
| 03:00 AM - 04:00 AM | 65.9        | 73.1         | 65.3        |
| 04:00 AM - 05:00 AM | 65.1        | 83.1         | 64.1        |
| 05:00 AM - 06:00 AM | 65.1        | 78.0         | 64.3        |
| 06:00 AM - 07:00 AM | 65.0        | 78.8         | 64.1        |
| 07:00 AM - 08:00 AM | 65.0        | 77.3         | 64.4        |

Leq Average 24 hrs. (dB(A))

65.8

Lmax (dB(A))

83.1

L90 (dB(A))

65.2

Ldn (dB(A))

72.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 3:00PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012648-1

Page 1 of 1

Sample Number 2454677-21  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศตะวันตก (N3) (GPS 47P 0728669, 1433632)  
Measurement Date May 29 - May 30, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900074

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 64.6        | 77.7         | 63.8        |
| 09:00 AM - 10:00 AM | 65.0        | 80.5         | 64.1        |
| 10:00 AM - 11:00 AM | 65.1        | 79.4         | 64.4        |
| 11:00 AM - 12:00 PM | 65.1        | 82.7         | 64.3        |
| 12:00 PM - 01:00 PM | 65.4        | 77.1         | 64.7        |
| 01:00 PM - 02:00 PM | 65.3        | 82.8         | 64.3        |
| 02:00 PM - 03:00 PM | 64.8        | 77.8         | 64.2        |
| 03:00 PM - 04:00 PM | 65.1        | 74.1         | 64.5        |
| 04:00 PM - 05:00 PM | 65.7        | 88.5         | 64.8        |
| 05:00 PM - 06:00 PM | 65.8        | 82.0         | 65.1        |
| 06:00 PM - 07:00 PM | 66.0        | 81.3         | 65.1        |
| 07:00 PM - 08:00 PM | 65.8        | 75.3         | 65.2        |
| 08:00 PM - 09:00 PM | 65.7        | 79.5         | 65.0        |
| 09:00 PM - 10:00 PM | 65.9        | 80.8         | 65.2        |
| 10:00 PM - 11:00 PM | 66.1        | 76.5         | 65.4        |
| 11:00 PM - 12:00 AM | 66.1        | 82.1         | 65.3        |
| 12:00 AM - 01:00 AM | 65.9        | 74.3         | 65.4        |
| 01:00 AM - 02:00 AM | 66.1        | 81.3         | 65.2        |
| 02:00 AM - 03:00 AM | 65.8        | 81.0         | 65.2        |
| 03:00 AM - 04:00 AM | 65.2        | 69.9         | 64.5        |
| 04:00 AM - 05:00 AM | 65.2        | 78.8         | 64.3        |
| 05:00 AM - 06:00 AM | 65.5        | 82.5         | 64.5        |
| 06:00 AM - 07:00 AM | 65.2        | 77.5         | 64.6        |
| 07:00 AM - 08:00 AM | 64.8        | 77.9         | 64.0        |

Leq Average 24 hrs. (dB(A)) 65.5  
Lmax (dB(A)) 88.5  
L90 (dB(A)) 64.6  
Ldn (dB(A)) 72.1  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:42PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012649-1

Page 1 of 1

Sample Number 2454677-22  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 23 - May 24, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.1        | 74.5         | 62.1        |
| 09:00 AM - 10:00 AM | 63.5        | 74.9         | 62.3        |
| 10:00 AM - 11:00 AM | 64.2        | 77.0         | 62.9        |
| 11:00 AM - 12:00 PM | 63.8        | 75.3         | 62.5        |
| 12:00 PM - 01:00 PM | 63.1        | 77.6         | 61.9        |
| 01:00 PM - 02:00 PM | 63.5        | 83.3         | 62.0        |
| 02:00 PM - 03:00 PM | 64.0        | 83.8         | 62.4        |
| 03:00 PM - 04:00 PM | 63.3        | 69.3         | 62.3        |
| 04:00 PM - 05:00 PM | 64.3        | 76.4         | 63.1        |
| 05:00 PM - 06:00 PM | 64.9        | 75.8         | 63.3        |
| 06:00 PM - 07:00 PM | 64.1        | 77.2         | 62.9        |
| 07:00 PM - 08:00 PM | 64.1        | 78.7         | 62.8        |
| 08:00 PM - 09:00 PM | 63.7        | 72.8         | 62.7        |
| 09:00 PM - 10:00 PM | 63.8        | 79.8         | 62.7        |
| 10:00 PM - 11:00 PM | 63.6        | 73.1         | 62.7        |
| 11:00 PM - 12:00 AM | 63.6        | 74.0         | 62.7        |
| 12:00 AM - 01:00 AM | 63.5        | 70.8         | 62.6        |
| 01:00 AM - 02:00 AM | 63.8        | 70.8         | 62.9        |
| 02:00 AM - 03:00 AM | 64.7        | 87.9         | 63.0        |
| 03:00 AM - 04:00 AM | 64.7        | 78.5         | 63.5        |
| 04:00 AM - 05:00 AM | 65.0        | 78.9         | 63.7        |
| 05:00 AM - 06:00 AM | 65.1        | 79.2         | 63.7        |
| 06:00 AM - 07:00 AM | 64.5        | 86.7         | 62.9        |
| 07:00 AM - 08:00 AM | 63.5        | 77.1         | 62.4        |

Leq Average 24 hrs. (dB(A)) 64.0  
Lmax (dB(A)) 87.9  
L90 (dB(A)) 62.7  
Ldn (dB(A)) 70.7  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:42PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012650-1

Page 1 of 1

Sample Number 2454677-23  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 24 - May 25, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.5        | 79.4         | 62.1        |
| 09:00 AM - 10:00 AM | 63.0        | 78.1         | 61.8        |
| 10:00 AM - 11:00 AM | 63.4        | 78.3         | 61.9        |
| 11:00 AM - 12:00 PM | 63.6        | 79.7         | 62.1        |
| 12:00 PM - 01:00 PM | 63.9        | 79.3         | 62.1        |
| 01:00 PM - 02:00 PM | 63.6        | 81.2         | 61.9        |
| 02:00 PM - 03:00 PM | 64.0        | 70.5         | 62.6        |
| 03:00 PM - 04:00 PM | 63.3        | 67.7         | 62.4        |
| 04:00 PM - 05:00 PM | 63.6        | 72.6         | 62.5        |
| 05:00 PM - 06:00 PM | 64.3        | 77.5         | 62.3        |
| 06:00 PM - 07:00 PM | 62.6        | 69.4         | 61.7        |
| 07:00 PM - 08:00 PM | 62.8        | 71.7         | 61.9        |
| 08:00 PM - 09:00 PM | 63.1        | 72.3         | 62.2        |
| 09:00 PM - 10:00 PM | 63.4        | 85.0         | 62.2        |
| 10:00 PM - 11:00 PM | 63.7        | 69.9         | 62.7        |
| 11:00 PM - 12:00 AM | 63.8        | 71.8         | 63.0        |
| 12:00 AM - 01:00 AM | 63.5        | 71.5         | 62.7        |
| 01:00 AM - 02:00 AM | 63.7        | 71.3         | 62.8        |
| 02:00 AM - 03:00 AM | 63.7        | 69.7         | 62.8        |
| 03:00 AM - 04:00 AM | 63.8        | 82.7         | 62.7        |
| 04:00 AM - 05:00 AM | 63.6        | 79.2         | 62.3        |
| 05:00 AM - 06:00 AM | 65.0        | 79.3         | 62.4        |
| 06:00 AM - 07:00 AM | 62.8        | 74.4         | 61.6        |
| 07:00 AM - 08:00 AM | 63.1        | 74.1         | 61.8        |

Leq Average 24 hrs. (dB(A))

63.6

Lmax (dB(A))

85.0

L90 (dB(A))

62.2

Ldn (dB(A))

70.1

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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S:\Reports\Air Noise.rpt ( 2:43PM)



## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012651-1

Page 1 of 1

Sample Number 2454677-24  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 25 - May 26, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.0        | 77.3         | 61.6        |
| 09:00 AM - 10:00 AM | 63.8        | 72.4         | 61.2        |
| 10:00 AM - 11:00 AM | 64.0        | 76.5         | 62.7        |
| 11:00 AM - 12:00 PM | 64.3        | 79.3         | 62.9        |
| 12:00 PM - 01:00 PM | 63.5        | 82.3         | 61.8        |
| 01:00 PM - 02:00 PM | 62.8        | 74.7         | 61.7        |
| 02:00 PM - 03:00 PM | 63.5        | 70.2         | 62.1        |
| 03:00 PM - 04:00 PM | 63.1        | 77.4         | 61.9        |
| 04:00 PM - 05:00 PM | 63.4        | 74.2         | 62.2        |
| 05:00 PM - 06:00 PM | 64.1        | 79.0         | 62.6        |
| 06:00 PM - 07:00 PM | 63.7        | 73.1         | 62.7        |
| 07:00 PM - 08:00 PM | 63.8        | 73.5         | 63.0        |
| 08:00 PM - 09:00 PM | 63.6        | 71.8         | 62.7        |
| 09:00 PM - 10:00 PM | 64.1        | 82.7         | 62.8        |
| 10:00 PM - 11:00 PM | 63.9        | 68.2         | 63.0        |
| 11:00 PM - 12:00 AM | 64.2        | 72.2         | 63.2        |
| 12:00 AM - 01:00 AM | 63.9        | 71.4         | 63.0        |
| 01:00 AM - 02:00 AM | 63.7        | 71.0         | 62.9        |
| 02:00 AM - 03:00 AM | 63.7        | 71.5         | 62.9        |
| 03:00 AM - 04:00 AM | 64.0        | 81.5         | 63.0        |
| 04:00 AM - 05:00 AM | 63.7        | 73.1         | 62.6        |
| 05:00 AM - 06:00 AM | 63.8        | 74.2         | 62.3        |
| 06:00 AM - 07:00 AM | 63.4        | 77.8         | 61.9        |
| 07:00 AM - 08:00 AM | 66.7        | 80.0         | 62.3        |

Leq Average 24 hrs. (dB(A))

63.9

Lmax (dB(A))

82.7

L90 (dB(A))

62.6

Ldn (dB(A))

70.2

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

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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10731-22/ EMAIL

S:\Reports\Air Noise.rpt ( 2:43PM)





## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012652-1

Page 1 of 1

Sample Number 2454677-25  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 26 - May 27, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.5        | 73.1         | 61.2        |
| 09:00 AM - 10:00 AM | 62.5        | 70.3         | 61.2        |
| 10:00 AM - 11:00 AM | 74.6        | 94.2         | 62.1        |
| 11:00 AM - 12:00 PM | 63.1        | 79.2         | 61.5        |
| 12:00 PM - 01:00 PM | 62.9        | 71.0         | 61.5        |
| 01:00 PM - 02:00 PM | 63.4        | 71.3         | 61.7        |
| 02:00 PM - 03:00 PM | 63.7        | 72.3         | 62.2        |
| 03:00 PM - 04:00 PM | 63.6        | 73.7         | 62.4        |
| 04:00 PM - 05:00 PM | 63.9        | 76.9         | 62.8        |
| 05:00 PM - 06:00 PM | 64.2        | 77.0         | 63.0        |
| 06:00 PM - 07:00 PM | 64.2        | 72.1         | 63.2        |
| 07:00 PM - 08:00 PM | 63.9        | 72.9         | 63.1        |
| 08:00 PM - 09:00 PM | 64.0        | 70.8         | 63.1        |
| 09:00 PM - 10:00 PM | 64.4        | 81.0         | 63.2        |
| 10:00 PM - 11:00 PM | 64.1        | 71.1         | 63.2        |
| 11:00 PM - 12:00 AM | 64.4        | 77.1         | 63.4        |
| 12:00 AM - 01:00 AM | 63.9        | 77.4         | 62.8        |
| 01:00 AM - 02:00 AM | 63.8        | 69.6         | 62.9        |
| 02:00 AM - 03:00 AM | 64.1        | 80.1         | 63.1        |
| 03:00 AM - 04:00 AM | 63.9        | 73.4         | 63.0        |
| 04:00 AM - 05:00 AM | 64.1        | 77.3         | 62.9        |
| 05:00 AM - 06:00 AM | 64.9        | 78.2         | 63.3        |
| 06:00 AM - 07:00 AM | 63.8        | 77.6         | 62.2        |
| 07:00 AM - 08:00 AM | 63.6        | 73.0         | 62.2        |

Leq Average 24 hrs. (dB(A)) 65.5

Lmax (dB(A)) 94.2

L90 (dB(A)) 62.8

Ldn (dB(A)) 70.9

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012653-1

Page 1 of 1

Sample Number 2454677-26  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 27 - May 28, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 63.2        | 78.9         | 61.8        |
| 09:00 AM - 10:00 AM | 63.2        | 80.2         | 61.8        |
| 10:00 AM - 11:00 AM | 62.5        | 72.4         | 61.5        |
| 11:00 AM - 12:00 PM | 61.8        | 81.2         | 60.7        |
| 12:00 PM - 01:00 PM | 61.8        | 75.7         | 60.6        |
| 01:00 PM - 02:00 PM | 62.2        | 71.6         | 60.8        |
| 02:00 PM - 03:00 PM | 62.8        | 76.6         | 61.1        |
| 03:00 PM - 04:00 PM | 63.2        | 74.7         | 62.0        |
| 04:00 PM - 05:00 PM | 63.6        | 76.4         | 62.3        |
| 05:00 PM - 06:00 PM | 63.3        | 71.0         | 61.9        |
| 06:00 PM - 07:00 PM | 62.9        | 78.1         | 62.0        |
| 07:00 PM - 08:00 PM | 62.7        | 71.3         | 62.0        |
| 08:00 PM - 09:00 PM | 62.7        | 68.9         | 62.0        |
| 09:00 PM - 10:00 PM | 62.7        | 75.8         | 61.9        |
| 10:00 PM - 11:00 PM | 63.3        | 83.7         | 62.0        |
| 11:00 PM - 12:00 AM | 62.9        | 71.2         | 62.1        |
| 12:00 AM - 01:00 AM | 62.8        | 72.8         | 62.0        |
| 01:00 AM - 02:00 AM | 62.9        | 75.7         | 62.0        |
| 02:00 AM - 03:00 AM | 62.9        | 77.3         | 62.0        |
| 03:00 AM - 04:00 AM | 63.3        | 71.9         | 62.2        |
| 04:00 AM - 05:00 AM | 63.5        | 76.6         | 62.0        |
| 05:00 AM - 06:00 AM | 64.1        | 81.3         | 61.9        |
| 06:00 AM - 07:00 AM | 62.2        | 75.5         | 60.9        |
| 07:00 AM - 08:00 AM | 62.1        | 78.2         | 60.6        |

Leq Average 24 hrs. (dB(A)) 62.9

Lmax (dB(A)) 83.7

L90 (dB(A)) 61.9

Ldn (dB(A)) 69.5

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012654-1

Page 1 of 1

Sample Number 2454677-27  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 28 - May 29, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 61.3        | 75.2         | 60.3        |
| 09:00 AM - 10:00 AM | 61.7        | 80.9         | 60.3        |
| 10:00 AM - 11:00 AM | 61.5        | 74.7         | 60.3        |
| 11:00 AM - 12:00 PM | 61.5        | 79.3         | 60.1        |
| 12:00 PM - 01:00 PM | 61.3        | 77.8         | 60.1        |
| 01:00 PM - 02:00 PM | 62.0        | 73.0         | 60.6        |
| 02:00 PM - 03:00 PM | 62.5        | 84.5         | 60.6        |
| 03:00 PM - 04:00 PM | 62.9        | 82.1         | 61.6        |
| 04:00 PM - 05:00 PM | 63.2        | 71.5         | 61.8        |
| 05:00 PM - 06:00 PM | 63.0        | 69.6         | 61.7        |
| 06:00 PM - 07:00 PM | 62.4        | 70.6         | 61.6        |
| 07:00 PM - 08:00 PM | 62.6        | 69.9         | 61.8        |
| 08:00 PM - 09:00 PM | 62.4        | 75.4         | 61.6        |
| 09:00 PM - 10:00 PM | 62.4        | 71.7         | 61.7        |
| 10:00 PM - 11:00 PM | 63.3        | 81.5         | 61.7        |
| 11:00 PM - 12:00 AM | 62.4        | 71.3         | 61.6        |
| 12:00 AM - 01:00 AM | 62.5        | 69.7         | 61.8        |
| 01:00 AM - 02:00 AM | 62.6        | 69.0         | 61.7        |
| 02:00 AM - 03:00 AM | 62.8        | 74.6         | 62.0        |
| 03:00 AM - 04:00 AM | 63.5        | 80.9         | 62.2        |
| 04:00 AM - 05:00 AM | 63.3        | 79.8         | 62.0        |
| 05:00 AM - 06:00 AM | 63.6        | 80.2         | 61.5        |
| 06:00 AM - 07:00 AM | 62.9        | 85.7         | 60.8        |
| 07:00 AM - 08:00 AM | 62.3        | 77.3         | 60.9        |

Leq Average 24 hrs. (dB(A))

62.5

Lmax (dB(A))

85.7

L90 (dB(A))

61.6

Ldn (dB(A))

69.3

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

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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## Analysis / Test Report



TESTING  
No.0042

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC240531

Project Name :

Project Location :

Lot ID: 2454677

Date Received : May 30, 2024

Date Reported : Jun 04, 2024

Report Number: 3012655-1

Page 1 of 1

Sample Number 2454677-28  
Parameter Noise (Leq 24 hrs.)  
Location ริมรั้วโครงการด้านทิศเหนือ (N4) (GPS 47P 0728909, 1433715)  
Measurement Date May 29 - May 30, 2024  
Measurement by Suphanut Pisaipan  
Sound Level meter Serial No. 900072

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:00 AM - 09:00 AM | 61.7        | 76.3         | 60.4        |
| 09:00 AM - 10:00 AM | 61.7        | 76.8         | 60.5        |
| 10:00 AM - 11:00 AM | 61.5        | 77.7         | 60.3        |
| 11:00 AM - 12:00 PM | 61.4        | 77.8         | 60.2        |
| 12:00 PM - 01:00 PM | 61.6        | 82.4         | 60.3        |
| 01:00 PM - 02:00 PM | 62.2        | 80.1         | 60.8        |
| 02:00 PM - 03:00 PM | 62.8        | 81.4         | 61.1        |
| 03:00 PM - 04:00 PM | 62.7        | 83.7         | 61.5        |
| 04:00 PM - 05:00 PM | 62.9        | 71.1         | 61.8        |
| 05:00 PM - 06:00 PM | 62.9        | 70.0         | 61.7        |
| 06:00 PM - 07:00 PM | 62.4        | 73.1         | 61.6        |
| 07:00 PM - 08:00 PM | 62.2        | 70.3         | 61.5        |
| 08:00 PM - 09:00 PM | 62.3        | 77.7         | 61.5        |
| 09:00 PM - 10:00 PM | 62.3        | 72.5         | 61.6        |
| 10:00 PM - 11:00 PM | 64.0        | 86.6         | 61.9        |
| 11:00 PM - 12:00 AM | 62.4        | 72.6         | 61.7        |
| 12:00 AM - 01:00 AM | 62.4        | 70.7         | 61.7        |
| 01:00 AM - 02:00 AM | 62.6        | 77.7         | 61.8        |
| 02:00 AM - 03:00 AM | 62.6        | 75.2         | 61.7        |
| 03:00 AM - 04:00 AM | 63.0        | 76.9         | 61.8        |
| 04:00 AM - 05:00 AM | 63.2        | 75.4         | 61.8        |
| 05:00 AM - 06:00 AM | 64.5        | 81.8         | 61.7        |
| 06:00 AM - 07:00 AM | 63.6        | 80.1         | 62.3        |
| 07:00 AM - 08:00 AM | 63.9        | 80.5         | 61.8        |

Leq Average 24 hrs. (dB(A))

62.7

Lmax (dB(A))

86.6

L90 (dB(A))

61.6

Ldn (dB(A))

69.5

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

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

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

Technical Management

Thanita K.

Thanita Kulsuriwong  
Scientist (4)

Approved by

Supot S.

Supot Salamteh  
Section Head

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# ภาคผนวก ค-4

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คุณภาพน้ำทิ้ง



## Analysis / Test Report

TESTING  
No.0042

Lot ID: 23149180

Date Received : Jan 12, 2024

Date Reported : Jan 19, 2024

Report Number : 2889656-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location :

|                         |   |  |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|--|
| Sample Number           | 23149180-2  |  |  |  |  |  |  |
| Sampled Date            | Jan 12, 2024 10:20 AM   |  |  |  |  |  |  |
| Sample Description      | Wastewater  |  |  |  |  |  |  |
| Location                | Effluent WWTP   |  |  |  |  |  |  |
| Date Analysis Commenced | Jan 12, 2024  |  |  |  |  |  |  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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      | ≤600                      | 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      | ≤600                      | 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     | ≤10                       | 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 | -   | -         | 30.0   | ≤45                       | 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         | 2430   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | 1.8    | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-จ-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.  
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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 23149180

Date Received : Jan 12, 2024

Date Reported : Jan 19, 2024

Report Number : 2889656-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location :

|                         |   |  |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|--|
| Sample Number           | 23149180-2  |  |  |  |  |  |  |
| Sampled Date            | Jan 12, 2024 10:20 AM   |  |  |  |  |  |  |
| Sample Description      | Wastewater  |  |  |  |  |  |  |
| Location                | Effluent WWTP   |  |  |  |  |  |  |
| Date Analysis Commenced | Jan 12, 2024  |  |  |  |  |  |  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | <5     | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumplee ทะเบียนเลขที่ ว-204-จ-7830

Remark :

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

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-จ-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.  
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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:



TESTING  
No.0009  
Lot ID: 23149180  
Date Received : Jan 12, 2024  
Date Reported : Jan 19, 2024  
Report Number : 2889656-2

Page 1 of 1

|                         |   |  |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|--|
| Sample Number           | 23149180-2  |  |  |  |  |  |  |
| Sampled Date            | Jan 12, 2024 10:20 AM   |  |  |  |  |  |  |
| Sample Description      | Wastewater  |  |  |  |  |  |  |
| Location                | Effluent WWTP   |  |  |  |  |  |  |
| Date Analysis Commenced | Jan 13, 2024  |  |  |  |  |  |  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |        |           |              |                           |   |                  |
| Copper                | mg/L | 0.0003 | 0.0005    | 0.03         | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                  | mg/L | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                  | mg/L | 0.003  | 0.005     | 0.76         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline** : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By** : Tanasit Wongsachai ทะเบียนเลขที่ ว-323-จ-9460 , Samart Khumphlee ทะเบียนเลขที่ ว-204-จ-7830

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

Technical Management

*Sawitree N.*

Sawitree Noisangiam  
Manager

ทะเบียนเลขที่ ว-204-จ-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-จ-6111

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:



TESTING  
No.0009  
Lot ID: 23149180  
Date Received : Jan 12, 2024  
Date Reported : Jan 19, 2024  
Report Number : 2889656-3

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|                         |   |  |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|--|
| Sample Number           | 23149180-2  |  |  |  |  |  |  |
| Sampled Date            | Jan 12, 2024 10:20 AM   |  |  |  |  |  |  |
| Sample Description      | Wastewater  |  |  |  |  |  |  |
| Location                | Effluent WWTP   |  |  |  |  |  |  |
| Date Analysis Commenced | Jan 13, 2024  |  |  |  |  |  |  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |       |           |           |                           |   |                  |
| Iron                  | mg/L | 0.003 | 0.005     | 0.16      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>  |      |       |           |           |                           |   |                  |
| Chloride as Cl *      | mg/L | 0.5   | 1         | 728       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *               | -    | -     | -         | Odourless | Non Objectionable         | TIS, 257-2549   | Rayong           |

**Guideline** : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By** : Tanasit Wongsachai , Samart Khumphlee

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

TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**

**Lot ID: 241778**  
Date Received : Feb 02, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2907180-1

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 241778-2  |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Feb 02, 2024 3:10 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Feb 02, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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         | 6      | ≤600                      | 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         | 5      | ≤600                      | 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     | ≤10                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B                      | Rayong           |
| pH at 25 degree C                            |          | -   | -         | 7.7    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)                | Rayong           |
| Temperature *                                | Degree C | -   | -         | 30.1   | ≤45                       | 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         | 2570   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | 1.1    | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

TESTING  
No.0042

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**

**Lot ID: 241778**  
Date Received : Feb 02, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2907180-1

Page 2 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 241778-2  |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Feb 02, 2024 3:10 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Feb 02, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | <5     | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant  
**Sampling By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 241778**  
Date Received : Feb 02, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2907180-2

Page 1 of 1

| <b>Sample Number</b>           | 241778-2  |        |           |              |                           |   |                  |
|--------------------------------|---|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Sampled Date</b>            | Feb 02, 2024 3:10 PM  |        |           |              |                           |   |                  |
| <b>Sample Description</b>      | Wastewater  |        |           |              |                           |   |                  |
| <b>Location</b>                | Effluent WWTP   |        |           |              |                           |   |                  |
| <b>Date Analysis Commenced</b> | Feb 05, 2024  |        |           |              |                           |   |                  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |        |           |              |                           |   |                  |
| Analyte                        | Unit  | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
| <b>Metals Testing</b>          |   |        |           |              |                           |   |                  |
| Copper                         | mg/L  | 0.0003 | 0.0005    | 0.02         | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                           | mg/L  | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                           | mg/L  | 0.003  | 0.005     | 0.67         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-323-๖-9461 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ๖-204-๖-0002

**Remark :**

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Technical Management

*Sawitree N.*

Sawitree Noisangiam  
Manager

ทะเบียนเลขที่ ๖-204-๖-4709

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ๖-204-๖-6111

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 241778**  
Date Received : Feb 02, 2024  
Date Reported : Feb 09, 2024  
Report Number : 2907180-3

Page 1 of 1

| <b>Sample Number</b>           | 241778-2  |       |           |           |                           |   |                  |
|--------------------------------|---|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Sampled Date</b>            | Feb 02, 2024 3:10 PM  |       |           |           |                           |   |                  |
| <b>Sample Description</b>      | Wastewater  |       |           |           |                           |   |                  |
| <b>Location</b>                | Effluent WWTP   |       |           |           |                           |   |                  |
| <b>Date Analysis Commenced</b> | Feb 03, 2024  |       |           |           |                           |   |                  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |       |           |           |                           |   |                  |
| Analyte                        | Unit  | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
| <b>Metals Testing</b>          |   |       |           |           |                           |   |                  |
| Iron                           | mg/L  | 0.003 | 0.005     | 0.11      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>           |   |       |           |           |                           |   |                  |
| Chloride as Cl *               | mg/L  | 0.5   | 1         | 561       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *                        | -   | -     | -         | Odourless | Non Objectionable         | TIS, 257-2549   | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

**Remark :**

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**

**TESTING**  
**No.0042**  
**Lot ID: 2423890**  
Date Received : Mar 01, 2024  
Date Reported : Mar 07, 2024  
Report Number : 2929965-1

Page 1 of 2

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2423890-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Mar 01, 2024 2:35 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Mar 01, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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         | 6      | ≤600                      | 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         | <5     | ≤600                      | 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     | ≤10                       | 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 | -   | -         | 31.8   | ≤45                       | 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         | 2540   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | 1.0    | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**

**TESTING**  
**No.0042**  
**Lot ID: 2423890**  
Date Received : Mar 01, 2024  
Date Reported : Mar 07, 2024  
Report Number : 2929965-1

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|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2423890-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Mar 01, 2024 2:35 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Mar 01, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | <5     | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant  
**Sampling By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ว-323-จ-9461 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2423890**  
Date Received : Mar 01, 2024  
Date Reported : Mar 07, 2024  
Report Number : 2929965-2

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2423890-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Mar 01, 2024 2:35 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Mar 02, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |        |           |              |                           |   |                  |
| Copper                | mg/L | 0.0003 | 0.0005    | 0.02         | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                  | mg/L | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                  | mg/L | 0.003  | 0.005     | 0.70         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Chainusorn Lertnanthakunchai ทะเบียนเลขที่ ๖-323-๖-9461 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ๖-204-๖-0002

Remark :  
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)  
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

*Chanatt L.*

Chanattagarn Imchom  
Section Head  
ทะเบียนเลขที่ ๖-204-๖-0008

Approved by

*Kanok Korn Anek*

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ๖-204-๖-0004

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2423890**  
Date Received : Mar 01, 2024  
Date Reported : Mar 07, 2024  
Report Number : 2929965-3

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2423890-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Mar 01, 2024 2:35 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Mar 02, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |       |           |           |                           |   |                  |
| Iron                  | mg/L | 0.003 | 0.005     | 0.26      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>  |      |       |           |           |                           |   |                  |
| Chloride as Cl *      | mg/L | 0.5   | 1         | 589       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *               | -    | -     | -         | Odourless | Non Objectionable         | TIS, 257-2549   | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Chainusorn Lertnanthakunchai , Pattarapol Sawangjaitam

Remark :  
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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2432080

Date Received : Apr 05, 2024

Date Reported : Apr 12, 2024

Report Number : 2965108-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

|                         |   |
|-------------------------|---|
| Sample Number           | 2432080-2   |
| Sampled Date            | Apr 05, 2024 10:57 AM   |
| Sample Description      | Wastewater  |
| Location                | Effluent WWTP   |
| Date Analysis Commenced | Apr 05, 2024  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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         | 6      | ≤600                      | 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         | 5      | ≤600                      | 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     | ≤10                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B                      | Rayong           |
| pH at 25 degree C                            |          | -   | -         | 7.8    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)                | Rayong           |
| Temperature *                                | Degree C | -   | -         | 32.1   | ≤45                       | 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         | 2570   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | <1.0   | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

*N. Banachit*

Narumon Banchongkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2432080

Date Received : Apr 05, 2024

Date Reported : Apr 12, 2024

Report Number : 2965108-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

|                         |   |
|-------------------------|---|
| Sample Number           | 2432080-2   |
| Sampled Date            | Apr 05, 2024 10:57 AM   |
| Sample Description      | Wastewater  |
| Location                | Effluent WWTP   |
| Date Analysis Commenced | Apr 05, 2024  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | 7      | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Nattawat Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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Technical Management

*N. Banachit*

Narumon Banchongkit  
Supervisor  
ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager  
ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2432080**  
Date Received : Apr 05, 2024  
Date Reported : Apr 12, 2024  
Report Number : 2965108-2

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2432080-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Apr 05, 2024 10:57 AM   |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Apr 06, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |        |           |              |                           |   |                  |
| Copper                | mg/L | 0.0003 | 0.0005    | 0.02         | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                  | mg/L | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                  | mg/L | 0.003  | 0.005     | 0.51         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Nattawut Athomprommarat ทะเบียนเลขที่ ว-323-จ-0006 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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Technical Management

*Sawitree N.*

Sawitree Noisangiam  
Manager

ทะเบียนเลขที่ ว-204-จ-0007

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2432080**  
Date Received : Apr 05, 2024  
Date Reported : Apr 12, 2024  
Report Number : 2965108-3

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2432080-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Apr 05, 2024 10:57 AM   |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Apr 06, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |       |           |           |                           |   |                  |
| Iron                  | mg/L | 0.003 | 0.005     | 0.27      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>  |      |       |           |           |                           |   |                  |
| Chloride as Cl *      | mg/L | 0.5   | 1         | 732       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *               | -    | -     | -         | Odourless | Non Objectionable         | TIS, 257-2549   | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Nattawut Athomprommarat , Pattarapol Sawangjaitam

**Remark :**

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2444074

Date Received : May 03, 2024

Date Reported : May 10, 2024

Report Number : 2987940-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

|                         |   |
|-------------------------|---|
| Sample Number           | 2444074-2   |
| Sampled Date            | May 03, 2024 10:45 AM   |
| Sample Description      | Wastewater  |
| Location                | Effluent WWTP   |
| Date Analysis Commenced | May 03, 2024  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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     | ≤600                      | 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         | 9      | ≤600                      | 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     | ≤10                       | 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 | -   | -         | 33.2   | ≤45                       | 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         | 2330   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | <1.0   | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

*N. Banachit*

Narumon Banachonkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2444074

Date Received : May 03, 2024

Date Reported : May 10, 2024

Report Number : 2987940-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

|                         |   |
|-------------------------|---|
| Sample Number           | 2444074-2   |
| Sampled Date            | May 03, 2024 10:45 AM   |
| Sample Description      | Wastewater  |
| Location                | Effluent WWTP   |
| Date Analysis Commenced | May 03, 2024  |
| Condition of Sample     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | <5     | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Pitthaya Thongtaeng ทะเบียนเลขที่ ว-323-จ-9448 , Kardbundit Kitisupavanit ทะเบียนเลขที่ ว-204-จ-0001

Remark :

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

*N. Banachit*

Narumon Banachonkit  
Supervisor

ทะเบียนเลขที่ ว-323-จ-9445

Approved by

*D. Changchon*

Dej Changchon  
Senior Manager

ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2444074**  
Date Received : May 03, 2024  
Date Reported : May 10, 2024  
Report Number : 2987940-2

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2444074-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 03, 2024 10:45 AM   |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 06, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |        |           |              |                           |   |                  |
| Copper                | mg/L | 0.0003 | 0.0005    | 0.02         | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                  | mg/L | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                  | mg/L | 0.003  | 0.005     | 0.49         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Pitthaya Thongtaeng ทะเบียนเลขที่ ๖-323-๖-9448 , Kardbundi Kitisupavanit ทะเบียนเลขที่ ๖-204-๖-0001

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Technical Management

*Sawitree N.*

Sawitree Noisangiam  
Manager

ทะเบียนเลขที่ ๖-204-๖-0007

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ๖-204-๖-0004

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2444074**  
Date Received : May 03, 2024  
Date Reported : May 10, 2024  
Report Number : 2987940-3

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2444074-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | May 03, 2024 10:45 AM   |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | May 04, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |       |           |           |                           |   |                  |
| Iron                  | mg/L | 0.003 | 0.005     | 0.19      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>  |      |       |           |           |                           |   |                  |
| Chloride as Cl *      | mg/L | 0.5   | 1         | 617       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *               | -    | -     | -         | Odourless | Non Objectionable         | TIS, 257-2549   | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

**Sampling By :** Pitthaya Thongtaeng , Kardbundi Kitisupavanit

**Remark :**

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2464007

Date Received : Jun 07, 2024

Date Reported : Jun 14, 2024

Report Number : 3024449-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

Sample Number 2464007-2  
Sampled Date Jun 07, 2024 1:55 PM  
Sample Description Wastewater  
Location Effluent WWTP  
Date Analysis Commenced Jun 07, 2024  
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte                                      | Unit     | LOD | LOQ (LOR) | Result | Guideline / Specification | Method   | Testing Location |
|--|----------|-----|-----------|--------|---------------------------|--|------------------|
| <b>Water Testing</b>                         |          |     |           |        |                           |  |                  |
| BOD (5 days at 20 Degree C)                  | mg/L     | -   | 2.0       | <2.0   | ≤500                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G     | Rayong           |
| COD  | mg/L     | 1.5 | 25        | <25    | ≤750                      | 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      | ≤600                      | 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         | 7      | ≤600                      | 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     | ≤10                       | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B                      | Rayong           |
| pH at 25 degree C                            |          | -   | -         | 7.7    | 5.5-9.0                   | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)                | Rayong           |
| Temperature *                                | Degree C | -   | -         | 33.2   | ≤45                       | 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         | 2600   | ≤3000                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C                      | Rayong           |
| Total Kjeldahl Nitrogen as N                 | mg/L     | -   | 1.0       | <1.0   | ≤100                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part NH3 (D) | Rayong           |

Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

ทะเบียนเลขที่ ว-323-จ-9449

Approved by

D. Chonon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

TESTING  
No.0042

Lot ID: 2464007

Date Received : Jun 07, 2024

Date Reported : Jun 14, 2024

Report Number : 3024449-1

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O : SmfC234058

Project Name :

Project Location:

Sample Number 2464007-2  
Sampled Date Jun 07, 2024 1:55 PM  
Sample Description Wastewater  
Location Effluent WWTP  
Date Analysis Commenced Jun 07, 2024  
Condition of Sample Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

| Analyte  | Unit | LOD | LOQ (LOR) | Result | Guideline / Specification | Method  | Testing Location |
|--|------|-----|-----------|--------|---------------------------|---|------------------|
| <b>Water Testing</b>                             |      |     |           |        |                           |   |                  |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | -   | 5         | <5     | ≤200                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

**Sampling By :** Wasan Kinunti ทะเบียนเลขที่ ว-323-จ-0019 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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Technical Management

Chontichak

Chonticha Subongkoch

Scientist (3)

ทะเบียนเลขที่ ว-323-จ-9449

Approved by

D. Chonon

Dej Changchon

Senior Manager

ทะเบียนเลขที่ ว-323-จ-9442

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2464007**  
Date Received : Jun 07, 2024  
Date Reported : Jun 14, 2024  
Report Number : 3024449-2

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2464007-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Jun 07, 2024 1:55 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Jun 10, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD    | LOQ (LOR) | Result       | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|--------|-----------|--------------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |        |           |              |                           |   |                  |
| Copper                | mg/L | 0.0003 | 0.0005    | 0.008        | ≤2.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Lead                  | mg/L | 0.0003 | 0.0005    | Not Detected | ≤0.2                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| Zinc                  | mg/L | 0.003  | 0.005     | 1.43         | ≤5.0                      | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

**Sampling By :** Wasan Kinunti ทะเบียนเลขที่ ว-323-จ-0019 , Pattarapol Sawangjaitam ทะเบียนเลขที่ ว-204-จ-0002

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Technical Management

*Sawitree N.*

Sawitree Noisangiam  
Manager

ทะเบียนเลขที่ ว-204-จ-0007

Approved by

*Kanokkorn Anek*

Kanokkorn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-จ-0004

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
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**P/O :** SmfC234058  
**Project Name :**  
**Project Location:**



**TESTING**  
**No.0009**  
**Lot ID: 2464007**  
Date Received : Jun 07, 2024  
Date Reported : Jun 14, 2024  
Report Number : 3024449-3

Page 1 of 1

|                                |   |  |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
| <b>Sample Number</b>           | 2464007-2   |  |  |  |  |  |  |
| <b>Sampled Date</b>            | Jun 07, 2024 1:55 PM  |  |  |  |  |  |  |
| <b>Sample Description</b>      | Wastewater  |  |  |  |  |  |  |
| <b>Location</b>                | Effluent WWTP   |  |  |  |  |  |  |
| <b>Date Analysis Commenced</b> | Jun 08, 2024  |  |  |  |  |  |  |
| <b>Condition of Sample</b>     | Contained in one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |  |  |  |  |  |  |

| Analyte               | Unit | LOD   | LOQ (LOR) | Result    | Guideline / Specification | Method  | Testing Location |
|-----------------------|------|-------|-----------|-----------|---------------------------|---|------------------|
| <b>Metals Testing</b> |      |       |           |           |                           |   |                  |
| Iron                  | mg/L | 0.003 | 0.005     | 0.13      | ≤10.0                     | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F | Bangkok          |
| <b>Water Testing</b>  |      |       |           |           |                           |   |                  |
| Chloride as Cl *      | mg/L | 0.5   | 1         | 627       | No Standard               | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (B)    | Rayong           |
| Odour *               | -    | -     | -         | Odourless | No Standard               | TIS, 257-2549   | Rayong           |

**Guideline :** Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

**Sampling By :** Wasan Kinunti , Pattarapol Sawangjaitam

Remark :

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# ภาคผนวก ค-5

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ความร้อนในสถานที่ทำงาน



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand  
21140

**P/O :**

**Project Name :**

**Project Location :**

**Lot ID: 2451327**

Date Received : May 08, 2024

Date Reported : May 21, 2024

Report Number: 2984956-1 Rev. No.1

Page 1 of 3

**Sample Number** 2451327-1  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 26, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

| Location                              | Duration (min) | WBGT (°C) | NWB (°C) | GT (°C) | DB (°C) |
|---------------------------------------|----------------|-----------|----------|---------|---------|
| PK_บริเวณสำนักงานเดิมเลนวัดเหล็ก (H1) | 120            | 29.9      | 27.3     | 36.0    | 35.8    |
| Average (WBGT)                        |                | 29.9      |          |         |         |
| Guideline WBGT (°C)                   |                | 32.0      |          |         |         |

**Reference Method :** Wet Bulb Globe Temperature

### Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

### Note:

This Analysis test report is reissued to supersede report No. 2984956, Date Reported : May 09, 2024 due to revise guideline/specification

Technical Management

*Supot S.*  
Supot Salamteh  
Section Head

Approved by

*Wichan Choonharat*  
Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand  
21140

**P/O :**

**Project Name :**

**Project Location :**

**Lot ID: 2451327**

Date Received : May 08, 2024

Date Reported : May 21, 2024

Report Number: 2984956-1 Rev. No.1

Page 2 of 3

**Sample Number** 2451327-2  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 26, 2024  
**Measurement by** Chanon Booncheun  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

| Location                        | Duration (min) | WBGT (°C) | NWB (°C) | GT (°C) | DB (°C) |
|---------------------------------|----------------|-----------|----------|---------|---------|
| PT_บริเวณเดาอบลวด จุดที่ 1 (H2) | 120            | 31.2      | 27.4     | 40.1    | 39.3    |
| Average (WBGT)                  |                | 31.2      |          |         |         |
| Guideline WBGT (°C)             |                | 32.0      |          |         |         |

**Reference Method :** Wet Bulb Globe Temperature

### Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

### Note:

This Analysis test report is reissued to supersede report No. 2984956, Date Reported : May 09, 2024 due to revise guideline/specification

Technical Management

*Supot S.*  
Supot Salamteh  
Section Head

Approved by

*Wichan Choonharat*  
Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand  
21140  
**P/O :** SmfC240682  
**Project Name :**  
**Project Location :**

**Lot ID: 2458126**  
Date Received : May 29, 2024  
Date Reported : May 30, 2024  
Report Number: 3000418-1

Page 1 of 1

**Sample Number** 2458126-1  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** May 27, 2024  
**Measurement by** Wikrom Meesiri  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แผนก : -)

| Location                                     | Duration (min) | WBGT (°C) | NWB (°C) | GT (°C) | DB (°C) |
|--|----------------|-----------|----------|---------|---------|
| PT_ บริเวณเดาอบลวดหลังการขึ้น จุดที่ 1 (H 3) | 120            | 31.9      | 27.9     | 41.1    | 40.7    |
| Average (WBGT)                               |                | 31.9      |          |         |         |
| Guideline WBGT (°C)                          |                | 32.0      |          |         |         |

**Reference Method :** Wet Bulb Globe Temperature

### Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

  
Supot Salamteh  
Section Head

Approved by

  
Wichan Choonharat  
Assistant Manager

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# ภาคผนวก ค-6

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คุณภาพอากาศในสถานประกอบการ



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-3  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** DD\_บริเวณหลังอาคารแบบทรง จตุรัส 1 (T1)  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                           | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|----------------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                                  |           |                  |
| Respirable Dust    | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.42   | 5               | Based on NIOSH (1998), OSHA 0600 | OSHA      | Rayong           |
| Total Dust         | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 1.49   | 15              | Based on NIOSH (1994), OSHA 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

Page 4 of 24

**Sample Number** 2454729-4  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบหลังการชุบ จุดที่ 1 (T2)  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                           | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|----------------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                                  |           |                  |
| Respirable Dust    | 09:45 AM - 11:45 AM | mg/m3 | -   | 0.15      | <0.15  | 5               | Based on NIOSH (1998), OSHA 0600 | OSHA      | Rayong           |
| Total Dust         | 09:45 AM - 11:45 AM | mg/m3 | -   | 0.15      | <0.15  | 15              | Based on NIOSH (1994), OSHA 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-5  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบลวด จุดที่ 1 (T3)  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                           | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|----------------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                                  |           |                  |
| Respirable Dust    | 09:55 AM - 11:55 AM | mg/m3 | -   | 0.15      | <0.15  | 5               | Based on NIOSH (1998), OSHA 0600 | OSHA      | Rayong           |
| Total Dust         | 09:55 AM - 11:55 AM | mg/m3 | -   | 0.15      | <0.15  | 15              | Based on NIOSH (1994), OSHA 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

Page 1 of 24

**Sample Number** 2454729-1  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PK\_บริเวณล่างวัดฤทธิดินเสนลวดเหล็ก (HC1)  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one sorbent tube, refrigerated  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte            | Sampled Date/time   | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method                   | Guideline | Testing Location |
|--------------------|---------------------|------|-----|-----------|--------|-----------------|--------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |      |     |           |        |                 |                          |           |                  |
| Hydrogen chloride  | 08:30 AM - 10:30 AM | ppm  | -   | 0.05      | <0.05  | 5(C)            | Based on OSHA, ID-174-SG | MOL       | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-6  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบ จุดที่ 1 (Si1)  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one filter paper placed in plastic cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 35.7 °C

| Analyte               | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method             | Guideline | Testing Location |
|-----------------------|---------------------|-------|-----|-----------|--------|-----------------|--------------------|-----------|------------------|
| <b>Air Testing</b>    |                     |       |     |           |        |                 |                    |           |                  |
| Silica (Cristobalite) | 09:45 AM - 12:45 PM | mg/m3 | -   | 0.02      | <0.020 | 0.025(R)        | NIOSH (2003), 7500 | MOL       | Bangkok          |
| Silica (Quartz)       | 09:45 AM - 12:45 PM | mg/m3 | -   | 0.02      | <0.020 | 0.025(R)        | NIOSH (2003), 7500 | MOL       | Bangkok          |
| Silica (Tridymite)    | 09:45 AM - 12:45 PM | mg/m3 | -   | 0.08      | <0.080 | No Standard     | NIOSH (2003), 7500 | -         | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok  
**Remark :**  
- LOD : Limit of Detection  
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

*Sawitree N.*

Sawitree Noisangiam  
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**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-7  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเขตนกบินฯสนามบินลาด จุดที่ 1 (PL1)-line1  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte            | Sampled Date/time   | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method                   | Guideline | Testing Location |
|--------------------|---------------------|------|-----|-----------|--------|-----------------|--------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |      |     |           |        |                 |                          |           |                  |
| Nitric acid        | 08:00 AM - 10:00 AM | ppm  | -   | 0.05      | <0.05  | 2               | Based on OSHA, ID-174-SG | MOL       | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

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**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-22  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณชุมชนเคหะร่มเกล้า จดที่ 1 (PL1)-line1  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one sorbent tube, refrigerated  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                   | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|--------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                          |           |                  |
| Sulfuric acid      | 08:00 AM - 10:00 AM | mg/m3 | -   | 0.05      | <0.05  | 1               | Based on OSHA, ID-174-SG | MOL       | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

Remark :  
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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

**Client** : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-23  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณชุมชนเคหะร่มเกล้า จดที่ 1 (PL1)-line1  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one filter paper placed in plastic cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte               | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method             | Guideline | Testing Location |
|-----------------------|---------------------|-------|-----|-----------|--------|-----------------|--------------------|-----------|------------------|
| <b>Metals Testing</b> |                     |       |     |           |        |                 |                    |           |                  |
| Copper (Fume)         | 08:00 AM - 10:00 AM | mg/m3 | -   | 0.001     | 0.03   | 0.2             | NIOSH (2003), 7301 | ACGIH     | Bangkok          |

**Guideline :**  
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O** : SmfC240531  
**Project Name** :  
**Project Location** :

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

Page 24 of 24

**Sample Number** 2454729-24  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณชุมชนเคสิออบเส้นลวด จุดที่ 1 (PL1)-line1  
**Date Analysis Commenced** May 31, 2024  
**Condition of Sample** Drawn into one filter paper placed in plastic cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte                            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method             | Guideline | Testing Location |
|------------------------------------|---------------------|-------|-----|-----------|--------|-----------------|--------------------|-----------|------------------|
| <b>Metals Testing</b>              |                     |       |     |           |        |                 |                    |           |                  |
| Zinc Oxide (Inhalable dust) (Fume) | 08.00 AM - 10.00 AM | mg/m3 | -   | 0.002     | 0.15   | 5               | NIOSH (2003), 7301 | MOL       | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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# ภาคผนวก ค-7

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ระดับเสียงในสถานที่ทำงาน



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454739**

Date Received : May 29, 2024

Date Reported : May 31, 2024

Report Number: 3009898-1

Page 1 of 1

|                         |  |
|-------------------------|--|
| <b>Sample Number</b>    | 2454739-1                                |
| <b>Parameter</b>        | Noise (Leq 8 hrs.)                       |
| <b>Location</b>         | PK_บริเวณลำรางวัดจุดดินเส้นลวดเหล็ก (C1) |
| <b>Measurement Date</b> | May 28, 2024                             |
| <b>Measurement by</b>   | Wikrom Meesiri                           |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:40 AM - 09:40 AM | 86.1        | 94.3         | 85.2        |
| 09:40 AM - 10:40 AM | 85.6        | 91.4         | 84.5        |
| 10:40 AM - 11:40 AM | 85.3        | 89.6         | 84.3        |
| 11:40 AM - 12:40 PM | 84.9        | 88.6         | 84.1        |
| 12:40 PM - 01:40 PM | 84.4        | 88.1         | 83.6        |
| 01:40 PM - 02:40 PM | 84.1        | 89.8         | 83.3        |
| 02:40 PM - 03:40 PM | 84.3        | 93.7         | 83.3        |
| 03:40 PM - 04:40 PM | 86.4        | 90.7         | 85.4        |

Leq Average 8 hrs. (dB(A))

85.2

Lmax (dB(A))

94.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454739**

Date Received : May 29, 2024

Date Reported : May 31, 2024

Report Number: 3009899-1

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|                         |  |
|-------------------------|--|
| <b>Sample Number</b>    | 2454739-2  |
| <b>Parameter</b>        | Noise (Leq 8 hrs.)                               |
| <b>Location</b>         | DD_เครื่องตึงยึดลวดแบบแห้ง จุดที่ 1 (C2) DD no.4 |
| <b>Measurement Date</b> | May 27, 2024                                     |
| <b>Measurement by</b>   | Wikrom Meesiri                                   |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 09:20 AM - 10:20 AM | 82.4        | 88.1         | 79.8        |
| 10:20 AM - 11:20 AM | 82.2        | 86.7         | 81.7        |
| 11:20 AM - 12:20 PM | 81.3        | 88.7         | 79.1        |
| 12:20 PM - 01:20 PM | 83.0        | 88.7         | 82.4        |
| 01:20 PM - 02:20 PM | 81.1        | 86.6         | 74.6        |
| 02:20 PM - 03:20 PM | 80.2        | 87.6         | 72.4        |
| 03:20 PM - 04:20 PM | 81.9        | 89.3         | 79.7        |
| 04:20 PM - 05:20 PM | 81.7        | 89.1         | 79.5        |

Leq Average 8 hrs. (dB(A))

81.8

Lmax (dB(A))

89.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454739**

Date Received : May 29, 2024

Date Reported : May 31, 2024

Report Number: 3009901-1

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|                         |  |
|-------------------------|--|
| <b>Sample Number</b>    | 2454739-4  |
| <b>Parameter</b>        | Noise (Leq 8 hrs.)                                   |
| <b>Location</b>         | WD_เครื่องตั้งยึดลดแบบเบี่ยง จุดที่ 1 (C3) WD no.226 |
| <b>Measurement Date</b> | May 27, 2024   |
| <b>Measurement by</b>   | Wikrom Meesiri                                       |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 09:28 AM - 10:28 AM | 90.3        | 100.6        | 89.9        |
| 10:28 AM - 11:28 AM | 90.7        | 97.4         | 90.6        |
| 11:28 AM - 12:28 PM | 90.7        | 109.2        | 90.4        |
| 12:28 PM - 01:28 PM | 90.5        | 97.4         | 90.3        |
| 01:28 PM - 02:28 PM | 90.3        | 98.6         | 90.0        |
| 02:28 PM - 03:28 PM | 90.7        | 93.5         | 90.5        |
| 03:28 PM - 04:28 PM | 90.5        | 96.7         | 90.3        |
| 04:28 PM - 05:28 PM | 90.3        | 99.4         | 90.0        |

Leq Average 8 hrs. (dB(A))

90.5

Lmax (dB(A))

109.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454739**

Date Received : May 29, 2024

Date Reported : May 31, 2024

Report Number: 3009904-1

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|                         |  |
|-------------------------|--|
| <b>Sample Number</b>    | 2454739-7  |
| <b>Parameter</b>        | Noise (Leq 8 hrs.)                                 |
| <b>Location</b>         | ST_เครื่องตีเกลียวเส้นลวด จุดที่ 1 (C4) RHA no.147 |
| <b>Measurement Date</b> | May 28, 2024                                       |
| <b>Measurement by</b>   | Wikrom Meesiri                                     |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 08:33 AM - 09:33 AM | 87.1        | 89.6         | 86.5        |
| 09:33 AM - 10:33 AM | 87.1        | 98.4         | 85.9        |
| 10:33 AM - 11:33 AM | 87.1        | 89.4         | 86.7        |
| 11:33 AM - 12:33 PM | 87.2        | 93.8         | 86.6        |
| 12:33 PM - 01:33 PM | 86.7        | 93.1         | 83.1        |
| 01:33 PM - 02:33 PM | 87.3        | 89.1         | 86.8        |
| 02:33 PM - 03:33 PM | 87.3        | 93.4         | 86.5        |
| 03:33 PM - 04:33 PM | 87.6        | 89.9         | 87.1        |

Leq Average 8 hrs. (dB(A))

87.2

Lmax (dB(A))

98.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :** SmfC240531

**Project Name :**

**Project Location :**

**Lot ID: 2454739**

Date Received : May 29, 2024

Date Reported : May 31, 2024

Report Number: 3009900-1

Page 1 of 1

|                         |  |
|-------------------------|--|
| <b>Sample Number</b>    | 2454739-3                                |
| <b>Parameter</b>        | Noise (Leq 8 hrs.)                       |
| <b>Location</b>         | PT_บริเวณหลุมเคลือบเส้นลวด จุดที่ 1 (C5) |
| <b>Measurement Date</b> | May 27, 2024                             |
| <b>Measurement by</b>   | Wikrom Meesiri                           |

| Time                | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---------------------|-------------|--------------|-------------|
| 09:51 AM - 10:51 AM | 82.9        | 83.7         | 82.7        |
| 10:51 AM - 11:51 AM | 83.1        | 87.5         | 82.9        |
| 11:51 AM - 12:51 PM | 83.0        | 87.7         | 82.8        |
| 12:51 PM - 01:51 PM | 83.0        | 84.0         | 82.8        |
| 01:51 PM - 02:51 PM | 83.3        | 88.3         | 83.0        |
| 02:51 PM - 03:51 PM | 83.1        | 83.7         | 83.0        |
| 03:51 PM - 04:51 PM | 82.8        | 87.5         | 82.6        |
| 04:51 PM - 05:51 PM | 83.3        | 84.1         | 83.1        |

Leq Average 8 hrs. (dB(A))

83.1

Lmax (dB(A))

88.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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# ภาคผนวก ค-8

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (1)-1

Page 1 of 6

| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 1                                       | Spot : S1 Plant : First Aid Room : โต๊ะทำงานพยาบาล     | 2467113 (1)-1    | 20-Jun-24 | Day time   | 1   | 405               | -       | 400-500         | -       | Pass    |
|   |  | 2467113 (1)-2    | 20-Jun-24 | Night time | 1   | 402               | -       | 400-500         | -       | Pass    |
| 2                                       | Spot : S1 Plant : First Aid Room : เคียงตรวจรักษาคนไข้ | 2467113 (1)-3    | 20-Jun-24 | Day time   | 1   | 418               | -       | 400-500         | -       | Pass    |
|   |  | 2467113 (1)-4    | 20-Jun-24 | Night time | 1   | 324               | -       | 400-500         | -       | Fail    |
| 3                                       | Area : S1 Plant : First Aid Room : ห้องพยาบาล          | 2467113 (1)-5    | 20-Jun-24 | Day time   | 1   | 579               | 526     | 150             | 300     | Pass    |
|   |  | 2467113 (1)-6    | 20-Jun-24 | Day time   | 2   | 493               |         |                 |         |         |
|   |  | 2467113 (1)-7    | 20-Jun-24 | Day time   | 3   | 505               |         |                 |         |         |
|   |  | 2467113 (1)-8    | 20-Jun-24 | Night time | 1   | 371               | 405     | 150             | 300     | Pass    |
|   |  | 2467113 (1)-9    | 20-Jun-24 | Night time | 2   | 373               |         |                 |         |         |
|   |  | 2467113 (1)-10   | 20-Jun-24 | Night time | 3   | 471               |         |                 |         |         |

Technical Management

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Supot Salamteh  
Section Head

Approved by

*Nichan Ch*

Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (1)-1

Page 2 of 6

| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location                                       | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 4                                       | Area : S1 Plant : Canteen : โต๊ะรับประทานอาหาร | 2467113 (1)-11   | 20-Jun-24 | Day time   | 1   | 950               | 794     | 150             | 300     | Pass    |
|   |  | 2467113 (1)-12   | 20-Jun-24 | Day time   | 2   | 492               |         |                 |         |         |
|   |  | 2467113 (1)-13   | 20-Jun-24 | Day time   | 3   | 1,485             |         |                 |         |         |
|   |  | 2467113 (1)-14   | 20-Jun-24 | Day time   | 4   | 1,129             |         |                 |         |         |
|   |  | 2467113 (1)-15   | 20-Jun-24 | Day time   | 5   | 730               |         |                 |         |         |
|   |  | 2467113 (1)-16   | 20-Jun-24 | Day time   | 6   | 711               |         |                 |         |         |
|   |  | 2467113 (1)-17   | 20-Jun-24 | Day time   | 7   | 441               |         |                 |         |         |
|   |  | 2467113 (1)-18   | 20-Jun-24 | Day time   | 8   | 449               |         |                 |         |         |
|   |  | 2467113 (1)-19   | 20-Jun-24 | Day time   | 9   | 672               |         |                 |         |         |
|   |  | 2467113 (1)-20   | 20-Jun-24 | Day time   | 10  | 958               |         |                 |         |         |
|   |  | 2467113 (1)-21   | 20-Jun-24 | Day time   | 11  | 688               |         |                 |         |         |
|   |  | 2467113 (1)-22   | 20-Jun-24 | Day time   | 12  | 802               |         |                 |         |         |
|   |  | 2467113 (1)-23   | 20-Jun-24 | Day time   | 13  | 733               |         |                 |         |         |
|   |  | 2467113 (1)-24   | 20-Jun-24 | Day time   | 14  | 880               |         |                 |         |         |
|   |  | 2467113 (1)-25   | 20-Jun-24 | Day time   | 15  | 918               |         |                 |         |         |
|   |  | 2467113 (1)-26   | 20-Jun-24 | Day time   | 16  | 893               |         |                 |         |         |
|   |  | 2467113 (1)-27   | 20-Jun-24 | Day time   | 17  | 687               |         |                 |         |         |
|   |  | 2467113 (1)-28   | 20-Jun-24 | Day time   | 18  | 810               |         |                 |         |         |
|   |  | 2467113 (1)-29   | 20-Jun-24 | Night time | 1   | 240               | 709     | 150             | 300     | Pass    |
|   |  | 2467113 (1)-30   | 20-Jun-24 | Night time | 2   | 376               |         |                 |         |         |
|   |  | 2467113 (1)-31   | 20-Jun-24 | Night time | 3   | 828               |         |                 |         |         |
|   |  | 2467113 (1)-32   | 20-Jun-24 | Night time | 4   | 614               |         |                 |         |         |
|   |  | 2467113 (1)-33   | 20-Jun-24 | Night time | 5   | 552               |         |                 |         |         |
|   |  | 2467113 (1)-34   | 20-Jun-24 | Night time | 6   | 567               |         |                 |         |         |
|   |  | 2467113 (1)-35   | 20-Jun-24 | Night time | 7   | 493               |         |                 |         |         |
|   |  | 2467113 (1)-36   | 20-Jun-24 | Night time | 8   | 391               |         |                 |         |         |
|   |  | 2467113 (1)-37   | 20-Jun-24 | Night time | 9   | 343               |         |                 |         |         |
|   |  | 2467113 (1)-38   | 20-Jun-24 | Night time | 10  | 349               |         |                 |         |         |
|   |  | 2467113 (1)-39   | 20-Jun-24 | Night time | 11  | 736               |         |                 |         |         |
|   |  | 2467113 (1)-40   | 20-Jun-24 | Night time | 12  | 859               |         |                 |         |         |
|   |  | 2467113 (1)-41   | 20-Jun-24 | Night time | 13  | 770               |         |                 |         |         |
|   |  | 2467113 (1)-42   | 20-Jun-24 | Night time | 14  | 878               |         |                 |         |         |
|   |  | 2467113 (1)-43   | 20-Jun-24 | Night time | 15  | 791               |         |                 |         |         |
|   |  | 2467113 (1)-44   | 20-Jun-24 | Night time | 16  | 837               |         |                 |         |         |
|   |  | 2467113 (1)-45   | 20-Jun-24 | Night time | 17  | 857               |         |                 |         |         |
|   |  | 2467113 (1)-46   | 20-Jun-24 | Night time | 18  | 796               |         |                 |         |         |

Technical Management

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Supot Salamteh  
Section Head

Approved by

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Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (1)-1

Page 3 of 6

| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 5                                       | Area : S1 Plant : Canteen : ห้องน้ำชาย               | 2467113 (1)-47   | 20-Jun-24 | Day time   | 1   | 906               | 917     | 50              | 100     | Pass    |
|   |  | 2467113 (1)-48   | 20-Jun-24 | Day time   | 2   | 992               |         |                 |         |         |
|   |  | 2467113 (1)-49   | 20-Jun-24 | Day time   | 3   | 853               |         |                 |         |         |
|   |  | 2467113 (1)-50   | 20-Jun-24 | Night time | 1   | 309               | 329     | 50              | 100     | Pass    |
|   |  | 2467113 (1)-51   | 20-Jun-24 | Night time | 2   | 346               |         |                 |         |         |
|   |  | 2467113 (1)-52   | 20-Jun-24 | Night time | 3   | 333               |         |                 |         |         |
| 6                                       | Area : S1 Plant : Canteen : ห้องน้ำหญิง              | 2467113 (1)-53   | 20-Jun-24 | Day time   | 1   | 678               | 902     | 50              | 100     | Pass    |
|   |  | 2467113 (1)-54   | 20-Jun-24 | Day time   | 2   | 1,126             |         |                 |         |         |
|   |  | 2467113 (1)-55   | 20-Jun-24 | Night time | 1   | 527               | 540     | 50              | 100     | Pass    |
|   |  | 2467113 (1)-56   | 20-Jun-24 | Night time | 2   | 552               |         |                 |         |         |
| 7                                       | Area : S1 Plant : Canteen : พื้นที่จัดเก็บ Sample QA | 2467113 (1)-57   | 20-Jun-24 | Day time   | 1   | 1,032             | 1416    | 100             | 200     | Pass    |
|   |  | 2467113 (1)-58   | 20-Jun-24 | Day time   | 2   | 1,226             |         |                 |         |         |
|   |  | 2467113 (1)-59   | 20-Jun-24 | Day time   | 3   | 1,971             |         |                 |         |         |
|   |  | 2467113 (1)-60   | 20-Jun-24 | Day time   | 4   | 1,076             |         |                 |         |         |
|   |  | 2467113 (1)-61   | 20-Jun-24 | Day time   | 5   | 1,369             |         |                 |         |         |
|   |  | 2467113 (1)-62   | 20-Jun-24 | Day time   | 6   | 1,619             |         |                 |         |         |
|   |  | 2467113 (1)-63   | 20-Jun-24 | Day time   | 7   | 1,036             |         |                 |         |         |
|   |  | 2467113 (1)-64   | 20-Jun-24 | Day time   | 8   | 1,254             |         |                 |         |         |
|   |  | 2467113 (1)-65   | 20-Jun-24 | Day time   | 9   | 2,160             |         |                 |         |         |
|   |  | 2467113 (1)-66   | 20-Jun-24 | Night time | 1   | 417               | 459     | 100             | 200     | Pass    |
|   |  | 2467113 (1)-67   | 20-Jun-24 | Night time | 2   | 393               |         |                 |         |         |
|   |  | 2467113 (1)-68   | 20-Jun-24 | Night time | 3   | 393               |         |                 |         |         |
|   |  | 2467113 (1)-69   | 20-Jun-24 | Night time | 4   | 573               |         |                 |         |         |
|   |  | 2467113 (1)-70   | 20-Jun-24 | Night time | 5   | 411               |         |                 |         |         |
|   |  | 2467113 (1)-71   | 20-Jun-24 | Night time | 6   | 536               |         |                 |         |         |
|   |  | 2467113 (1)-72   | 20-Jun-24 | Night time | 7   | 371               |         |                 |         |         |
|   |  | 2467113 (1)-73   | 20-Jun-24 | Night time | 8   | 523               |         |                 |         |         |
|   |  | 2467113 (1)-74   | 20-Jun-24 | Night time | 9   | 511               |         |                 |         |         |
| 8                                       | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณอรุณี     | 2467113 (1)-75   | 20-Jun-24 | Day time   | 1   | 569               | -       | 400-500         | -       | Pass    |
| 9                                       | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณสุพล      | 2467113 (1)-76   | 20-Jun-24 | Day time   | 1   | 639               | -       | 400-500         | -       | Pass    |
| 10                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณเอศศักดิ์ | 2467113 (1)-77   | 20-Jun-24 | Day time   | 1   | 850               | -       | 400-500         | -       | Pass    |
| 11                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณยุทธพงษ์  | 2467113 (1)-78   | 20-Jun-24 | Day time   | 1   | 328               | -       | 400-500         | -       | Fail    |

Technical Management

  
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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (1)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 12                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณองอาจ     | 2467113 (1)-79   | 20-Jun-24 | Day time   | 1   | 464               | -       | 400-500         | -       | Pass    |
| 13                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณสุชาติ    | 2467113 (1)-80   | 20-Jun-24 | Day time   | 1   | 613               | -       | 400-500         | -       | Pass    |
| 14                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณวาสนา     | 2467113 (1)-81   | 20-Jun-24 | Day time   | 1   | 726               | -       | 400-500         | -       | Pass    |
| 15                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณปฐกานต์   | 2467113 (1)-82   | 20-Jun-24 | Day time   | 1   | 590               | -       | 400-500         | -       | Pass    |
| 16                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณธีระพงษ์  | 2467113 (1)-83   | 20-Jun-24 | Day time   | 1   | 667               | -       | 400-500         | -       | Pass    |
| 17                                      | Spot : S1 Plant : Office S1 : โต๊ะทำงาน คุณสุกัญญา   | 2467113 (1)-84   | 20-Jun-24 | Day time   | 1   | 621               | -       | 400-500         | -       | Pass    |
| 18                                      | Spot : S1 Plant : Office S1 : เครื่องถ่ายเอกสาร      | 2467113 (1)-85   | 20-Jun-24 | Day time   | 1   | 704               | -       | 300-400         | -       | Pass    |
| 19                                      | Area : S1 Plant : Office S1 : ห้องประชุม S1          | 2467113 (1)-86   | 20-Jun-24 | Day time   | 1   | 590               | 657     | 150             | 300     | Pass    |
|   |  | 2467113 (1)-87   | 20-Jun-24 | Day time   | 2   | 782               |         |                 |         |         |
|   |  | 2467113 (1)-88   | 20-Jun-24 | Day time   | 3   | 673               |         |                 |         |         |
|   |  | 2467113 (1)-89   | 20-Jun-24 | Day time   | 4   | 666               |         |                 |         |         |
|   |  | 2467113 (1)-90   | 20-Jun-24 | Day time   | 5   | 711               |         |                 |         |         |
|   |  | 2467113 (1)-91   | 20-Jun-24 | Day time   | 6   | 522               |         |                 |         |         |
| 20                                      | Area : S1 Plant : Office S1 : ห้องเก็บของโรงงาน 1    | 2467113 (1)-92   | 20-Jun-24 | Day time   | 1   | 854               | 767     | 100             | 200     | Pass    |
|   |  | 2467113 (1)-93   | 20-Jun-24 | Day time   | 2   | 705               |         |                 |         |         |
|   |  | 2467113 (1)-94   | 20-Jun-24 | Day time   | 3   | 708               |         |                 |         |         |
|   |  | 2467113 (1)-95   | 20-Jun-24 | Day time   | 4   | 801               |         |                 |         |         |
|   |  | 2467113 (1)-96   | 20-Jun-24 | Night time | 1   | 777               | 734     | 100             | 200     | Pass    |
|   |  | 2467113 (1)-97   | 20-Jun-24 | Night time | 2   | 641               |         |                 |         |         |
|   |  | 2467113 (1)-98   | 20-Jun-24 | Night time | 3   | 789               |         |                 |         |         |
|   |  | 2467113 (1)-99   | 20-Jun-24 | Night time | 4   | 728               |         |                 |         |         |
| 21                                      | Spot : S1 Plant : ENG S1 : คอมพิวเตอร์เครื่องวัดขนาด | 2467113 (1)-100  | 20-Jun-24 | Day time   | 1   | 577               | -       | 400-500         | -       | Pass    |
| 22                                      | Spot : S1 Plant : ENG S1 : โต๊ะทำงาน คุณธีรพัฒน์     | 2467113 (1)-101  | 20-Jun-24 | Day time   | 1   | 700               | -       | 400-500         | -       | Pass    |
| 23                                      | Spot : S1 Plant : ENG S1 : โต๊ะทำงาน คุณพิเชษฐ์      | 2467113 (1)-102  | 20-Jun-24 | Day time   | 1   | 618               | -       | 400-500         | -       | Pass    |

Technical Management

  
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Section Head

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (1)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                                    |                        |                        |        |                   |         |                    |         |              |
|---|--|------------------------------------|------------------------|------------------------|--------|-------------------|---------|--------------------|---------|--------------|
| Lay out No.                             | Location   | Reference Number                   | Date                   | Time                   | No.    | Illuminance (Lux) |         | Guideline Limit    |         | Comment      |
|   |  |                                    |                        |                        |        | Spot              | Average | Spot/Min           | Average |              |
| 24                                      | Spot : S1 Plant : ENG S1 : โต๊ะทำงาน คุณศรวิทย์                      | 2467113 (1)-103                    | 20-Jun-24              | Day time               | 1      | 680               | -       | 400-500            | -       | Pass         |
| 26                                      | Spot : S1 Plant : ENG S1 : โต๊ะทำงาน Mr. Miyake                      | 2467113 (1)-104                    | 20-Jun-24              | Day time               | 1      | 579               | -       | 400-500            | -       | Pass         |
| 27                                      | Spot : S1 Plant : ENG S1 : โต๊ะทำงาน Mr. Yoshitomi                   | 2467113 (1)-105                    | 20-Jun-24              | Day time               | 1      | 507               | -       | 400-500            | -       | Pass         |
| 28                                      | Spot : S1 Plant : Dies repair : เครื่องเจาะ Reduction Area Dies No.1 | 2467113 (1)-106<br>2467113 (1)-107 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 495<br>473        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 29                                      | Spot : S1 Plant : Dies repair : เครื่องเจาะ Reduction Area Dies No.2 | 2467113 (1)-108<br>2467113 (1)-109 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 499<br>448        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 30                                      | Spot : S1 Plant : Dies repair : เครื่องเจาะ Reduction Area DiesNo.3  | 2467113 (1)-110<br>2467113 (1)-111 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 430<br>441        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 31                                      | Spot : S1 Plant : Dies repair : เครื่องเหลาชิ้น Reduction            | 2467113 (1)-112<br>2467113 (1)-113 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 687<br>498        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 32                                      | Spot : S1 Plant : Dies repair : เครื่อง Microscope No.1              | 2467113 (1)-114<br>2467113 (1)-115 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 537<br>488        | -<br>-  | 400-500<br>400-500 | -<br>-  | Pass<br>Pass |
| 33                                      | Spot : S1 Plant : Dies repair : เครื่อง Microscope No.2              | 2467113 (1)-116<br>2467113 (1)-117 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 521<br>483        | -<br>-  | 400-500<br>400-500 | -<br>-  | Pass<br>Pass |
| 34                                      | Spot : S1 Plant : Dies repair : เครื่อง Microscope No.3              | 2467113 (1)-118<br>2467113 (1)-119 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 536<br>480        | -<br>-  | 400-500<br>400-500 | -<br>-  | Pass<br>Pass |
| 35                                      | Spot : S1 Plant : Dies repair : เครื่องเจาะ Bearing No.1             | 2467113 (1)-120<br>2467113 (1)-121 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 543<br>496        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 36                                      | Spot : S1 Plant : Dies repair : เครื่องเจาะ Bearing No.2             | 2467113 (1)-122<br>2467113 (1)-123 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 553<br>479        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |
| 37                                      | Spot : S1 Plant : Dies repair : คอมพิวเตอร์ขนาด Dies No.1            | 2467113 (1)-124<br>2467113 (1)-125 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 403<br>326        | -<br>-  | 400-500<br>400-500 | -<br>-  | Pass<br>Fail |
| 38                                      | Spot : S1 Plant : Dies repair : คอมพิวเตอร์ขนาด Dies No.2            | 2467113 (1)-126<br>2467113 (1)-127 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 559<br>437        | -<br>-  | 400-500<br>400-500 | -<br>-  | Pass<br>Pass |
| 39                                      | Spot : S1 Plant : Dies repair : เครื่องขึ้นหมายเลข Dies              | 2467113 (1)-128<br>2467113 (1)-129 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 620<br>586        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |

Technical Management

Supot Salamteh  
Section Head

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Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (1)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (1)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                                    |                        |                        |        |                   |         |                    |         |              |
|---|---|------------------------------------|------------------------|------------------------|--------|-------------------|---------|--------------------|---------|--------------|
| Lay out No.                             | Location  | Reference Number                   | Date                   | Time                   | No.    | Illuminance (Lux) |         | Guideline Limit    |         | Comment      |
|   |   |                                    |                        |                        |        | Spot              | Average | Spot/Min           | Average |              |
| 40                                      | Spot : S1 Plant : Dies repair : เครื่องล้าง Dies        | 2467113 (1)-130<br>2467113 (1)-131 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 649<br>173        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Fail |
| 41                                      | Spot : S1 Plant : Dies repair : เครื่องเหลาชิ้น Bearing | 2467113 (1)-132<br>2467113 (1)-133 | 20-Jun-24<br>20-Jun-24 | Day time<br>Night time | 1<br>1 | 647<br>474        | -<br>-  | 200-300<br>200-300 | -<br>-  | Pass<br>Pass |

Measurement by : Wikrom Meesiri

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (2)-1

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### Sumiden Steel Wire (Thailand) Co., Ltd.

| Lay out No. | Location   | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|-------------|--|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
|             |  |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 1           | Area : S1 Plant : MN Sect. : Substation 115 KV.        | 2467113 (2)-1    | 20-Jun-24 | Day time | 1   | 570               | 664     | 100             | 200     | Pass    |
|             |  | 2467113 (2)-2    | 20-Jun-24 | Day time | 2   | 401               |         |                 |         |         |
|             |  | 2467113 (2)-3    | 20-Jun-24 | Day time | 3   | 478               |         |                 |         |         |
|             |  | 2467113 (2)-4    | 20-Jun-24 | Day time | 4   | 380               |         |                 |         |         |
|             |  | 2467113 (2)-5    | 20-Jun-24 | Day time | 5   | 676               |         |                 |         |         |
|             |  | 2467113 (2)-6    | 20-Jun-24 | Day time | 6   | 648               |         |                 |         |         |
|             |  | 2467113 (2)-7    | 20-Jun-24 | Day time | 7   | 1,520             |         |                 |         |         |
|             |  | 2467113 (2)-8    | 20-Jun-24 | Day time | 8   | 1,533             |         |                 |         |         |
|             |  | 2467113 (2)-9    | 20-Jun-24 | Day time | 9   | 771               |         |                 |         |         |
|             |  | 2467113 (2)-10   | 20-Jun-24 | Day time | 10  | 655               |         |                 |         |         |
|             |  | 2467113 (2)-11   | 20-Jun-24 | Day time | 11  | 455               |         |                 |         |         |
|             |  | 2467113 (2)-12   | 20-Jun-24 | Day time | 12  | 474               |         |                 |         |         |
|             |  | 2467113 (2)-13   | 20-Jun-24 | Day time | 13  | 525               |         |                 |         |         |
|             |  | 2467113 (2)-14   | 20-Jun-24 | Day time | 14  | 526               |         |                 |         |         |
|             |  | 2467113 (2)-15   | 20-Jun-24 | Day time | 15  | 423               |         |                 |         |         |
|             |  | 2467113 (2)-16   | 20-Jun-24 | Day time | 16  | 728               |         |                 |         |         |
|             |  | 2467113 (2)-17   | 20-Jun-24 | Day time | 17  | 660               |         |                 |         |         |
|             |  | 2467113 (2)-18   | 20-Jun-24 | Day time | 18  | 544               |         |                 |         |         |
| 2           | Area : S1 Plant : MN Sect. : พื้นที่ซ่อมงาน Shop MN    | 2467113 (2)-19   | 20-Jun-24 | Day time | 1   | 193               | 185     | 150             | 300     | Fail    |
|             |  | 2467113 (2)-20   | 20-Jun-24 | Day time | 2   | 177               |         |                 |         |         |
| 3           | Area : S1 Plant : MN Sect. : พื้นที่วางของ Shop MN     | 2467113 (2)-21   | 20-Jun-24 | Day time | 1   | 263               | 241     | 100             | 200     | Pass    |
|             |  | 2467113 (2)-22   | 20-Jun-24 | Day time | 2   | 176               |         |                 |         |         |
|             |  | 2467113 (2)-23   | 20-Jun-24 | Day time | 3   | 220               |         |                 |         |         |
|             |  | 2467113 (2)-24   | 20-Jun-24 | Day time | 4   | 217               |         |                 |         |         |
|             |  | 2467113 (2)-25   | 20-Jun-24 | Day time | 5   | 249               |         |                 |         |         |
|             |  | 2467113 (2)-26   | 20-Jun-24 | Day time | 6   | 226               |         |                 |         |         |
|             |  | 2467113 (2)-27   | 20-Jun-24 | Day time | 7   | 267               |         |                 |         |         |
|             |  | 2467113 (2)-28   | 20-Jun-24 | Day time | 8   | 309               |         |                 |         |         |
| 4           | Spot : S1 Plant : MN Sect. : โต๊ะเอกสาร Shop MN        | 2467113 (2)-29   | 20-Jun-24 | Day time | 1   | 243               | -       | 400-500         | -       | Fail    |
| 5           | Spot : S1 Plant : MN Sect. : เครื่องเจาะ Shop MN       | 2467113 (2)-30   | 20-Jun-24 | Day time | 1   | 336               | -       | 200-300         | -       | Pass    |
| 6           | Spot : S1 Plant : MN Sect. : เครื่องขัดชิ้นงาน Shop MN | 2467113 (2)-31   | 20-Jun-24 | Day time | 1   | 332               | -       | 200-300         | -       | Pass    |
| 7           | Spot : S1 Plant : MN Sect. : เครื่อง Press Shop MN     | 2467113 (2)-32   | 20-Jun-24 | Day time | 1   | 209               | -       | 200-300         | -       | Pass    |

Technical Management

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Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.

7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (2)-1

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### Sumiden Steel Wire (Thailand) Co., Ltd.

| Lay out No. | Location  | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|-------------|---|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
|             |   |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 8           | Spot : S1 Plant : MN Sect. : Boiler No.1                      | 2467113 (2)-33   | 20-Jun-24 | Day time | 1   | 1,080             | -       | 200-300         | -       | Pass    |
|             |   | 2467113 (2)-34   | 20-Jun-24 | Day time | 2   | 1,082             | -       | 300             | -       |         |
|             |   | 2467113 (2)-35   | 20-Jun-24 | Day time | 3   | 376               | -       | 200             | -       |         |
| 9           | Spot : S1 Plant : MN Sect. : Boiler No.2                      | 2467113 (2)-36   | 20-Jun-24 | Day time | 1   | 4,180             | -       | 200-300         | -       | Pass    |
|             |   | 2467113 (2)-37   | 20-Jun-24 | Day time | 2   | 3,040             | -       | 600             | -       |         |
|             |   | 2467113 (2)-38   | 20-Jun-24 | Day time | 3   | 2,090             | -       | 300             | -       |         |
| 12          | Spot : S1 Plant : MN Sect. : ตู้ Air Compressor No.01         | 2467113 (2)-39   | 20-Jun-24 | Day time | 1   | 240               | -       | 200-300         | -       | Pass    |
| 13          | Area : S1 Plant : Wastewater Treatment Plant : โรงเก็บน้ำขาร  | 2467113 (2)-40   | 20-Jun-24 | Day time | 1   | 263               | 253     | 100             | 200     | Pass    |
|             |   | 2467113 (2)-41   | 20-Jun-24 | Day time | 2   | 241               |         |                 |         |         |
|             |   | 2467113 (2)-42   | 20-Jun-24 | Day time | 3   | 216               |         |                 |         |         |
|             |   | 2467113 (2)-43   | 20-Jun-24 | Day time | 4   | 255               |         |                 |         |         |
|             |   | 2467113 (2)-44   | 20-Jun-24 | Day time | 5   | 278               |         |                 |         |         |
|             |   | 2467113 (2)-45   | 20-Jun-24 | Day time | 6   | 266               |         |                 |         |         |
| 14          | Spot : S1 Plant : Wastewater Treatment Plant : โรงผสมน้ำขาร   | 2467113 (2)-46   | 20-Jun-24 | Day time | 1   | 764               | -       | 200-300         | -       | Pass    |
| 15          | Spot : S1 Plant : Wastewater Treatment Plant : โต๊ะ Calibrate | 2467113 (2)-47   | 20-Jun-24 | Day time | 1   | 852               | -       | 400-500         | -       | Pass    |
| 16          | Spot : S1 Plant : Wastewater Treatment Plant : ผนัง Control   | 2467113 (2)-48   | 20-Jun-24 | Day time | 1   | 618               | -       | 200-300         | -       | Pass    |

Technical Management

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024  
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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location                                     | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 18                                      | Area : S1 Plant : PK Sect. : ทางเดิน Line PK | 2467113 (2)-49   | 20-Jun-24 | Day time   | 1   | 1,526             | 1061    | 50              | 100     | Pass    |
|   |  | 2467113 (2)-50   | 20-Jun-24 | Day time   | 2   | 1,183             |         |                 |         |         |
|   |  | 2467113 (2)-51   | 20-Jun-24 | Day time   | 3   | 1,117             |         |                 |         |         |
|   |  | 2467113 (2)-52   | 20-Jun-24 | Day time   | 4   | 1,092             |         |                 |         |         |
|   |  | 2467113 (2)-53   | 20-Jun-24 | Day time   | 5   | 1,104             |         |                 |         |         |
|   |  | 2467113 (2)-54   | 20-Jun-24 | Day time   | 6   | 1,061             |         |                 |         |         |
|   |  | 2467113 (2)-55   | 20-Jun-24 | Day time   | 7   | 1,065             |         |                 |         |         |
|   |  | 2467113 (2)-56   | 20-Jun-24 | Day time   | 8   | 1,071             |         |                 |         |         |
|   |  | 2467113 (2)-57   | 20-Jun-24 | Day time   | 9   | 961               |         |                 |         |         |
|   |  | 2467113 (2)-58   | 20-Jun-24 | Day time   | 10  | 703               |         |                 |         |         |
|   |  | 2467113 (2)-59   | 20-Jun-24 | Day time   | 11  | 1,034             |         |                 |         |         |
|   |  | 2467113 (2)-60   | 20-Jun-24 | Day time   | 12  | 1,061             |         |                 |         |         |
|   |  | 2467113 (2)-61   | 20-Jun-24 | Day time   | 13  | 1,018             |         |                 |         |         |
|   |  | 2467113 (2)-62   | 20-Jun-24 | Day time   | 14  | 1,067             |         |                 |         |         |
|   |  | 2467113 (2)-63   | 20-Jun-24 | Day time   | 15  | 953               |         |                 |         |         |
|   |  | 2467113 (2)-64   | 20-Jun-24 | Day time   | 16  | 961               |         |                 |         |         |
|   |  | 2467113 (2)-65   | 20-Jun-24 | Night time | 1   | 170               | 61      | 50              | 100     | Fail    |
|   |  | 2467113 (2)-66   | 20-Jun-24 | Night time | 2   | 112               |         |                 |         |         |
|   |  | 2467113 (2)-67   | 20-Jun-24 | Night time | 3   | 94                |         |                 |         |         |
|   |  | 2467113 (2)-68   | 20-Jun-24 | Night time | 4   | 72                |         |                 |         |         |
|   |  | 2467113 (2)-69   | 20-Jun-24 | Night time | 5   | 110               |         |                 |         |         |
|   |  | 2467113 (2)-70   | 20-Jun-24 | Night time | 6   | 71                |         |                 |         |         |
|   |  | 2467113 (2)-71   | 20-Jun-24 | Night time | 7   | 61                |         |                 |         |         |
|   |  | 2467113 (2)-72   | 20-Jun-24 | Night time | 8   | 71                |         |                 |         |         |
|   |  | 2467113 (2)-73   | 20-Jun-24 | Night time | 9   | 50                |         |                 |         |         |
|   |  | 2467113 (2)-74   | 20-Jun-24 | Night time | 10  | 45                |         |                 |         |         |
|   |  | 2467113 (2)-75   | 20-Jun-24 | Night time | 11  | 40                |         |                 |         |         |
|   |  | 2467113 (2)-76   | 20-Jun-24 | Night time | 12  | 31                |         |                 |         |         |
|   |  | 2467113 (2)-77   | 20-Jun-24 | Night time | 13  | 20                |         |                 |         |         |
|   |  | 2467113 (2)-78   | 20-Jun-24 | Night time | 14  | 12                |         |                 |         |         |
|   |  | 2467113 (2)-79   | 20-Jun-24 | Night time | 15  | 10                |         |                 |         |         |
|   |  | 2467113 (2)-80   | 20-Jun-24 | Night time | 16  | 0                 |         |                 |         |         |
| 19                                      | Area : S1 Plant : PK Sect. : โรงไฟฟ้า PK     | 2467113 (2)-81   | 20-Jun-24 | Day time   | 1   | 206               | 254     | 100             | 200     | Pass    |
|   |  | 2467113 (2)-82   | 20-Jun-24 | Day time   | 2   | 301               |         |                 |         |         |
|   |  | 2467113 (2)-83   | 20-Jun-24 | Night time | 1   | 298               |         | 100             | 200     | Pass    |
|   |  | 2467113 (2)-84   | 20-Jun-24 | Night time | 2   | 268               |         |                 |         |         |

Technical Management

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024  
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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 20                                      | Area : S1 Plant : PK Sect. : จุดวางวัตถุ ต้น PK    | 2467113 (2)-85   | 20-Jun-24 | Day time   | 1   | 1,244             | 1402    | 100             | 200     | Pass    |
|   |  | 2467113 (2)-86   | 20-Jun-24 | Day time   | 2   | 1,425             |         |                 |         |         |
|   |  | 2467113 (2)-87   | 20-Jun-24 | Day time   | 3   | 1,525             |         |                 |         |         |
|   |  | 2467113 (2)-88   | 20-Jun-24 | Day time   | 4   | 1,503             |         |                 |         |         |
|   |  | 2467113 (2)-89   | 20-Jun-24 | Day time   | 5   | 1,453             |         |                 |         |         |
|   |  | 2467113 (2)-90   | 20-Jun-24 | Day time   | 6   | 1,343             |         |                 |         |         |
|   |  | 2467113 (2)-91   | 20-Jun-24 | Day time   | 7   | 1,375             |         |                 |         |         |
|   |  | 2467113 (2)-92   | 20-Jun-24 | Day time   | 8   | 1,345             |         |                 |         |         |
|   |  | 2467113 (2)-93   | 20-Jun-24 | Night time | 1   | 85                | 74      | 100             | 200     | Fail    |
|   |  | 2467113 (2)-94   | 20-Jun-24 | Night time | 2   | 78                |         |                 |         |         |
|   |  | 2467113 (2)-95   | 20-Jun-24 | Night time | 3   | 58                |         |                 |         |         |
|   |  | 2467113 (2)-96   | 20-Jun-24 | Night time | 4   | 52                |         |                 |         |         |
|   |  | 2467113 (2)-97   | 20-Jun-24 | Night time | 5   | 52                |         |                 |         |         |
|   |  | 2467113 (2)-98   | 20-Jun-24 | Night time | 6   | 79                |         |                 |         |         |
|   |  | 2467113 (2)-99   | 20-Jun-24 | Night time | 7   | 80                |         |                 |         |         |
|   |  | 2467113 (2)-100  | 20-Jun-24 | Night time | 8   | 105               |         |                 |         |         |
| 21                                      | Spot : S1 Plant : PK Sect. : จุดติดตั้งวัตถุ       | 2467113 (2)-101  | 20-Jun-24 | Day time   | 1   | 1,135             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-102  | 20-Jun-24 | Day time   | 2   | 1,097             | -       |                 |         |         |
|   |  | 2467113 (2)-103  | 20-Jun-24 | Day time   | 3   | 1,187             | -       |                 |         | Fail    |
|   |  | 2467113 (2)-104  | 20-Jun-24 | Night time | 1   | 86                | -       |                 |         |         |
| 22                                      | Spot : S1 Plant : PK Sect. : โต๊ะทำงาน PK          | 2467113 (2)-105  | 20-Jun-24 | Day time   | 1   | 201               | -       | 400-500         | -       | Fail    |
|   |  | 2467113 (2)-106  | 20-Jun-24 | Night time | 1   | 134               | -       |                 |         |         |
| 23                                      | Spot : S1 Plant : PK Sect. : ตู้ยา HCL             | 2467113 (2)-107  | 20-Jun-24 | Day time   | 1   | 934               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-108  | 20-Jun-24 | Night time | 1   | 75                | -       |                 |         |         |
| 24                                      | Spot : S1 Plant : PK Sect. : ตู้ยา Water Rinse     | 2467113 (2)-109  | 20-Jun-24 | Day time   | 1   | 1,044             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-110  | 20-Jun-24 | Day time   | 2   | 1,037             | -       |                 |         |         |
|   |  | 2467113 (2)-111  | 20-Jun-24 | Day time   | 3   | 995               | -       |                 |         | Fail    |
|   |  | 2467113 (2)-112  | 20-Jun-24 | Night time | 1   | 76                | -       |                 |         |         |
| 25                                      | Spot : S1 Plant : PK Sect. : ตู้ยา Hot Water Rinse | 2467113 (2)-113  | 20-Jun-24 | Day time   | 1   | 1,156             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-114  | 20-Jun-24 | Day time   | 2   | 1,215             | -       |                 |         |         |
|   |  | 2467113 (2)-115  | 20-Jun-24 | Day time   | 3   | 1,227             | -       |                 |         | Fail    |
|   |  | 2467113 (2)-116  | 20-Jun-24 | Night time | 1   | 90                | -       |                 |         |         |
| 26                                      | Spot : S1 Plant : PK Sect. : ตู้ยา Borax           | 2467113 (2)-117  | 20-Jun-24 | Day time   | 1   | 963               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-118  | 20-Jun-24 | Night time | 1   | 80                | -       |                 |         |         |

Technical Management

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (2)

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |  |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|--|
| Lay out No.                             | Location                                     | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |  |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |  |
| 28                                      | Spot : S1 Plant : PK Sect. : ฟ้องแดง PK      | 2467113 (2)-119  | 20-Jun-24 | Day time   | 1   | 390               | -       | 400-500         | -       | Fail    |  |
|   |  | 2467113 (2)-120  | 20-Jun-24 | Night time | 1   | 253               | -       | 400-500         | -       | Fail    |  |
| 31                                      | Area : S1 Plant : DD Sect. : ทางเดิน DD Line | 2467113 (2)-121  | 20-Jun-24 | Day time   | 1   | 769               | 678     | 50              | 100     | Pass    |  |
|   |  | 2467113 (2)-122  | 20-Jun-24 | Day time   | 2   | 812               |         |                 |         |         |  |
|   |  | 2467113 (2)-123  | 20-Jun-24 | Day time   | 3   | 728               |         |                 |         |         |  |
|   |  | 2467113 (2)-124  | 20-Jun-24 | Day time   | 4   | 948               |         |                 |         |         |  |
|   |  | 2467113 (2)-125  | 20-Jun-24 | Day time   | 5   | 786               |         |                 |         |         |  |
|   |  | 2467113 (2)-126  | 20-Jun-24 | Day time   | 6   | 711               |         |                 |         |         |  |
|   |  | 2467113 (2)-127  | 20-Jun-24 | Day time   | 7   | 865               |         |                 |         |         |  |
|   |  | 2467113 (2)-128  | 20-Jun-24 | Day time   | 8   | 650               |         |                 |         |         |  |
|   |  | 2467113 (2)-129  | 20-Jun-24 | Day time   | 9   | 534               |         |                 |         |         |  |
|   |  | 2467113 (2)-130  | 20-Jun-24 | Day time   | 10  | 453               |         |                 |         |         |  |
|   |  | 2467113 (2)-131  | 20-Jun-24 | Day time   | 11  | 464               |         |                 |         |         |  |
|   |  | 2467113 (2)-132  | 20-Jun-24 | Day time   | 12  | 412               |         |                 |         |         |  |
|   |  | 2467113 (2)-133  | 20-Jun-24 | Night time | 1   | 211               | 291     | 50              | 100     | Pass    |  |
|   |  | 2467113 (2)-134  | 20-Jun-24 | Night time | 2   | 265               |         |                 |         |         |  |
|   |  | 2467113 (2)-135  | 20-Jun-24 | Night time | 3   | 271               |         |                 |         |         |  |
|   |  | 2467113 (2)-136  | 20-Jun-24 | Night time | 4   | 262               |         |                 |         |         |  |
|   |  | 2467113 (2)-137  | 20-Jun-24 | Night time | 5   | 259               |         |                 |         |         |  |
|   |  | 2467113 (2)-138  | 20-Jun-24 | Night time | 6   | 259               |         |                 |         |         |  |
|   |  | 2467113 (2)-139  | 20-Jun-24 | Night time | 7   | 285               |         |                 |         |         |  |
|   |  | 2467113 (2)-140  | 20-Jun-24 | Night time | 8   | 288               |         |                 |         |         |  |
|   |  | 2467113 (2)-141  | 20-Jun-24 | Night time | 9   | 345               |         |                 |         |         |  |
|   |  | 2467113 (2)-142  | 20-Jun-24 | Night time | 10  | 372               |         |                 |         |         |  |
|   |  | 2467113 (2)-143  | 20-Jun-24 | Night time | 11  | 355               |         |                 |         |         |  |
|   |  | 2467113 (2)-144  | 20-Jun-24 | Night time | 12  | 322               |         |                 |         |         |  |

Technical Management

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |  |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|--|
| Lay out No.                             | Location                                   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |  |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |  |
| 32                                      | Area : S1 Plant : DD Sect. : พื้นผิวทาง DD | 2467113 (2)-145  | 20-Jun-24 | Day time   | 1   | 2,520             | 1292    | 100             | 200     | Pass    |  |
|   |  | 2467113 (2)-146  | 20-Jun-24 | Day time   | 2   | 676               |         |                 |         |         |  |
|   |  | 2467113 (2)-147  | 20-Jun-24 | Day time   | 3   | 2,130             |         |                 |         |         |  |
|   |  | 2467113 (2)-148  | 20-Jun-24 | Day time   | 4   | 1,620             |         |                 |         |         |  |
|   |  | 2467113 (2)-149  | 20-Jun-24 | Day time   | 5   | 807               |         |                 |         |         |  |
|   |  | 2467113 (2)-150  | 20-Jun-24 | Day time   | 6   | 734               |         |                 |         |         |  |
|   |  | 2467113 (2)-151  | 20-Jun-24 | Day time   | 7   | 1,099             |         |                 |         |         |  |
|   |  | 2467113 (2)-152  | 20-Jun-24 | Day time   | 8   | 1,120             |         |                 |         |         |  |
|   |  | 2467113 (2)-153  | 20-Jun-24 | Day time   | 9   | 993               |         |                 |         |         |  |
|   |  | 2467113 (2)-154  | 20-Jun-24 | Day time   | 10  | 1,239             |         |                 |         |         |  |
|   |  | 2467113 (2)-155  | 20-Jun-24 | Day time   | 11  | 1,508             |         |                 |         |         |  |
|   |  | 2467113 (2)-156  | 20-Jun-24 | Day time   | 12  | 1,587             |         |                 |         |         |  |
|   |  | 2467113 (2)-157  | 20-Jun-24 | Day time   | 13  | 1,374             |         |                 |         |         |  |
|   |  | 2467113 (2)-158  | 20-Jun-24 | Day time   | 14  | 1,515             |         |                 |         |         |  |
|   |  | 2467113 (2)-159  | 20-Jun-24 | Day time   | 15  | 1,077             |         |                 |         |         |  |
|   |  | 2467113 (2)-160  | 20-Jun-24 | Day time   | 16  | 1,113             |         |                 |         |         |  |
|   |  | 2467113 (2)-161  | 20-Jun-24 | Day time   | 17  | 1,266             |         |                 |         |         |  |
|   |  | 2467113 (2)-162  | 20-Jun-24 | Day time   | 18  | 1,312             |         |                 |         |         |  |
|   |  | 2467113 (2)-163  | 20-Jun-24 | Night time | 1   | 251               | 405     | 100             | 200     | Pass    |  |
|   |  | 2467113 (2)-164  | 20-Jun-24 | Night time | 2   | 444               |         |                 |         |         |  |
|   |  | 2467113 (2)-165  | 20-Jun-24 | Night time | 3   | 298               |         |                 |         |         |  |
|   |  | 2467113 (2)-166  | 20-Jun-24 | Night time | 4   | 340               |         |                 |         |         |  |
|   |  | 2467113 (2)-167  | 20-Jun-24 | Night time | 5   | 267               |         |                 |         |         |  |
|   |  | 2467113 (2)-168  | 20-Jun-24 | Night time | 6   | 311               |         |                 |         |         |  |
|   |  | 2467113 (2)-169  | 20-Jun-24 | Night time | 7   | 243               |         |                 |         |         |  |
|   |  | 2467113 (2)-170  | 20-Jun-24 | Night time | 8   | 301               |         |                 |         |         |  |
|   |  | 2467113 (2)-171  | 20-Jun-24 | Night time | 9   | 381               |         |                 |         |         |  |
|   |  | 2467113 (2)-172  | 20-Jun-24 | Night time | 10  | 556               |         |                 |         |         |  |
|   |  | 2467113 (2)-173  | 20-Jun-24 | Night time | 11  | 492               |         |                 |         |         |  |
|   |  | 2467113 (2)-174  | 20-Jun-24 | Night time | 12  | 459               |         |                 |         |         |  |
|   |  | 2467113 (2)-175  | 20-Jun-24 | Night time | 13  | 428               |         |                 |         |         |  |
|   |  | 2467113 (2)-176  | 20-Jun-24 | Night time | 14  | 391               |         |                 |         |         |  |
|   |  | 2467113 (2)-177  | 20-Jun-24 | Night time | 15  | 288               |         |                 |         |         |  |
|   |  | 2467113 (2)-178  | 20-Jun-24 | Night time | 16  | 508               |         |                 |         |         |  |
|   |  | 2467113 (2)-179  | 20-Jun-24 | Night time | 17  | 517               |         |                 |         |         |  |
|   |  | 2467113 (2)-180  | 20-Jun-24 | Night time | 18  | 509               |         |                 |         |         |  |

Technical Management

*Supot S*  
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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (2)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 33                                      | Area : S1 Plant : DD Sect. : ห้องไฟฟ้า DD             | 2467113 (2)-181  | 20-Jun-24 | Day time   | 1   | 424               | 312     | 100             | 200     | Pass    |
|   |   | 2467113 (2)-182  | 20-Jun-24 | Day time   | 2   | 439               |         |                 |         |         |
|   |   | 2467113 (2)-183  | 20-Jun-24 | Day time   | 3   | 178               |         |                 |         |         |
|   |   | 2467113 (2)-184  | 20-Jun-24 | Day time   | 4   | 243               |         |                 |         |         |
|   |   | 2467113 (2)-185  | 20-Jun-24 | Day time   | 5   | 252               |         |                 |         |         |
|   |   | 2467113 (2)-186  | 20-Jun-24 | Day time   | 6   | 407               |         |                 |         |         |
|   |   | 2467113 (2)-187  | 20-Jun-24 | Day time   | 7   | 283               |         |                 |         |         |
|   |   | 2467113 (2)-188  | 20-Jun-24 | Day time   | 8   | 271               |         |                 |         |         |
| 34                                      | Spot : S1 Plant : DD Sect. : โต๊ะเอกสาร               | 2467113 (2)-189  | 20-Jun-24 | Day time   | 1   | 624               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (2)-190  | 20-Jun-24 | Night time | 1   | 186               | -       | 400-500         | -       | Fail    |
| 35                                      | Spot : S1 Plant : DD Sect. : ตู้ Control No.2         | 2467113 (2)-191  | 20-Jun-24 | Day time   | 1   | 1,236             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-192  | 20-Jun-24 | Day time   | 2   | 1,493             | -       | 300             | -       |         |
|   |   | 2467113 (2)-193  | 20-Jun-24 | Day time   | 3   | 1,362             | -       | 200             | -       |         |
|   |   | 2467113 (2)-194  | 20-Jun-24 | Night time | 1   | 224               | -       | 200-300         | -       | Pass    |
| 36                                      | Spot : S1 Plant : DD Sect. : ตู้ Control No.4         | 2467113 (2)-195  | 20-Jun-24 | Day time   | 1   | 1,273             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-196  | 20-Jun-24 | Day time   | 2   | 1,103             | -       | 300             | -       |         |
|   |   | 2467113 (2)-197  | 20-Jun-24 | Day time   | 3   | 1,323             | -       | 200             | -       |         |
|   |   | 2467113 (2)-198  | 20-Jun-24 | Night time | 1   | 369               | -       | 200-300         | -       | Pass    |
| 37                                      | Spot : S1 Plant : DD Sect. : ตู้ Control No.8         | 2467113 (2)-199  | 20-Jun-24 | Day time   | 1   | 1,249             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-200  | 20-Jun-24 | Day time   | 2   | 1,155             | -       | 300             | -       |         |
|   |   | 2467113 (2)-201  | 20-Jun-24 | Day time   | 3   | 1,312             | -       | 200             | -       |         |
|   |   | 2467113 (2)-202  | 20-Jun-24 | Night time | 1   | 411               | -       | 200-300         | -       | Pass    |
| 38                                      | Spot : S1 Plant : DD Sect. : จุด Check Supply MC No.2 | 2467113 (2)-203  | 20-Jun-24 | Day time   | 1   | 2,030             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-204  | 20-Jun-24 | Day time   | 2   | 2,080             | -       | 600             | -       |         |
|   |   | 2467113 (2)-205  | 20-Jun-24 | Day time   | 3   | 2,030             | -       | 300             | -       |         |
|   |   | 2467113 (2)-206  | 20-Jun-24 | Night time | 1   | 605               | -       | 200-300         | -       | Pass    |
| 39                                      | Spot : S1 Plant : DD Sect. : จุด Check Supply MC No.4 | 2467113 (2)-207  | 20-Jun-24 | Day time   | 1   | 1,360             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-208  | 20-Jun-24 | Day time   | 2   | 1,510             | -       | 300             | -       |         |
|   |   | 2467113 (2)-209  | 20-Jun-24 | Day time   | 3   | 1,470             | -       | 200             | -       |         |
|   |   | 2467113 (2)-210  | 20-Jun-24 | Night time | 1   | 753               | -       | 200-300         | -       | Pass    |
| 40                                      | Spot : S1 Plant : DD Sect. : จุด Check Supply MC No.8 | 2467113 (2)-211  | 20-Jun-24 | Day time   | 1   | 1,674             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-212  | 20-Jun-24 | Day time   | 2   | 1,455             | -       | 300             | -       |         |
|   |   | 2467113 (2)-213  | 20-Jun-24 | Day time   | 3   | 1,473             | -       | 200             | -       |         |
|   |   | 2467113 (2)-214  | 20-Jun-24 | Night time | 1   | 527               | -       | 200-300         | -       | Pass    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (2)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (2)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 41                                      | Spot : S1 Plant : DD Sect. : เครื่องทำลายเส้นลวด           | 2467113 (2)-215  | 20-Jun-24 | Day time   | 1   | 1,790             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-216  | 20-Jun-24 | Day time   | 2   | 2,550             | -       | 300             | -       |         |
|   |  | 2467113 (2)-217  | 20-Jun-24 | Day time   | 3   | 2,420             | -       | 200             | -       |         |
|   |  | 2467113 (2)-218  | 20-Jun-24 | Night time | 1   | 444               | -       | 200-300         | -       | Pass    |
| 42                                      | Spot : S1 Plant : DD Sect. : จุดขังน้ำมันใกล้เส้นลวด       | 2467113 (2)-219  | 20-Jun-24 | Day time   | 1   | 2,150             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-220  | 20-Jun-24 | Day time   | 2   | 2,220             | -       | 600             | -       |         |
|   |  | 2467113 (2)-221  | 20-Jun-24 | Day time   | 3   | 2,310             | -       | 300             | -       |         |
|   |  | 2467113 (2)-222  | 20-Jun-24 | Night time | 1   | 394               | -       | 200-300         | -       | Pass    |
| 43                                      | Spot : S1 Plant : DD Sect. : จุดเติมน้ำมันรถโฟล์คสปีทโรง 1 | 2467113 (2)-223  | 20-Jun-24 | Day time   | 1   | 537               | -       | 300-400         | -       | Pass    |
|   |  | 2467113 (2)-224  | 20-Jun-24 | Night time | 1   | 151               | -       | 300-400         | -       | Fail    |
| 44                                      | Area : S1 Plant : DD Sect. : ห้องพักเบรก DD                | 2467113 (2)-225  | 20-Jun-24 | Day time   | 1   | 257               | 303     | 150             | 300     | Pass    |
|   |  | 2467113 (2)-226  | 20-Jun-24 | Day time   | 2   | 334               |         |                 |         |         |
|   |  | 2467113 (2)-227  | 20-Jun-24 | Day time   | 3   | 317               |         |                 |         |         |
|   |  | 2467113 (2)-228  | 20-Jun-24 | Night time | 1   | 266               | 220     | 150             | 300     | Fail    |
|   |  | 2467113 (2)-229  | 20-Jun-24 | Night time | 2   | 137               |         |                 |         |         |
|   |  | 2467113 (2)-230  | 20-Jun-24 | Night time | 3   | 256               |         |                 |         |         |
| 45                                      | Spot : S1 Plant : DD Sect. : โต๊ะเอกสาร (ห้องพักเบรก)      | 2467113 (2)-231  | 20-Jun-24 | Day time   | 1   | 173               | -       | 400-500         | -       | Fail    |
|   |  | 2467113 (2)-232  | 20-Jun-24 | Night time | 1   | 132               | -       | 400-500         | -       | Fail    |

Technical Management

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (2)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (2)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location                                      | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 46                                      | Area : S1 Plant : PK Sect. : สแตนเลส Wire rod | 2467113 (2)-233  | 20-Jun-24 | Day time   | 1   | 523               | 869     | 100             | 200     | Pass    |
|   |   | 2467113 (2)-234  | 20-Jun-24 | Day time   | 2   | 1,618             |         |                 |         |         |
|   |   | 2467113 (2)-235  | 20-Jun-24 | Day time   | 3   | 818               |         |                 |         |         |
|   |   | 2467113 (2)-236  | 20-Jun-24 | Day time   | 4   | 712               |         |                 |         |         |
|   |   | 2467113 (2)-237  | 20-Jun-24 | Day time   | 5   | 888               |         |                 |         |         |
|   |   | 2467113 (2)-238  | 20-Jun-24 | Day time   | 6   | 787               |         |                 |         |         |
|   |   | 2467113 (2)-239  | 20-Jun-24 | Day time   | 7   | 409               |         |                 |         |         |
|   |   | 2467113 (2)-240  | 20-Jun-24 | Day time   | 8   | 367               |         |                 |         |         |
|   |   | 2467113 (2)-241  | 20-Jun-24 | Day time   | 9   | 1,479             |         |                 |         |         |
|   |   | 2467113 (2)-242  | 20-Jun-24 | Day time   | 10  | 707               |         |                 |         |         |
|   |   | 2467113 (2)-243  | 20-Jun-24 | Day time   | 11  | 1,064             |         |                 |         |         |
|   |   | 2467113 (2)-244  | 20-Jun-24 | Day time   | 12  | 1,070             |         |                 |         |         |
|   |   | 2467113 (2)-245  | 20-Jun-24 | Day time   | 13  | 760               |         |                 |         |         |
|   |   | 2467113 (2)-246  | 20-Jun-24 | Day time   | 14  | 674               |         |                 |         |         |
|   |   | 2467113 (2)-247  | 20-Jun-24 | Day time   | 15  | 1,204             |         |                 |         |         |
|   |   | 2467113 (2)-248  | 20-Jun-24 | Day time   | 16  | 1,187             |         |                 |         |         |
|   |   | 2467113 (2)-249  | 20-Jun-24 | Day time   | 17  | 584               |         |                 |         |         |
|   |   | 2467113 (2)-250  | 20-Jun-24 | Day time   | 18  | 757               |         |                 |         |         |
|   |   | 2467113 (2)-251  | 20-Jun-24 | Night time | 1   | 151               | 291     | 100             | 200     |         |
|   |   | 2467113 (2)-252  | 20-Jun-24 | Night time | 2   | 170               |         |                 |         |         |
|   |   | 2467113 (2)-253  | 20-Jun-24 | Night time | 3   | 121               |         |                 |         |         |
|   |   | 2467113 (2)-254  | 20-Jun-24 | Night time | 4   | 138               |         |                 |         |         |
|   |   | 2467113 (2)-255  | 20-Jun-24 | Night time | 5   | 180               |         |                 |         |         |
|   |   | 2467113 (2)-256  | 20-Jun-24 | Night time | 6   | 172               |         |                 |         |         |
|   |   | 2467113 (2)-257  | 20-Jun-24 | Night time | 7   | 255               |         |                 |         |         |
|   |   | 2467113 (2)-258  | 20-Jun-24 | Night time | 8   | 267               |         |                 |         |         |
|   |   | 2467113 (2)-259  | 20-Jun-24 | Night time | 9   | 259               |         |                 |         |         |
|   |   | 2467113 (2)-260  | 20-Jun-24 | Night time | 10  | 249               |         |                 |         |         |
|   |   | 2467113 (2)-261  | 20-Jun-24 | Night time | 11  | 329               |         |                 |         |         |
|   |   | 2467113 (2)-262  | 20-Jun-24 | Night time | 12  | 331               |         |                 |         |         |
|   |   | 2467113 (2)-263  | 20-Jun-24 | Night time | 13  | 329               |         |                 |         |         |
|   |   | 2467113 (2)-264  | 20-Jun-24 | Night time | 14  | 330               |         |                 |         |         |
|   |   | 2467113 (2)-265  | 20-Jun-24 | Night time | 15  | 264               |         |                 |         |         |
|   |   | 2467113 (2)-266  | 20-Jun-24 | Night time | 16  | 290               |         |                 |         |         |
|   |   | 2467113 (2)-267  | 20-Jun-24 | Night time | 17  | 360               |         |                 |         |         |
|   |   | 2467113 (2)-268  | 20-Jun-24 | Night time | 18  | 363               |         |                 |         |         |
| 47                                      | Spot : S1 Plant : PK Sect. : จดเค็ม Borax     | 2467113 (2)-269  | 20-Jun-24 | Day time   | 1   | 570               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (2)-270  | 20-Jun-24 | Night time | 1   | 277               | -       | 200-300         | -       | Pass    |

Technical Management

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Section Head

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (2)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (2)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 48                                      | Spot : S1 Plant : PK Sect. : ถัง Coil Turning MC | 2467113 (2)-271  | 20-Jun-24 | Day time   | 1   | 619               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (2)-272  | 20-Jun-24 | Night time | 1   | 70                | -       | 200-300         | -       | Fail    |

Measurement by : Wikrom Meesiri

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (3)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (3)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 1                                       | Spot : S1 Plant : QA Sect. : จุดวาง Sample QA                       | 2467113 (3)-1    | 20-Jun-24 | Day time   | 1   | 733               | -       | 300-400         | -       | Pass    |
|   |   | 2467113 (3)-2    | 20-Jun-24 | Night time | 1   | 801               | -       | 300-400         | -       | Pass    |
| 3                                       | Spot : S1 Plant : QA Sect. : โต๊ะทดสอบ Microscope                   | 2467113 (3)-3    | 20-Jun-24 | Day time   | 1   | 438               | -       | 800-1200        | -       | Fail    |
|   |   | 2467113 (3)-4    | 20-Jun-24 | Night time | 1   | 496               | -       | 800-1200        | -       | Fail    |
| 4                                       | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน (X-Ray room)                 | 2467113 (3)-5    | 20-Jun-24 | Day time   | 1   | 856               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-6    | 20-Jun-24 | Night time | 1   | 843               | -       | 400-500         | -       | Pass    |
| 5                                       | Spot : S1 Plant : QA Sect. : เครื่อง DZ (X-Ray room)                | 2467113 (3)-7    | 20-Jun-24 | Day time   | 1   | 941               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-8    | 20-Jun-24 | Night time | 1   | 967               | -       | 200-300         | -       | Pass    |
| 6                                       | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน เครื่อง DZ (X-Ray room)      | 2467113 (3)-9    | 20-Jun-24 | Day time   | 1   | 862               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-10   | 20-Jun-24 | Night time | 1   | 832               | -       | 400-500         | -       | Pass    |
| 7                                       | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน (ห้องเตรียมสารเคมี)          | 2467113 (3)-11   | 20-Jun-24 | Day time   | 1   | 654               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-12   | 20-Jun-24 | Night time | 1   | 640               | -       | 400-500         | -       | Pass    |
| 8                                       | Spot : S1 Plant : QA Sect. : โต๊ะทดสอบ สารเคมี ( ห้องเตรียมสารเคมี) | 2467113 (3)-13   | 20-Jun-24 | Day time   | 1   | 842               | -       | 300-400         | -       | Pass    |
|   |   | 2467113 (3)-14   | 20-Jun-24 | Night time | 1   | 730               | -       | 300-400         | -       | Pass    |
| 9                                       | Spot : S1 Plant : QA Sect. : เครื่องหลอมยาง (Rubber Melting )       | 2467113 (3)-15   | 20-Jun-24 | Day time   | 1   | 138               | -       | 200-300         | -       | Fail    |
|   |   | 2467113 (3)-16   | 20-Jun-24 | Night time | 1   | 134               | -       | 200-300         | -       | Fail    |
| 10                                      | Spot : S1 Plant : QA Sect. : เครื่องนวดยาง (Rubber Melting )        | 2467113 (3)-17   | 20-Jun-24 | Day time   | 1   | 360               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-18   | 20-Jun-24 | Night time | 1   | 418               | -       | 200-300         | -       | Pass    |
| 11                                      | Spot : S1 Plant : QA Sect. : เครื่อง Oven (Rubber Melting )         | 2467113 (3)-19   | 20-Jun-24 | Day time   | 1   | 443               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-20   | 20-Jun-24 | Night time | 1   | 423               | -       | 200-300         | -       | Pass    |
| 12                                      | Spot : S1 Plant : QA Sect. : จุดวัด Diameter cord                   | 2467113 (3)-21   | 20-Jun-24 | Day time   | 1   | 631               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-22   | 20-Jun-24 | Night time | 1   | 607               | -       | 400-500         | -       | Pass    |
| 13                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณประสิทธิ์                 | 2467113 (3)-23   | 20-Jun-24 | Day time   | 1   | 424               | -       | 400-500         | -       | Pass    |
| 14                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณอังศุขล                   | 2467113 (3)-24   | 20-Jun-24 | Day time   | 1   | 528               | -       | 400-500         | -       | Pass    |
| 15                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณวนิดา                     | 2467113 (3)-25   | 20-Jun-24 | Day time   | 1   | 562               | -       | 400-500         | -       | Pass    |
| 16                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณรพีพงศ์                   | 2467113 (3)-26   | 20-Jun-24 | Day time   | 1   | 477               | -       | 400-500         | -       | Pass    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (3)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (3)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 17                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณอภพรพร                  | 2467113 (3)-27   | 20-Jun-24 | Day time   | 1   | 562               | -       | 400-500         | -       | Pass    |
| 18                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณพนามชัย                 | 2467113 (3)-28   | 20-Jun-24 | Day time   | 1   | 507               | -       | 400-500         | -       | Pass    |
| 19                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณปฐมพร                   | 2467113 (3)-29   | 20-Jun-24 | Day time   | 1   | 543               | -       | 400-500         | -       | Pass    |
| 20                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณพิไลวรรณ                | 2467113 (3)-30   | 20-Jun-24 | Day time   | 1   | 443               | -       | 400-500         | -       | Pass    |
| 21                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณจริยา                   | 2467113 (3)-31   | 20-Jun-24 | Day time   | 1   | 531               | -       | 400-500         | -       | Pass    |
| 22                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณสุณิดา                  | 2467113 (3)-32   | 20-Jun-24 | Day time   | 1   | 467               | -       | 400-500         | -       | Pass    |
| 23                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงาน คุณธนัญญา                  | 2467113 (3)-33   | 20-Jun-24 | Day time   | 1   | 604               | -       | 400-500         | -       | Pass    |
| 24                                      | Spot : S1 Plant : QA Sect. : จุดวัด Micrometer S2 Filament        | 2467113 (3)-34   | 20-Jun-24 | Day time   | 1   | 508               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-35   | 20-Jun-24 | Night time | 1   | 464               | -       | 400-500         | -       | Pass    |
| 25                                      | Spot : S1 Plant : QA Sect. : โต๊ะชูดยาง                           | 2467113 (3)-36   | 20-Jun-24 | Day time   | 1   | 974               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-37   | 20-Jun-24 | Night time | 1   | 958               | -       | 200-300         | -       | Pass    |
| 26                                      | Spot : S1 Plant : QA Sect. : โต๊ะประกอบ การยึดติดของยางกับเส้นลวด | 2467113 (3)-38   | 20-Jun-24 | Day time   | 1   | 546               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-39   | 20-Jun-24 | Night time | 1   | 449               | -       | 200-300         | -       | Pass    |
| 27                                      | Spot : S1 Plant : QA Sect. : โต๊ะตรวจ สอนชิ้นงาน                  | 2467113 (3)-40   | 20-Jun-24 | Day time   | 1   | 1,579             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-41   | 20-Jun-24 | Day time   | 2   | 723               | -       | 300             | -       | Pass    |
|   |   | 2467113 (3)-42   | 20-Jun-24 | Day time   | 3   | 741               | -       | 200             | -       |         |
|   |   | 2467113 (3)-43   | 20-Jun-24 | Night time | 1   | 1,193             | -       | 200-300         | -       |         |
|   |   | 2467113 (3)-44   | 20-Jun-24 | Night time | 2   | 630               | -       | 300             | -       |         |
|   |   | 2467113 (3)-45   | 20-Jun-24 | Night time | 3   | 841               | -       | 200             | -       |         |
| 28                                      | Spot : S1 Plant : QA Sect. : จุดตัดเส้น ลวดด้วยไฟฟ้า              | 2467113 (3)-46   | 20-Jun-24 | Day time   | 1   | 764               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-47   | 20-Jun-24 | Night time | 1   | 819               | -       | 200-300         | -       | Pass    |
| 29                                      | Spot : S1 Plant : QA Sect. : จุดตัดเส้น ลวด โรง 1                 | 2467113 (3)-48   | 20-Jun-24 | Day time   | 1   | 828               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-49   | 20-Jun-24 | Night time | 1   | 953               | -       | 200-300         | -       | Pass    |
| 30                                      | Spot : S1 Plant : QA Sect. : เครื่องวัด ความยืดหยุ่นของเส้นลวด    | 2467113 (3)-50   | 20-Jun-24 | Day time   | 1   | 522               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-51   | 20-Jun-24 | Night time | 1   | 477               | -       | 400-500         | -       | Pass    |

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (3)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (3)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 31                                      | Spot : S1 Plant : QA Sect. : โต๊ะวัดค่าพัด              | 2467113 (3)-52   | 20-Jun-24 | Day time   | 1   | 678               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-53   | 20-Jun-24 | Night time | 1   | 690               | -       | 400-500         | -       | Pass    |
| 32                                      | Spot : S1 Plant : QA Sect. : จุดซึ่งนำพนักเส้นลวด       | 2467113 (3)-54   | 20-Jun-24 | Day time   | 1   | 469               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-55   | 20-Jun-24 | Night time | 1   | 463               | -       | 200-300         | -       | Pass    |
| 33                                      | Spot : S1 Plant : QA Sect. : โต๊ะวัดแรงดึงของเส้นลวด B3 | 2467113 (3)-56   | 20-Jun-24 | Day time   | 1   | 884               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-57   | 20-Jun-24 | Night time | 1   | 582               | -       | 400-500         | -       | Pass    |
| 34                                      | Spot : S1 Plant : QA Sect. : โต๊ะวัดแรงดึงของเส้นลวด B2 | 2467113 (3)-58   | 20-Jun-24 | Day time   | 1   | 641               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-59   | 20-Jun-24 | Night time | 1   | 652               | -       | 400-500         | -       | Pass    |
| 35                                      | Spot : S1 Plant : QA Sect. : เครื่อง Torque tester      | 2467113 (3)-60   | 20-Jun-24 | Day time   | 1   | 525               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-61   | 20-Jun-24 | Night time | 1   | 681               | -       | 200-300         | -       | Pass    |
| 36                                      | Spot : S1 Plant : QA Sect. : เครื่อง Profile            | 2467113 (3)-62   | 20-Jun-24 | Day time   | 1   | 559               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-63   | 20-Jun-24 | Night time | 1   | 621               | -       | 200-300         | -       | Pass    |
| 37                                      | Spot : S1 Plant : QA Sect. : เครื่อง Test Cu            | 2467113 (3)-64   | 20-Jun-24 | Day time   | 1   | 418               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (3)-65   | 20-Jun-24 | Night time | 1   | 403               | -       | 400-500         | -       | Pass    |
| 38                                      | Spot : S1 Plant : QA Sect. : เครื่องขัด DZ              | 2467113 (3)-66   | 20-Jun-24 | Day time   | 1   | 405               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-67   | 20-Jun-24 | Night time | 1   | 450               | -       | 200-300         | -       | Pass    |
| 39                                      | Spot : S1 Plant : QA Sect. : เครื่องถ่างเกลียว          | 2467113 (3)-68   | 20-Jun-24 | Day time   | 1   | 731               | -       | 300-400         | -       | Pass    |
|   |   | 2467113 (3)-69   | 20-Jun-24 | Night time | 1   | 754               | -       | 300-400         | -       | Pass    |
| 40                                      | Spot : S1 Plant : QA Sect. : โต๊ะคอมพิวเตอรื 1          | 2467113 (3)-70   | 20-Jun-24 | Day time   | 1   | 443               | -       | 400-500         | -       | Pass    |
| 41                                      | Spot : S1 Plant : QA Sect. : โต๊ะคอมพิวเตอรื 2          | 2467113 (3)-71   | 20-Jun-24 | Day time   | 1   | 547               | -       | 400-500         | -       | Pass    |
| 42                                      | Area : S1 Plant : QA Sect. : ห้องพักเบรก QA             | 2467113 (3)-72   | 20-Jun-24 | Day time   | 1   | 725               | 731     | 150             | 300     | Pass    |
|   |   | 2467113 (3)-73   | 20-Jun-24 | Day time   | 2   | 705               |         |                 |         |         |
|   |   | 2467113 (3)-74   | 20-Jun-24 | Day time   | 3   | 763               |         |                 |         |         |
|   |   | 2467113 (3)-75   | 20-Jun-24 | Night time | 1   | 735               | 701     | 150             | 300     | Pass    |
|   |   | 2467113 (3)-76   | 20-Jun-24 | Night time | 2   | 682               |         |                 |         |         |
|   |   | 2467113 (3)-77   | 20-Jun-24 | Night time | 3   | 685               |         |                 |         |         |
| 43                                      | Spot : S1 Plant : QA Sect. : จุดขึ้น Sample (QA room)   | 2467113 (3)-78   | 20-Jun-24 | Day time   | 1   | 755               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (3)-79   | 20-Jun-24 | Night time | 1   | 798               | -       | 200-300         | -       | Pass    |

Technical Management

*Supot S*  
Supot Salamteh  
Section Head

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Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (3)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (3)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 44                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงานคุณวิจิตรดา | 2467113 (3)-80   | 20-Jun-24 | Day time   | 1   | 532               | -       | 400-500         | -       | Pass    |
| 45                                      | Spot : S1 Plant : QA Sect. : โต๊ะทำงานคุณวิภาณี   | 2467113 (3)-81   | 20-Jun-24 | Day time   | 1   | 419               | -       | 400-500         | -       | Pass    |
| 46                                      | Spot : S1 Plant : QA Sect. : โต๊ะตัดเมตร          | 2467113 (3)-82   | 20-Jun-24 | Day time   | 1   | 397               | -       | 300-400         | -       | Pass    |
|   |   | 2467113 (3)-83   | 20-Jun-24 | Night time | 1   | 327               | -       | 300-400         | -       | Pass    |

Measurement by : Wikrom Meesiri

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Assistant Manager

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (4)

Date Received : Jun 22, 2024  
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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 1                                       | Area : S1 Plant : PT Sect. : ห้องนำขน (Pay off)                     | 2467113 (4)-1    | 20-Jun-24 | Day time   | 1   | 330               | 382     | 50              | 100     | Pass    |
|   |   | 2467113 (4)-2    | 20-Jun-24 | Day time   | 2   | 434               |         |                 |         |         |
|   |   | 2467113 (4)-3    | 20-Jun-24 | Night time | 1   | 297               | 283     | 50              | 100     | Pass    |
|   |   | 2467113 (4)-4    | 20-Jun-24 | Night time | 2   | 269               |         |                 |         |         |
| 2                                       | Area : S1 Plant : PT Sect. : ห้องนำหตุ้ง (Pay off)                  | 2467113 (4)-5    | 20-Jun-24 | Day time   | 1   | 322               | 322     | 50              | 100     | Pass    |
|   |   | 2467113 (4)-6    | 20-Jun-24 | Day time   | 2   | 322               |         |                 |         |         |
|   |   | 2467113 (4)-7    | 20-Jun-24 | Night time | 1   | 329               | 298     | 50              | 100     | Pass    |
|   |   | 2467113 (4)-8    | 20-Jun-24 | Night time | 2   | 267               |         |                 |         |         |
| 3                                       | Spot : S1 Plant : PT Sect. : Pay off No.08                          | 2467113 (4)-9    | 20-Jun-24 | Day time   | 1   | 1,438             | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-10   | 20-Jun-24 | Day time   | 2   | 1,476             | -       | 300             | -       |         |
|   |   | 2467113 (4)-11   | 20-Jun-24 | Day time   | 3   | 1,564             | -       | 200             | -       |         |
|   |   | 2467113 (4)-12   | 20-Jun-24 | Night time | 1   | 238               | -       | 400-500         | -       | Fail    |
| 4                                       | Spot : S1 Plant : PT Sect. : Pay off No.17                          | 2467113 (4)-13   | 20-Jun-24 | Day time   | 1   | 1,414             | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-14   | 20-Jun-24 | Day time   | 2   | 1,632             | -       | 300             | -       |         |
|   |   | 2467113 (4)-15   | 20-Jun-24 | Day time   | 3   | 1,658             | -       | 200             | -       |         |
|   |   | 2467113 (4)-16   | 20-Jun-24 | Night time | 1   | 217               | -       | 400-500         | -       | Fail    |
| 5                                       | Spot : S1 Plant : PT Sect. : Pay off No.25                          | 2467113 (4)-17   | 20-Jun-24 | Day time   | 1   | 1,298             | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-18   | 20-Jun-24 | Day time   | 2   | 1,327             | -       | 300             | -       |         |
|   |   | 2467113 (4)-19   | 20-Jun-24 | Day time   | 3   | 1,359             | -       | 200             | -       |         |
|   |   | 2467113 (4)-20   | 20-Jun-24 | Night time | 1   | 232               | -       | 400-500         | -       | Fail    |
| 6                                       | Spot : S1 Plant : PT Sect. : Pay off No.36                          | 2467113 (4)-21   | 20-Jun-24 | Day time   | 1   | 721               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-22   | 20-Jun-24 | Night time | 1   | 280               | -       | 400-500         | -       | Fail    |
| 7                                       | Spot : S1 Plant : PT Sect. : Pay off No.48                          | 2467113 (4)-23   | 20-Jun-24 | Day time   | 1   | 734               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-24   | 20-Jun-24 | Night time | 1   | 240               | -       | 400-500         | -       | Fail    |
| 8                                       | Spot : S1 Plant : PT Sect. : Pay off No.60                          | 2467113 (4)-25   | 20-Jun-24 | Day time   | 1   | 1,250             | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-26   | 20-Jun-24 | Day time   | 2   | 1,334             | -       | 300             | -       |         |
|   |   | 2467113 (4)-27   | 20-Jun-24 | Day time   | 3   | 1,453             | -       | 200             | -       |         |
|   |   | 2467113 (4)-28   | 20-Jun-24 | Night time | 1   | 244               | -       | 400-500         | -       | Fail    |
| 9                                       | Spot : S1 Plant : PT Sect. : จุดจัดเรียง เสา Diffusion Heating Line | 2467113 (4)-29   | 20-Jun-24 | Day time   | 1   | 652               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-30   | 20-Jun-24 | Night time | 1   | 232               | -       | 200-300         | -       | Pass    |
| 10                                      | Spot : S1 Plant : PT Sect. : Boiler No.5                            | 2467113 (4)-31   | 20-Jun-24 | Day time   | 1   | 1,155             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-32   | 20-Jun-24 | Day time   | 2   | 1,436             | -       | 300             | -       |         |
|   |   | 2467113 (4)-33   | 20-Jun-24 | Day time   | 3   | 1,291             | -       | 200             | -       |         |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (4)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (4)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 11                                      | Spot : S1 Plant : PT Sect. : โต๊ะทำงาน (Center Room)          | 2467113 (4)-34   | 20-Jun-24 | Day time   | 1   | 370               | -       | 400-500         | -       | Fail    |
|   |   | 2467113 (4)-35   | 20-Jun-24 | Night time | 1   | 341               | -       | 400-500         | -       | Fail    |
| 12                                      | Spot : S1 Plant : PT Sect. : ตู้ Control (Center Room)        | 2467113 (4)-36   | 20-Jun-24 | Day time   | 1   | 323               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-37   | 20-Jun-24 | Night time | 1   | 325               | -       | 200-300         | -       | Pass    |
| 13                                      | Spot : S1 Plant : PT Sect. : โต๊ะทดสอบ สารเคมี PT             | 2467113 (4)-38   | 20-Jun-24 | Day time   | 1   | 461               | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (4)-39   | 20-Jun-24 | Night time | 1   | 431               | -       | 400-500         | -       | Pass    |
| 14                                      | Spot : S1 Plant : PT Sect. : น้ํา Nitric Line1                | 2467113 (4)-40   | 20-Jun-24 | Day time   | 1   | 1,351             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-41   | 20-Jun-24 | Day time   | 2   | 1,350             | -       | 300             | -       |         |
|   |   | 2467113 (4)-42   | 20-Jun-24 | Day time   | 3   | 1,059             | -       | 200             | -       |         |
|   |   | 2467113 (4)-43   | 20-Jun-24 | Night time | 1   | 339               | -       | 200-300         | -       | Pass    |
| 15                                      | Spot : S1 Plant : PT Sect. : น้ํา Zinc Line 1                 | 2467113 (4)-44   | 20-Jun-24 | Day time   | 1   | 1,698             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-45   | 20-Jun-24 | Day time   | 2   | 1,641             | -       | 300             | -       |         |
|   |   | 2467113 (4)-46   | 20-Jun-24 | Day time   | 3   | 1,170             | -       | 200             | -       |         |
|   |   | 2467113 (4)-47   | 20-Jun-24 | Night time | 1   | 326               | -       | 200-300         | -       | Pass    |
| 16                                      | Spot : S1 Plant : PT Sect. : น้ํา Copper Line 1               | 2467113 (4)-48   | 20-Jun-24 | Day time   | 1   | 1,809             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-49   | 20-Jun-24 | Day time   | 2   | 1,696             | -       | 300             | -       |         |
|   |   | 2467113 (4)-50   | 20-Jun-24 | Day time   | 3   | 1,229             | -       | 200             | -       |         |
|   |   | 2467113 (4)-51   | 20-Jun-24 | Night time | 1   | 348               | -       | 200-300         | -       | Pass    |
| 17                                      | Spot : S1 Plant : PT Sect. : น้ํา Sulfuric Line 1             | 2467113 (4)-52   | 20-Jun-24 | Day time   | 1   | 1,688             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-53   | 20-Jun-24 | Day time   | 2   | 1,674             | -       | 300             | -       |         |
|   |   | 2467113 (4)-54   | 20-Jun-24 | Day time   | 3   | 1,522             | -       | 200             | -       |         |
|   |   | 2467113 (4)-55   | 20-Jun-24 | Night time | 1   | 210               | -       | 200-300         | -       | Pass    |
| 18                                      | Spot : S1 Plant : PT Sect. : จุดจัดเรียง เสา Diffusion Line 1 | 2467113 (4)-56   | 20-Jun-24 | Day time   | 1   | 469               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-57   | 20-Jun-24 | Night time | 1   | 137               | -       | 200-300         | -       | Fail    |
| 19                                      | Spot : S1 Plant : PT Sect. : น้ํา Nitric Line 2               | 2467113 (4)-58   | 20-Jun-24 | Day time   | 1   | 1,288             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-59   | 20-Jun-24 | Day time   | 2   | 1,284             | -       | 300             | -       |         |
|   |   | 2467113 (4)-60   | 20-Jun-24 | Day time   | 3   | 1,528             | -       | 200             | -       |         |
|   |   | 2467113 (4)-61   | 20-Jun-24 | Night time | 1   | 524               | -       | 200-300         | -       | Pass    |
| 20                                      | Spot : S1 Plant : PT Sect. : น้ํา Zinc Line 2                 | 2467113 (4)-62   | 20-Jun-24 | Day time   | 1   | 2,450             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (4)-63   | 20-Jun-24 | Day time   | 2   | 2,460             | -       | 600             | -       |         |
|   |   | 2467113 (4)-64   | 20-Jun-24 | Day time   | 3   | 2,500             | -       | 300             | -       |         |
|   |   | 2467113 (4)-65   | 20-Jun-24 | Night time | 1   | 646               | -       | 200-300         | -       | Pass    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (4)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (4)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |  |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|--|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |  |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |  |
| 21                                      | Spot : S1 Plant : PT Sect. : ภา Copper Line 2                        | 2467113 (4)-66   | 20-Jun-24 | Day time   | 1   | 1,985             | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-67   | 20-Jun-24 | Day time   | 2   | 2,080             | -       | 300             | -       |         |  |
|   |  | 2467113 (4)-68   | 20-Jun-24 | Day time   | 3   | 2,000             | -       | 200             | -       |         |  |
|   |  | 2467113 (4)-69   | 20-Jun-24 | Night time | 1   | 612               | -       | 200-300         | -       | Pass    |  |
| 22                                      | Spot : S1 Plant : PT Sect. : ภา Sulfuric Line 2                      | 2467113 (4)-70   | 20-Jun-24 | Day time   | 1   | 2,060             | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-71   | 20-Jun-24 | Day time   | 2   | 1,920             | -       | 600             | -       |         |  |
|   |  | 2467113 (4)-72   | 20-Jun-24 | Day time   | 3   | 1,580             | -       | 300             | -       |         |  |
|   |  | 2467113 (4)-73   | 20-Jun-24 | Night time | 1   | 560               | -       | 200-300         | -       | Pass    |  |
| 23                                      | Spot : S1 Plant : PT Sect. : จุดจัดเรียงเส้นลวด เตา Diffusion Line 2 | 2467113 (4)-74   | 20-Jun-24 | Day time   | 1   | 495               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-75   | 20-Jun-24 | Night time | 1   | 364               | -       | 200-300         | -       | Pass    |  |
| 24                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.08                   | 2467113 (4)-76   | 20-Jun-24 | Day time   | 1   | 1,156             | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-77   | 20-Jun-24 | Day time   | 2   | 1,510             | -       | 300             | -       |         |  |
|   |  | 2467113 (4)-78   | 20-Jun-24 | Day time   | 3   | 1,592             | -       | 200             | -       |         |  |
|   |  | 2467113 (4)-79   | 20-Jun-24 | Night time | 1   | 183               | -       | 200-300         | -       | Fail    |  |
| 25                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.17                   | 2467113 (4)-80   | 20-Jun-24 | Day time   | 1   | 492               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-81   | 20-Jun-24 | Night time | 1   | 138               | -       | 200-300         | -       | Fail    |  |
| 26                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.24                   | 2467113 (4)-82   | 20-Jun-24 | Day time   | 1   | 854               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-83   | 20-Jun-24 | Night time | 1   | 205               | -       | 200-300         | -       | Pass    |  |
| 27                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.30                   | 2467113 (4)-84   | 20-Jun-24 | Day time   | 1   | 456               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-85   | 20-Jun-24 | Night time | 1   | 201               | -       | 200-300         | -       | Pass    |  |
| 28                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.40                   | 2467113 (4)-86   | 20-Jun-24 | Day time   | 1   | 857               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-87   | 20-Jun-24 | Night time | 1   | 225               | -       | 200-300         | -       | Pass    |  |
| 29                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.51                   | 2467113 (4)-88   | 20-Jun-24 | Day time   | 1   | 724               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-89   | 20-Jun-24 | Night time | 1   | 231               | -       | 200-300         | -       | Pass    |  |
| 30                                      | Spot : S1 Plant : PT Sect. : เครื่อง Take up No.65                   | 2467113 (4)-90   | 20-Jun-24 | Day time   | 1   | 792               | -       | 200-300         | -       | Pass    |  |
|   |  | 2467113 (4)-91   | 20-Jun-24 | Night time | 1   | 253               | -       | 200-300         | -       | Pass    |  |
| 31                                      | Area : S1 Plant : PT Sect. : ห้องนำขยะ (Take up)                     | 2467113 (4)-92   | 20-Jun-24 | Day time   | 1   | 218               | 227     | 50              | 100     | Pass    |  |
|   |  | 2467113 (4)-93   | 20-Jun-24 | Day time   | 2   | 236               |         |                 |         |         |  |
|   |  | 2467113 (4)-94   | 20-Jun-24 | Night time | 1   | 173               | 166     | 50              | 100     | Pass    |  |
|   |  | 2467113 (4)-95   | 20-Jun-24 | Night time | 2   | 158               |         |                 |         |         |  |

Technical Management

  
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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (4)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (4)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |  |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|--|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |  |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |  |
| 32                                      | Area : S1 Plant : PT Sect. : ห้องนำขยะ (Take up)       | 2467113 (4)-96   | 20-Jun-24 | Day time   | 1   | 58                | 93      | 50              | 100     | Fail    |  |
|   |  | 2467113 (4)-97   | 20-Jun-24 | Day time   | 2   | 128               |         |                 |         |         |  |
|   |  | 2467113 (4)-98   | 20-Jun-24 | Night time | 1   | 18                | 92      | 50              | 100     | Fail    |  |
|   |  | 2467113 (4)-99   | 20-Jun-24 | Night time | 2   | 165               |         |                 |         |         |  |
| 33                                      | Spot : S1 Plant : PT Sect. : โต๊ะเอกสาร Take up        | 2467113 (4)-100  | 20-Jun-24 | Day time   | 1   | 480               | -       | 400-500         | -       | Pass    |  |
|   |  | 2467113 (4)-101  | 20-Jun-24 | Night time | 1   | 263               | -       | 400-500         | -       | Fail    |  |
| 34                                      | Area : S1 Plant : PT Sect. : ห้องไฟฟ้า S1 ห้อง 1       | 2467113 (4)-102  | 20-Jun-24 | Day time   | 1   | 125               | 100     | 100             | 200     | Fail    |  |
|   |  | 2467113 (4)-103  | 20-Jun-24 | Day time   | 2   | 103               |         |                 |         |         |  |
|   |  | 2467113 (4)-104  | 20-Jun-24 | Day time   | 3   | 73                |         |                 |         |         |  |
| 35                                      | Area : S1 Plant : PT Sect. : ห้องไฟฟ้า S1 ห้อง 2       | 2467113 (4)-105  | 20-Jun-24 | Day time   | 1   | 100               | 130     | 100             | 200     | Fail    |  |
|   |  | 2467113 (4)-106  | 20-Jun-24 | Day time   | 2   | 155               |         |                 |         |         |  |
|   |  | 2467113 (4)-107  | 20-Jun-24 | Day time   | 3   | 136               |         |                 |         |         |  |
| 36                                      | Area : S1 Plant : PT Sect. : พื้นที่ Pack และวางสินค้า | 2467113 (4)-108  | 20-Jun-24 | Day time   | 1   | 477               | 469     | 150             | 300     | Pass    |  |
|   |  | 2467113 (4)-109  | 20-Jun-24 | Day time   | 2   | 426               |         |                 |         |         |  |
|   |  | 2467113 (4)-110  | 20-Jun-24 | Day time   | 3   | 435               |         |                 |         |         |  |
|   |  | 2467113 (4)-111  | 20-Jun-24 | Day time   | 4   | 482               |         |                 |         |         |  |
|   |  | 2467113 (4)-112  | 20-Jun-24 | Day time   | 5   | 197               |         |                 |         |         |  |
|   |  | 2467113 (4)-113  | 20-Jun-24 | Day time   | 6   | 555               |         |                 |         |         |  |
|   |  | 2467113 (4)-114  | 20-Jun-24 | Day time   | 7   | 565               |         |                 |         |         |  |
|   |  | 2467113 (4)-115  | 20-Jun-24 | Day time   | 8   | 616               |         |                 |         |         |  |
|   |  | 2467113 (4)-116  | 20-Jun-24 | Night time | 1   | 525               | 284     | 150             | 300     | Fail    |  |
|   |  | 2467113 (4)-117  | 20-Jun-24 | Night time | 2   | 255               |         |                 |         |         |  |
|   |  | 2467113 (4)-118  | 20-Jun-24 | Night time | 3   | 226               |         |                 |         |         |  |
|   |  | 2467113 (4)-119  | 20-Jun-24 | Night time | 4   | 262               |         |                 |         |         |  |
|   |  | 2467113 (4)-120  | 20-Jun-24 | Night time | 5   | 253               |         |                 |         |         |  |
|   |  | 2467113 (4)-121  | 20-Jun-24 | Night time | 6   | 227               |         |                 |         |         |  |
|   |  | 2467113 (4)-122  | 20-Jun-24 | Night time | 7   | 250               |         |                 |         |         |  |
|   |  | 2467113 (4)-123  | 20-Jun-24 | Night time | 8   | 277               |         |                 |         |         |  |

Technical Management

  
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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (4)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (4)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location                                     | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 37                                      | Area : S1 Plant : PT Sect. : ทางเดิน PT Line | 2467113 (4)-124  | 20-Jun-24 | Day time   | 1   | 819               | 664     | 50              | 100     | Pass    |
|   |  | 2467113 (4)-125  | 20-Jun-24 | Day time   | 2   | 712               |         |                 |         |         |
|   |  | 2467113 (4)-126  | 20-Jun-24 | Day time   | 3   | 677               |         |                 |         |         |
|   |  | 2467113 (4)-127  | 20-Jun-24 | Day time   | 4   | 850               |         |                 |         |         |
|   |  | 2467113 (4)-128  | 20-Jun-24 | Day time   | 5   | 822               |         |                 |         |         |
|   |  | 2467113 (4)-129  | 20-Jun-24 | Day time   | 6   | 977               |         |                 |         |         |
|   |  | 2467113 (4)-130  | 20-Jun-24 | Day time   | 7   | 912               |         |                 |         |         |
|   |  | 2467113 (4)-131  | 20-Jun-24 | Day time   | 8   | 911               |         |                 |         |         |
|   |  | 2467113 (4)-132  | 20-Jun-24 | Day time   | 9   | 820               |         |                 |         |         |
|   |  | 2467113 (4)-133  | 20-Jun-24 | Day time   | 10  | 817               |         |                 |         |         |
|   |  | 2467113 (4)-134  | 20-Jun-24 | Day time   | 11  | 939               |         |                 |         |         |
|   |  | 2467113 (4)-135  | 20-Jun-24 | Day time   | 12  | 849               |         |                 |         |         |
|   |  | 2467113 (4)-136  | 20-Jun-24 | Day time   | 13  | 559               |         |                 |         |         |
|   |  | 2467113 (4)-137  | 20-Jun-24 | Day time   | 14  | 453               |         |                 |         |         |
|   |  | 2467113 (4)-138  | 20-Jun-24 | Day time   | 15  | 394               |         |                 |         |         |
|   |  | 2467113 (4)-139  | 20-Jun-24 | Day time   | 16  | 231               |         |                 |         |         |
|   |  | 2467113 (4)-140  | 20-Jun-24 | Day time   | 17  | 392               |         |                 |         |         |
|   |  | 2467113 (4)-141  | 20-Jun-24 | Day time   | 18  | 460               |         |                 |         |         |
|   |  | 2467113 (4)-142  | 20-Jun-24 | Day time   | 19  | 576               |         |                 |         |         |
|   |  | 2467113 (4)-143  | 20-Jun-24 | Day time   | 20  | 477               |         |                 |         |         |
|   |  | 2467113 (4)-144  | 20-Jun-24 | Day time   | 21  | 763               |         |                 |         |         |
|   |  | 2467113 (4)-145  | 20-Jun-24 | Day time   | 22  | 764               |         |                 |         |         |
|   |  | 2467113 (4)-146  | 20-Jun-24 | Day time   | 23  | 316               |         |                 |         |         |
|   |  | 2467113 (4)-147  | 20-Jun-24 | Day time   | 24  | 459               |         |                 |         |         |
|   |  | 2467113 (4)-148  | 20-Jun-24 | Night time | 1   | 293               | 370     | 50              | 100     | Pass    |
|   |  | 2467113 (4)-149  | 20-Jun-24 | Night time | 2   | 368               |         |                 |         |         |
|   |  | 2467113 (4)-150  | 20-Jun-24 | Night time | 3   | 351               |         |                 |         |         |
|   |  | 2467113 (4)-151  | 20-Jun-24 | Night time | 4   | 366               |         |                 |         |         |
|   |  | 2467113 (4)-152  | 20-Jun-24 | Night time | 5   | 365               |         |                 |         |         |
|   |  | 2467113 (4)-153  | 20-Jun-24 | Night time | 6   | 291               |         |                 |         |         |
|   |  | 2467113 (4)-154  | 20-Jun-24 | Night time | 7   | 335               |         |                 |         |         |
|   |  | 2467113 (4)-155  | 20-Jun-24 | Night time | 8   | 327               |         |                 |         |         |
|   |  | 2467113 (4)-156  | 20-Jun-24 | Night time | 9   | 406               |         |                 |         |         |
|   |  | 2467113 (4)-157  | 20-Jun-24 | Night time | 10  | 378               |         |                 |         |         |
|   |  | 2467113 (4)-158  | 20-Jun-24 | Night time | 11  | 376               |         |                 |         |         |
|   |  | 2467113 (4)-159  | 20-Jun-24 | Night time | 12  | 414               |         |                 |         |         |
|   |  | 2467113 (4)-160  | 20-Jun-24 | Night time | 13  | 253               |         |                 |         |         |
|   |  | 2467113 (4)-161  | 20-Jun-24 | Night time | 14  | 400               |         |                 |         |         |
|   |  | 2467113 (4)-162  | 20-Jun-24 | Night time | 15  | 420               |         |                 |         |         |
|   |  | 2467113 (4)-163  | 20-Jun-24 | Night time | 16  | 439               |         |                 |         |         |
|   |  | 2467113 (4)-164  | 20-Jun-24 | Night time | 17  | 393               |         |                 |         |         |
|   |  | 2467113 (4)-165  | 20-Jun-24 | Night time | 18  | 377               |         |                 |         |         |

Technical Management

*Supot S*  
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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (4)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (4)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 37                                      | Area : S1 Plant : PT Sect. : ทางเดิน PT Line     | 2467113 (4)-166  | 20-Jun-24 | Night time | 19  | 406               |         |                 |         |         |
|   |  | 2467113 (4)-167  | 20-Jun-24 | Night time | 20  | 358               |         |                 |         |         |
|   |  | 2467113 (4)-168  | 20-Jun-24 | Night time | 21  | 387               |         |                 |         |         |
|   |  | 2467113 (4)-169  | 20-Jun-24 | Night time | 22  | 347               |         |                 |         |         |
|   |  | 2467113 (4)-170  | 20-Jun-24 | Night time | 23  | 411               |         |                 |         |         |
|   |  | 2467113 (4)-171  | 20-Jun-24 | Night time | 24  | 406               |         |                 |         |         |
| 38                                      | Spot : S1 Plant : PT Sect. : เครื่องกลั่น Reel   | 2467113 (4)-172  | 20-Jun-24 | Day time   | 1   | 445               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (4)-173  | 20-Jun-24 | Night time | 1   | 210               | -       | 200-300         | -       | Pass    |
| 39                                      | Spot : S1 Plant : PT Sect. : เครื่องทอสายเส้นลวด | 2467113 (4)-174  | 20-Jun-24 | Day time   | 1   | 1,293             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (4)-175  | 20-Jun-24 | Day time   | 2   | 1,069             | -       | 300             | -       |         |
|   |  | 2467113 (4)-176  | 20-Jun-24 | Day time   | 3   | 1,029             | -       | 200             | -       |         |
|   |  | 2467113 (4)-177  | 20-Jun-24 | Night time | 1   | 243               | -       | 200-300         | -       | Pass    |

Measurement by : Wikrom Meesiri

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |  |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|--|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |  |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |  |
| 1                                       | Area : S2 Plant : 1st Floor : PS Sect. : พื้นที่ Loading        | 2467113 (5)-1    | 20-Jun-24 | Day time   | 1   | 2,382             | 1796    | 100             | 200     | Pass    |  |
|   |   | 2467113 (5)-2    | 20-Jun-24 | Day time   | 2   | 1,210             |         |                 |         |         |  |
|   |   | 2467113 (5)-3    | 20-Jun-24 | Night time | 1   | 276               | 290     | 100             | 200     | Pass    |  |
|   |   | 2467113 (5)-4    | 20-Jun-24 | Night time | 2   | 305               |         |                 |         |         |  |
| 2                                       | Area : S2 Plant : 1st Floor : PS Sect. : พื้นที่วางสินค้า       | 2467113 (5)-5    | 20-Jun-24 | Day time   | 1   | 681               | 776     | 100             | 200     | Pass    |  |
|   |   | 2467113 (5)-6    | 20-Jun-24 | Day time   | 2   | 386               |         |                 |         |         |  |
|   |   | 2467113 (5)-7    | 20-Jun-24 | Day time   | 3   | 472               |         |                 |         |         |  |
|   |   | 2467113 (5)-8    | 20-Jun-24 | Day time   | 4   | 1,565             |         |                 |         |         |  |
|   |   | 2467113 (5)-9    | 20-Jun-24 | Night time | 1   | 392               | 498     | 100             | 200     | Pass    |  |
|   |   | 2467113 (5)-10   | 20-Jun-24 | Night time | 2   | 378               |         |                 |         |         |  |
|   |   | 2467113 (5)-11   | 20-Jun-24 | Night time | 3   | 771               |         |                 |         |         |  |
|   |   | 2467113 (5)-12   | 20-Jun-24 | Night time | 4   | 452               |         |                 |         |         |  |
| 7                                       | Spot : S2 Plant : 1st Floor : PS Sect. : Joint No. 1            | 2467113 (5)-13   | 20-Jun-24 | Day time   | 1   | 949               | -       | 200-300         | -       | Pass    |  |
|   |   | 2467113 (5)-14   | 20-Jun-24 | Night time | 1   | 405               | -       | 200-300         | -       | Pass    |  |
| 8                                       | Spot : S2 Plant : 1st Floor : PS Sect. : Joint No. 3            | 2467113 (5)-15   | 20-Jun-24 | Day time   | 1   | 1,393             | -       | 200-300         | -       | Pass    |  |
|   |   | 2467113 (5)-16   | 20-Jun-24 | Day time   | 2   | 1,364             | -       | 300             | -       |         |  |
|   |   | 2467113 (5)-17   | 20-Jun-24 | Day time   | 3   | 1,314             | -       | 200             | -       |         |  |
|   |   | 2467113 (5)-18   | 20-Jun-24 | Night time | 1   | 382               | -       | 200-300         | -       | Pass    |  |
| 9                                       | Spot : S2 Plant : 1st Floor : PS Sect. : RW Machine No.08       | 2467113 (5)-19   | 20-Jun-24 | Day time   | 1   | 496               | -       | 200-300         | -       | Pass    |  |
|   |   | 2467113 (5)-20   | 20-Jun-24 | Night time | 1   | 528               | -       | 200-300         | -       | Pass    |  |
| 10                                      | Spot : S2 Plant : 1st Floor : PS Sect. : จุดเพ็ทงาน 1           | 2467113 (5)-21   | 20-Jun-24 | Day time   | 1   | 407               | -       | 300-400         | -       | Pass    |  |
|   |   | 2467113 (5)-22   | 20-Jun-24 | Night time | 1   | 796               | -       | 300-400         | -       | Pass    |  |
| 11                                      | Spot : S2 Plant : 1st Floor : PS Sect. : จุดวัด Torsion 1       | 2467113 (5)-23   | 20-Jun-24 | Day time   | 1   | 564               | -       | 400-500         | -       | Pass    |  |
|   |   | 2467113 (5)-24   | 20-Jun-24 | Night time | 1   | 521               | -       | 400-500         | -       | Pass    |  |
| 12                                      | Spot : S2 Plant : 1st Floor : PS Sect. : จุดวัด Torsion 3       | 2467113 (5)-25   | 20-Jun-24 | Day time   | 1   | 574               | -       | 400-500         | -       | Pass    |  |
|   |   | 2467113 (5)-26   | 20-Jun-24 | Night time | 1   | 522               | -       | 400-500         | -       | Pass    |  |
| 13                                      | Spot : S2 Plant : 1st Floor : PS Sect. : Air Balancer No. 7     | 2467113 (5)-27   | 20-Jun-24 | Day time   | 1   | 488               | -       | 200-300         | -       | Pass    |  |
|   |   | 2467113 (5)-28   | 20-Jun-24 | Night time | 1   | 553               | -       | 200-300         | -       | Pass    |  |
| 14                                      | Spot : S2 Plant : 1st Floor : PS Sect. : Air Balancer No. 1     | 2467113 (5)-29   | 20-Jun-24 | Day time   | 1   | 312               | -       | 200-300         | -       | Pass    |  |
|   |   | 2467113 (5)-30   | 20-Jun-24 | Night time | 1   | 500               | -       | 200-300         | -       | Pass    |  |
| 15                                      | Spot : S2 Plant : 1st Floor : PS Sect. : โต๊ะทำงาน Packing room | 2467113 (5)-31   | 20-Jun-24 | Day time   | 1   | 684               | -       | 400-500         | -       | Pass    |  |
|   |   | 2467113 (5)-32   | 20-Jun-24 | Night time | 1   | 739               | -       | 400-500         | -       | Pass    |  |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |      |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |      |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |      |
| 16                                      | Area : S2 Plant : 1st Floor : Office S2 :<br>ห้องนำหญิง (ฝั่ง RHA)   | 2467113 (5)-33   | 20-Jun-24 | Day time   | 1   | 170               |         | 225             | 50      | 100     | Pass |
|   |  | 2467113 (5)-34   | 20-Jun-24 | Day time   | 2   | 280               |         |                 |         |         |      |
|   |  | 2467113 (5)-35   | 20-Jun-24 | Night time | 1   | 113               | 114     | 50              | 100     | Pass    |      |
|   |  | 2467113 (5)-36   | 20-Jun-24 | Night time | 2   | 116               |         |                 |         |         |      |
| 17                                      | Area : S2 Plant : 1st Floor : Office S2 :<br>ห้องนำชาย (ฝั่ง RHA)    | 2467113 (5)-37   | 20-Jun-24 | Day time   | 1   | 284               | 337     | 50              | 100     | Pass    |      |
|   |  | 2467113 (5)-38   | 20-Jun-24 | Day time   | 2   | 390               |         |                 |         |         |      |
|   |  | 2467113 (5)-39   | 20-Jun-24 | Night time | 1   | 65                | 79      | 50              | 100     | Fail    |      |
|   |  | 2467113 (5)-40   | 20-Jun-24 | Night time | 2   | 93                |         |                 |         |         |      |
| 18                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณโชคอนันต์ | 2467113 (5)-41   | 20-Jun-24 | Day time   | 1   | 585               | -       | 400-500         | -       | Pass    |      |
| 19                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน K.Kato       | 2467113 (5)-42   | 20-Jun-24 | Day time   | 1   | 681               | -       | 400-500         | -       | Pass    |      |
| 20                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณธนศักดิ์  | 2467113 (5)-43   | 20-Jun-24 | Day time   | 1   | 633               | -       | 400-500         | -       | Pass    |      |
| 22                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณอนันต์    | 2467113 (5)-44   | 20-Jun-24 | Day time   | 1   | 483               | -       | 400-500         | -       | Pass    |      |
| 23                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณวัฒนา     | 2467113 (5)-45   | 20-Jun-24 | Day time   | 1   | 463               | -       | 400-500         | -       | Pass    |      |
| 24                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณวราชาติ   | 2467113 (5)-46   | 20-Jun-24 | Day time   | 1   | 489               | -       | 400-500         | -       | Pass    |      |
| 26                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณสุธี      | 2467113 (5)-47   | 20-Jun-24 | Day time   | 1   | 644               | -       | 400-500         | -       | Pass    |      |
| 27                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณรุ่งโรจน์ | 2467113 (5)-48   | 20-Jun-24 | Day time   | 1   | 516               | -       | 400-500         | -       | Pass    |      |
| 28                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณพิทักษ์   | 2467113 (5)-49   | 20-Jun-24 | Day time   | 1   | 472               | -       | 400-500         | -       | Pass    |      |
| 29                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณนิวัฒน์   | 2467113 (5)-50   | 20-Jun-24 | Day time   | 1   | 599               | -       | 400-500         | -       | Pass    |      |
| 30                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณชินเดช    | 2467113 (5)-51   | 20-Jun-24 | Day time   | 1   | 548               | -       | 400-500         | -       | Pass    |      |
| 31                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณกิตติ     | 2467113 (5)-52   | 20-Jun-24 | Day time   | 1   | 540               | -       | 400-500         | -       | Pass    |      |
| 32                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณแสงชัย    | 2467113 (5)-53   | 20-Jun-24 | Day time   | 1   | 632               | -       | 400-500         | -       | Pass    |      |

Technical Management

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 33                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : เครื่องถ่ายเอกสาร         | 2467113 (5)-54   | 20-Jun-24 | Day time   | 1   | 524               | -       | 300-400         | -       | Pass    |
| 34                                      | Area : S2 Plant : 1st Floor : MN Sect. : ห้องประชุม                     | 2467113 (5)-55   | 20-Jun-24 | Day time   | 1   | 606               | 603     | 150             | 300     | Pass    |
|   |   | 2467113 (5)-56   | 20-Jun-24 | Day time   | 2   | 600               |         |                 |         |         |
| 35                                      | Area : S2 Plant : 1st Floor : MN Sect. : Spare Part Room No.2 (นอกห้อง) | 2467113 (5)-57   | 20-Jun-24 | Day time   | 1   | 148               | 188     | 100             | 200     | Fail    |
|   |   | 2467113 (5)-58   | 20-Jun-24 | Day time   | 2   | 169               |         |                 |         |         |
|   |   | 2467113 (5)-59   | 20-Jun-24 | Day time   | 3   | 313               |         |                 |         |         |
|   |   | 2467113 (5)-60   | 20-Jun-24 | Day time   | 4   | 123               |         |                 |         |         |
|   |   | 2467113 (5)-61   | 20-Jun-24 | Day time   | 5   | 124               |         |                 |         |         |
|   |   | 2467113 (5)-62   | 20-Jun-24 | Day time   | 6   | 254               |         |                 |         |         |
|   |   | 2467113 (5)-63   | 20-Jun-24 | Night time | 1   | 89                | 74      | 100             | 200     | Fail    |
|   |   | 2467113 (5)-64   | 20-Jun-24 | Night time | 2   | 34                |         |                 |         |         |
|   |   | 2467113 (5)-65   | 20-Jun-24 | Night time | 3   | 100               |         |                 |         |         |
|   |   | 2467113 (5)-66   | 20-Jun-24 | Night time | 4   | 72                |         |                 |         |         |
|   |   | 2467113 (5)-67   | 20-Jun-24 | Night time | 5   | 67                |         |                 |         |         |
|   |   | 2467113 (5)-68   | 20-Jun-24 | Night time | 6   | 83                |         |                 |         |         |
| 36                                      | Area : S2 Plant : 1st Floor : MN Sect. : Part Material                  | 2467113 (5)-69   | 20-Jun-24 | Day time   | 1   | 373               | 264     | 100             | 200     | Pass    |
|   |   | 2467113 (5)-70   | 20-Jun-24 | Day time   | 2   | 268               |         |                 |         |         |
|   |   | 2467113 (5)-71   | 20-Jun-24 | Day time   | 3   | 189               |         |                 |         |         |
|   |   | 2467113 (5)-72   | 20-Jun-24 | Day time   | 4   | 257               |         |                 |         |         |
|   |   | 2467113 (5)-73   | 20-Jun-24 | Day time   | 5   | 218               |         |                 |         |         |
|   |   | 2467113 (5)-74   | 20-Jun-24 | Day time   | 6   | 282               |         |                 |         |         |
|   |   | 2467113 (5)-75   | 20-Jun-24 | Night time | 1   | 122               | 105     | 100             | 200     | Fail    |
|   |   | 2467113 (5)-76   | 20-Jun-24 | Night time | 2   | 126               |         |                 |         |         |
|   |   | 2467113 (5)-77   | 20-Jun-24 | Night time | 3   | 102               |         |                 |         |         |
|   |   | 2467113 (5)-78   | 20-Jun-24 | Night time | 4   | 103               |         |                 |         |         |
| 37                                      | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : จุดขึ้นลงลิฟต์            | 2467113 (5)-81   | 20-Jun-24 | Day time   | 1   | 165               | -       | 400-500         | -       | Fail    |
|   |   | 2467113 (5)-82   | 20-Jun-24 | Night time | 1   | 52                | -       | 400-500         | -       | Fail    |
| 38                                      | Spot : S2 Plant : 1st Floor : MN Sect. (SC2) : เครื่องเจาะชิ้นงาน       | 2467113 (5)-83   | 20-Jun-24 | Day time   | 1   | 280               | -       | 300-400         | -       | Fail    |
|   |   | 2467113 (5)-84   | 20-Jun-24 | Night time | 1   | 51                | -       | 300-400         | -       | Fail    |
| 39                                      | Spot : S2 Plant : 1st Floor : MN Sect. (SC2) : โต๊ะซ่อมงาน              | 2467113 (5)-85   | 20-Jun-24 | Day time   | 1   | 649               | -       | 300-400         | -       | Pass    |
|   |   | 2467113 (5)-86   | 20-Jun-24 | Night time | 1   | 106               | -       | 300-400         | -       | Fail    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 40                                      | Area : S2 Plant : 1st Floor : Traning Center : ห้องอบรมใหญ่    | 2467113 (5)-87   | 20-Jun-24 | Day time   | 1   | 493               | 521     | 150             | 300     | Pass    |
|   |  | 2467113 (5)-88   | 20-Jun-24 | Day time   | 2   | 525               |         |                 |         |         |
|   |  | 2467113 (5)-89   | 20-Jun-24 | Day time   | 3   | 518               |         |                 |         |         |
|   |  | 2467113 (5)-90   | 20-Jun-24 | Day time   | 4   | 511               |         |                 |         |         |
|   |  | 2467113 (5)-91   | 20-Jun-24 | Day time   | 5   | 540               |         |                 |         |         |
|   |  | 2467113 (5)-92   | 20-Jun-24 | Day time   | 6   | 538               |         |                 |         |         |
| 41                                      | Area : S2 Plant : 1st Floor : Traning Center : ห้องอบรมเล็ก    | 2467113 (5)-93   | 20-Jun-24 | Day time   | 1   | 419               | 618     | 150             | 300     | Pass    |
|   |  | 2467113 (5)-94   | 20-Jun-24 | Day time   | 2   | 701               |         |                 |         |         |
|   |  | 2467113 (5)-95   | 20-Jun-24 | Day time   | 3   | 568               |         |                 |         |         |
|   |  | 2467113 (5)-96   | 20-Jun-24 | Day time   | 4   | 786               |         |                 |         |         |
| 42                                      | Area : S2 Plant : 1st Floor : Traning Center : ห้องน้ำชาย      | 2467113 (5)-97   | 20-Jun-24 | Day time   | 1   | 110               | 94      | 50              | 100     | Fail    |
|   |  | 2467113 (5)-98   | 20-Jun-24 | Day time   | 2   | 79                |         |                 |         |         |
| 43                                      | Area : S2 Plant : 1st Floor : Traning Center : ห้องน้ำหญิง     | 2467113 (5)-99   | 20-Jun-24 | Day time   | 1   | 121               | 114     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-100  | 20-Jun-24 | Day time   | 2   | 106               |         |                 |         |         |
| 44                                      | Area : S2 Plant : 1st Floor : MN Sect. : Substation No. 4      | 2467113 (5)-101  | 20-Jun-24 | Day time   | 1   | 333               | 565     | 100             | 200     | Pass    |
|   |  | 2467113 (5)-102  | 20-Jun-24 | Day time   | 2   | 797               |         |                 |         |         |
| 45                                      | Area : S2 Plant : 1st Floor : MN Sect. : Substation No. 3      | 2467113 (5)-103  | 20-Jun-24 | Day time   | 1   | 203               | 271     | 100             | 200     | Pass    |
|   |  | 2467113 (5)-104  | 20-Jun-24 | Day time   | 2   | 293               |         |                 |         |         |
|   |  | 2467113 (5)-105  | 20-Jun-24 | Day time   | 3   | 276               |         |                 |         |         |
|   |  | 2467113 (5)-106  | 20-Jun-24 | Day time   | 4   | 312               |         |                 |         |         |
| 46                                      | Area : S2 Plant : 1st Floor : Office S2 : ห้องพัฒนาค STD (ชาย) | 2467113 (5)-107  | 20-Jun-24 | Day time   | 1   | 350               | 362     | 25              | 50      | Pass    |
|   |  | 2467113 (5)-108  | 20-Jun-24 | Day time   | 2   | 374               |         |                 |         |         |
|   |  | 2467113 (5)-109  | 20-Jun-24 | Night time | 1   | 299               | 272     | 25              | 50      | Pass    |
|   |  | 2467113 (5)-110  | 20-Jun-24 | Night time | 2   | 245               |         |                 |         |         |

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 47                                      | Area : S2 Plant : 1st Floor : Office S2 :<br>ทางเดินหน้า Office     | 2467113 (5)-111  | 20-Jun-24 | Day time   | 1   | 297               | 388     | 50              | 100     | Pass    |
|   |   | 2467113 (5)-112  | 20-Jun-24 | Day time   | 2   | 269               |         |                 |         |         |
|   |   | 2467113 (5)-113  | 20-Jun-24 | Day time   | 3   | 312               |         |                 |         |         |
|   |   | 2467113 (5)-114  | 20-Jun-24 | Day time   | 4   | 326               |         |                 |         |         |
|   |   | 2467113 (5)-115  | 20-Jun-24 | Day time   | 5   | 416               |         |                 |         |         |
|   |   | 2467113 (5)-116  | 20-Jun-24 | Day time   | 6   | 709               |         |                 |         |         |
|   |   | 2467113 (5)-117  | 20-Jun-24 | Night time | 1   | 195               | 135     | 50              | 100     | Pass    |
|   |   | 2467113 (5)-118  | 20-Jun-24 | Night time | 2   | 170               |         |                 |         |         |
|   |   | 2467113 (5)-119  | 20-Jun-24 | Night time | 3   | 115               |         |                 |         |         |
|   |   | 2467113 (5)-120  | 20-Jun-24 | Night time | 4   | 119               |         |                 |         |         |
|   |   | 2467113 (5)-121  | 20-Jun-24 | Night time | 5   | 105               |         |                 |         |         |
|   |   | 2467113 (5)-122  | 20-Jun-24 | Night time | 6   | 108               |         |                 |         |         |
| 49                                      | Area : S2 Plant : 1st Floor : STD : ทางเดินแผนก STD                 | 2467113 (5)-123  | 20-Jun-24 | Day time   | 1   | 1,613             | 1054    | 50              | 100     | Pass    |
|   |   | 2467113 (5)-124  | 20-Jun-24 | Day time   | 2   | 1,430             |         |                 |         |         |
|   |   | 2467113 (5)-125  | 20-Jun-24 | Day time   | 3   | 1,507             |         |                 |         |         |
|   |   | 2467113 (5)-126  | 20-Jun-24 | Day time   | 4   | 1,171             |         |                 |         |         |
|   |   | 2467113 (5)-127  | 20-Jun-24 | Day time   | 5   | 1,436             |         |                 |         |         |
|   |   | 2467113 (5)-128  | 20-Jun-24 | Day time   | 6   | 439               |         |                 |         |         |
|   |   | 2467113 (5)-129  | 20-Jun-24 | Day time   | 7   | 339               |         |                 |         |         |
|   |   | 2467113 (5)-130  | 20-Jun-24 | Day time   | 8   | 493               |         |                 |         |         |
|   |   | 2467113 (5)-131  | 20-Jun-24 | Night time | 1   | 123               | 129     | 50              | 100     | Pass    |
|   |   | 2467113 (5)-132  | 20-Jun-24 | Night time | 2   | 113               |         |                 |         |         |
|   |   | 2467113 (5)-133  | 20-Jun-24 | Night time | 3   | 93                |         |                 |         |         |
|   |   | 2467113 (5)-134  | 20-Jun-24 | Night time | 4   | 77                |         |                 |         |         |
|   |   | 2467113 (5)-135  | 20-Jun-24 | Night time | 5   | 85                |         |                 |         |         |
|   |   | 2467113 (5)-136  | 20-Jun-24 | Night time | 6   | 166               |         |                 |         |         |
|   |   | 2467113 (5)-137  | 20-Jun-24 | Night time | 7   | 196               |         |                 |         |         |
|   |   | 2467113 (5)-138  | 20-Jun-24 | Night time | 8   | 182               |         |                 |         |         |
| 51                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณกัญญ์ณิศา | 2467113 (5)-139  | 20-Jun-24 | Day time   | 1   | 668               | -       | 400-500         | -       | Pass    |
| 52                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณพรพรหม    | 2467113 (5)-140  | 20-Jun-24 | Day time   | 1   | 696               | -       | 400-500         | -       | Pass    |
| 53                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณพรหมพร    | 2467113 (5)-141  | 20-Jun-24 | Day time   | 1   | 634               | -       | 400-500         | -       | Pass    |
| 54                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณนิตติพงษ์ | 2467113 (5)-142  | 20-Jun-24 | Day time   | 1   | 643               | -       | 400-500         | -       | Pass    |
| 55                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณธีรวัฒน์  | 2467113 (5)-143  | 20-Jun-24 | Day time   | 1   | 664               | -       | 400-500         | -       | Pass    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |          |     |                   |         |                 |         |         |
|---|--|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 56                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณดาพร     | 2467113 (5)-144  | 20-Jun-24 | Day time | 1   | 731               | -       | 400-500         | -       | Pass    |
| 57                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณพรพิมล   | 2467113 (5)-145  | 20-Jun-24 | Day time | 1   | 644               | -       | 400-500         | -       | Pass    |
| 58                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณวิภาพร   | 2467113 (5)-146  | 20-Jun-24 | Day time | 1   | 632               | -       | 400-500         | -       | Pass    |
| 59                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณชานนท์   | 2467113 (5)-147  | 20-Jun-24 | Day time | 1   | 623               | -       | 400-500         | -       | Pass    |
| 60                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณพรทิพย์  | 2467113 (5)-148  | 20-Jun-24 | Day time | 1   | 670               | -       | 400-500         | -       | Pass    |
| 61                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณเพ็ญภา   | 2467113 (5)-149  | 20-Jun-24 | Day time | 1   | 635               | -       | 400-500         | -       | Pass    |
| 63                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณประทีป   | 2467113 (5)-150  | 20-Jun-24 | Day time | 1   | 567               | -       | 400-500         | -       | Pass    |
| 64                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณนิตติภา  | 2467113 (5)-151  | 20-Jun-24 | Day time | 1   | 661               | -       | 400-500         | -       | Pass    |
| 65                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณพิชิตชัย | 2467113 (5)-152  | 20-Jun-24 | Day time | 1   | 608               | -       | 400-500         | -       | Pass    |
| 66                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณจิราพร   | 2467113 (5)-153  | 20-Jun-24 | Day time | 1   | 621               | -       | 400-500         | -       | Pass    |
| 67                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณสมพร     | 2467113 (5)-154  | 20-Jun-24 | Day time | 1   | 575               | -       | 400-500         | -       | Pass    |
| 69                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณจันสุดา  | 2467113 (5)-155  | 20-Jun-24 | Day time | 1   | 443               | -       | 400-500         | -       | Pass    |
| 70                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะว่าง              | 2467113 (5)-156  | 20-Jun-24 | Day time | 1   | 513               | -       | 400-500         | -       | Pass    |
| 71                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>โต๊ะทำงาน คุณอรรถพร   | 2467113 (5)-157  | 20-Jun-24 | Day time | 1   | 499               | -       | 400-500         | -       | Pass    |
| 73                                      | Spot : S2 Plant : 1st Floor : Office S2 :<br>เครื่องถ่ายเอกสาร     | 2467113 (5)-158  | 20-Jun-24 | Day time | 1   | 493               | -       | 300-400         | -       | Pass    |
| 74                                      | Area : S2 Plant : 1st Floor : Office S2 :<br>ห้องประชุม office     | 2467113 (5)-159  | 20-Jun-24 | Day time | 1   | 460               | 388     | 150             | 300     | Pass    |
|   |  | 2467113 (5)-160  | 20-Jun-24 | Day time | 2   | 305               |         |                 |         |         |
|   |  | 2467113 (5)-161  | 20-Jun-24 | Day time | 3   | 398               |         |                 |         |         |

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 75                                      | Area : S2 Plant : 1st Floor : Office S2 : ห้องเก็บของ            | 2467113 (5)-162  | 20-Jun-24 | Day time   | 1   | 303               | 412     | 100             | 200     | Pass    |
|   |  | 2467113 (5)-163  | 20-Jun-24 | Day time   | 2   | 407               |         |                 |         |         |
|   |  | 2467113 (5)-164  | 20-Jun-24 | Day time   | 3   | 440               |         |                 |         |         |
|   |  | 2467113 (5)-165  | 20-Jun-24 | Day time   | 4   | 496               |         |                 |         |         |
| 76                                      | Spot : S2 Plant : 1st Floor : STD : จุดยืน Sample #1             | 2467113 (5)-166  | 20-Jun-24 | Day time   | 1   | 312               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-167  | 20-Jun-24 | Night time | 1   | 281               | -       | 200-300         | -       | Pass    |
| 77                                      | Spot : S2 Plant : 1st Floor : STD : จุดยืน Sample #2             | 2467113 (5)-168  | 20-Jun-24 | Day time   | 1   | 325               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-169  | 20-Jun-24 | Night time | 1   | 247               | -       | 200-300         | -       | Pass    |
| 78                                      | Area : S2 Plant : 1st Floor : Office S2 : ห้องพักเบรก STD (หญิง) | 2467113 (5)-170  | 20-Jun-24 | Day time   | 1   | 221               | 235     | 150             | 300     | Fail    |
|   |  | 2467113 (5)-171  | 20-Jun-24 | Day time   | 2   | 261               |         |                 |         |         |
|   |  | 2467113 (5)-172  | 20-Jun-24 | Day time   | 3   | 235               |         |                 |         |         |
|   |  | 2467113 (5)-173  | 20-Jun-24 | Day time   | 4   | 221               |         |                 |         |         |
|   |  | 2467113 (5)-174  | 20-Jun-24 | Night time | 1   | 414               | 330     | 150             | 300     | Pass    |
|   |  | 2467113 (5)-175  | 20-Jun-24 | Night time | 2   | 397               |         |                 |         |         |
|   |  | 2467113 (5)-176  | 20-Jun-24 | Night time | 3   | 232               |         |                 |         |         |
|   |  | 2467113 (5)-177  | 20-Jun-24 | Night time | 4   | 278               |         |                 |         |         |
| 79                                      | Area : S2 Plant : 1st Floor : Office S2 : ห้องนำหญิง (ฝั่ง DT2)  | 2467113 (5)-178  | 20-Jun-24 | Day time   | 1   | 143               | 180     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-179  | 20-Jun-24 | Day time   | 2   | 216               |         |                 |         |         |
|   |  | 2467113 (5)-180  | 20-Jun-24 | Night time | 1   | 215               | 230     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-181  | 20-Jun-24 | Night time | 2   | 246               |         |                 |         |         |
| 80                                      | Area : S2 Plant : 1st Floor : Office S2 : ห้องนำชาย (ฝั่ง DT2)   | 2467113 (5)-182  | 20-Jun-24 | Day time   | 1   | 831               | 497     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-183  | 20-Jun-24 | Day time   | 2   | 163               |         |                 |         |         |
|   |  | 2467113 (5)-184  | 20-Jun-24 | Night time | 1   | 223               | 334     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-185  | 20-Jun-24 | Night time | 2   | 445               |         |                 |         |         |
| 85                                      | Spot : S2 Plant : 1st Floor : PS Sect. : เครื่องขมอม Reel        | 2467113 (5)-186  | 20-Jun-24 | Day time   | 1   | 240               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-187  | 20-Jun-24 | Night time | 1   | 112               | -       | 200-300         | -       | Fail    |
| 86                                      | Spot : S2 Plant : 1st Floor : PS Sect : Check Reel (แกะบาร์โค้ด) | 2467113 (5)-188  | 20-Jun-24 | Day time   | 1   | 465               | -       | 400-500         | -       | Pass    |
|   |  | 2467113 (5)-189  | 20-Jun-24 | Night time | 1   | 112               | -       | 400-500         | -       | Fail    |
| 88                                      | Spot : S2 Plant : 1st Floor : MD Sect. : จุดผสมน้ำยาบ่อ 5        | 2467113 (5)-190  | 20-Jun-24 | Day time   | 1   | 2,056             | -       | 300-400         | -       | Pass    |
|   |  | 2467113 (5)-191  | 20-Jun-24 | Day time   | 2   | 2,011             | -       | 600             | -       |         |
|   |  | 2467113 (5)-192  | 20-Jun-24 | Day time   | 3   | 2,109             | -       | 300             | -       |         |
|   |  | 2467113 (5)-193  | 20-Jun-24 | Night time | 1   | 242               | -       | 300-400         | -       | Fail    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :

Project Name :

Project Location:

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024

Date Reported : Jul 03, 2024

Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 93                                      | Spot : S2 Plant : 1st Floor : MD Sect. : จุดผสมน้ำยาบ่อ 3            | 2467113 (5)-194  | 20-Jun-24 | Day time   | 1   | 2,368             | -       | 300-400         | -       | Pass    |
|   |  | 2467113 (5)-195  | 20-Jun-24 | Day time   | 2   | 1,785             | -       | 600             | -       |         |
|   |  | 2467113 (5)-196  | 20-Jun-24 | Day time   | 3   | 1,896             | -       | 300             | -       |         |
|   |  | 2467113 (5)-197  | 20-Jun-24 | Night time | 1   | 279               | -       | 300-400         | -       | Fail    |
| 94                                      | Area : S2 Plant : 1st Floor : MN Sect. : Substation No. 1            | 2467113 (5)-198  | 20-Jun-24 | Day time   | 1   | 25                | 42      | 100             | 200     | Fail    |
|   |  | 2467113 (5)-199  | 20-Jun-24 | Day time   | 2   | 23                |         |                 |         |         |
|   |  | 2467113 (5)-200  | 20-Jun-24 | Day time   | 3   | 68                |         |                 |         |         |
|   |  | 2467113 (5)-201  | 20-Jun-24 | Day time   | 4   | 52                |         |                 |         |         |
| 95                                      | Area : S2 Plant : 1st Floor : WD Sect : ทางเดิน WD Line              | 2467113 (5)-202  | 20-Jun-24 | Day time   | 1   | 836               | 946     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-203  | 20-Jun-24 | Day time   | 2   | 1,158             |         |                 |         |         |
|   |  | 2467113 (5)-204  | 20-Jun-24 | Day time   | 3   | 1,094             |         |                 |         |         |
|   |  | 2467113 (5)-205  | 20-Jun-24 | Day time   | 4   | 1,129             |         |                 |         |         |
|   |  | 2467113 (5)-206  | 20-Jun-24 | Day time   | 5   | 1,051             |         |                 |         |         |
|   |  | 2467113 (5)-207  | 20-Jun-24 | Day time   | 6   | 405               |         |                 |         |         |
|   |  | 2467113 (5)-208  | 20-Jun-24 | Night time | 1   | 178               | 192     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-209  | 20-Jun-24 | Night time | 2   | 205               |         |                 |         |         |
|   |  | 2467113 (5)-210  | 20-Jun-24 | Night time | 3   | 230               |         |                 |         |         |
|   |  | 2467113 (5)-211  | 20-Jun-24 | Night time | 4   | 165               |         |                 |         |         |
|   |  | 2467113 (5)-212  | 20-Jun-24 | Night time | 5   | 195               |         |                 |         |         |
|   |  | 2467113 (5)-213  | 20-Jun-24 | Night time | 6   | 181               |         |                 |         |         |
| 97                                      | Spot : S2 Plant : 1st Floor : MD Sect. : จุดผสมน้ำยาบ่อ 2            | 2467113 (5)-214  | 20-Jun-24 | Day time   | 1   | 2,456             | -       | 300-400         | -       | Pass    |
|   |  | 2467113 (5)-215  | 20-Jun-24 | Day time   | 2   | 2,321             | -       | 600             | -       |         |
|   |  | 2467113 (5)-216  | 20-Jun-24 | Day time   | 3   | 2,398             | -       | 300             | -       |         |
|   |  | 2467113 (5)-217  | 20-Jun-24 | Night time | 1   | 276               | -       | 300-400         | -       | Fail    |
| 98                                      | Area : S2 Plant : 1st Floor : MN Sect. : Substation No. 2            | 2467113 (5)-218  | 20-Jun-24 | Day time   | 1   | 40                | 52      | 100             | 200     | Fail    |
|   |  | 2467113 (5)-219  | 20-Jun-24 | Day time   | 2   | 63                |         |                 |         |         |
| 100                                     | Area : S2 Plant : 1st Floor : MN Sect. : Soft Water & Air Compressor | 2467113 (5)-220  | 20-Jun-24 | Day time   | 1   | 1,092             | 680     | 100             | 200     | Pass    |
|   |  | 2467113 (5)-221  | 20-Jun-24 | Day time   | 2   | 269               |         |                 |         |         |
| 101                                     | Spot : S2 Plant : 1st Floor : MD Sect. : จุดผสมน้ำยาบ่อ 1            | 2467113 (5)-222  | 20-Jun-24 | Day time   | 1   | 2,440             | -       | 300-400         | -       | Pass    |
|   |  | 2467113 (5)-223  | 20-Jun-24 | Day time   | 2   | 2,136             | -       | 600             | -       |         |
|   |  | 2467113 (5)-224  | 20-Jun-24 | Day time   | 3   | 1,998             | -       | 300             | -       |         |
|   |  | 2467113 (5)-225  | 20-Jun-24 | Night time | 1   | 310               | -       | 300-400         | -       | Pass    |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 102                                     | Area : S2 Plant : 1st Floor : WD Sect. : ห้องนำหึ่ง                | 2467113 (5)-226  | 20-Jun-24 | Day time   | 1   | 294               | 278     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-227  | 20-Jun-24 | Day time   | 2   | 262               |         |                 |         |         |
|   |  | 2467113 (5)-228  | 20-Jun-24 | Night time | 1   | 144               | 172     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-229  | 20-Jun-24 | Night time | 2   | 200               |         |                 |         |         |
| 103                                     | Area : S2 Plant : 1st Floor : WD Sect. : ห้องนำชาย                 | 2467113 (5)-230  | 20-Jun-24 | Day time   | 1   | 264               | 226     | 50              | 100     | Pass    |
|   |  | 2467113 (5)-231  | 20-Jun-24 | Day time   | 2   | 187               |         |                 |         |         |
|   |  | 2467113 (5)-232  | 20-Jun-24 | Night time | 1   | 108               | 89      | 50              | 100     | Fail    |
|   |  | 2467113 (5)-233  | 20-Jun-24 | Night time | 2   | 70                |         |                 |         |         |
| 105                                     | Spot : S2 Plant : 1st Floor : ร้อย รพ. : โต๊ะทำงาน รพ. คุณเจ้านิย  | 2467113 (5)-234  | 20-Jun-24 | Day time   | 1   | 963               | -       | 400-500         | -       | Pass    |
|   |  | 2467113 (5)-235  | 20-Jun-24 | Night time | 1   | 268               | -       | 400-500         | -       | Fail    |
| 106                                     | Spot : S2 Plant : 1st Floor : PS Sect. : RW Machine No. 15         | 2467113 (5)-236  | 20-Jun-24 | Day time   | 1   | 559               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-237  | 20-Jun-24 | Night time | 1   | 440               | -       | 200-300         | -       | Pass    |
| 108                                     | Spot : S2 Plant : 1st Floor : PS Sect. : โต๊ะทำงาน RW              | 2467113 (5)-238  | 20-Jun-24 | Day time   | 1   | 469               | -       | 400-500         | -       | Pass    |
|   |  | 2467113 (5)-239  | 20-Jun-24 | Night time | 1   | 564               | -       | 400-500         | -       | Pass    |
| 110                                     | Spot : S2 Plant : 1st Floor : STD : Standing Line / RHA-070        | 2467113 (5)-240  | 20-Jun-24 | Day time   | 1   | 275               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-241  | 20-Jun-24 | Night time | 1   | 154               | -       | 200-300         | -       | Fail    |
| 112                                     | Spot : S2 Plant : 1st Floor : Office S2 : โต๊ะทำงาน คุณอรรษา       | 2467113 (5)-242  | 20-Jun-24 | Day time   | 1   | 617               | -       | 400-500         | -       | Pass    |
| 117                                     | Spot : S2 Plant : 1st Floor : Sect. : ตู้ Air Compressor SC2 No.4  | 2467113 (5)-243  | 20-Jun-24 | Day time   | 1   | 331               | -       | 200-300         | -       | Pass    |
| 118                                     | Spot : S2 Plant : 1st Floor : STD : คอมพิวเตอร์ปรับบาร์โค้ด (ชาย)  | 2467113 (5)-244  | 20-Jun-24 | Day time   | 1   | 205               | -       | 400-500         | -       | Fail    |
|   |  | 2467113 (5)-245  | 20-Jun-24 | Night time | 1   | 237               | -       | 400-500         | -       | Fail    |
| 119                                     | Spot : S2 Plant : 1st Floor : STD : คอมพิวเตอร์ปรับบาร์โค้ด (หญิง) | 2467113 (5)-246  | 20-Jun-24 | Day time   | 1   | 256               | -       | 400-500         | -       | Fail    |
|   |  | 2467113 (5)-247  | 20-Jun-24 | Night time | 1   | 234               | -       | 400-500         | -       | Fail    |
| 122                                     | Area : S2 Plant : 1st Floor : WD Sect. : ห้องพักเบรก WD            | 2467113 (5)-248  | 20-Jun-24 | Day time   | 1   | 388               | 448     | 25              | 50      | Pass    |
|   |  | 2467113 (5)-249  | 20-Jun-24 | Day time   | 2   | 554               |         |                 |         |         |
|   |  | 2467113 (5)-250  | 20-Jun-24 | Day time   | 3   | 416               |         |                 |         |         |
|   |  | 2467113 (5)-251  | 20-Jun-24 | Day time   | 4   | 432               |         |                 |         |         |
|   |  | 2467113 (5)-252  | 20-Jun-24 | Night time | 1   | 346               | 356     | 25              | 50      | Pass    |
|   |  | 2467113 (5)-253  | 20-Jun-24 | Night time | 2   | 389               |         |                 |         |         |
|   |  | 2467113 (5)-254  | 20-Jun-24 | Night time | 3   | 329               |         |                 |         |         |
|   |  | 2467113 (5)-255  | 20-Jun-24 | Night time | 4   | 358               |         |                 |         |         |
|   |  |                  |           |            |     |                   |         |                 |         |         |
|   |  |                  |           |            |     |                   |         |                 |         |         |

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 123                                     | Spot : S2 Plant : 1st Floor : WD Sect : เครื่องทำลายเส้นลวด No.1      | 2467113 (5)-256  | 20-Jun-24 | Day time   | 1   | 401               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-257  | 20-Jun-24 | Night time | 1   | 180               | -       | 200-300         | -       | Fail    |
| 124                                     | Spot : S2 Plant : 1st Floor : WD Sect : เครื่องทำลายเส้นลวด No.2      | 2467113 (5)-258  | 20-Jun-24 | Day time   | 1   | 434               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-259  | 20-Jun-24 | Night time | 1   | 253               | -       | 200-300         | -       | Pass    |
| 125                                     | Spot : S2 Plant : 1st Floor : WD Sect : จุดตัดแก๊ส                    | 2467113 (5)-260  | 20-Jun-24 | Day time   | 1   | 4,270             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-261  | 20-Jun-24 | Day time   | 2   | 4,136             | -       | 600             | -       |         |
|   |   | 2467113 (5)-262  | 20-Jun-24 | Day time   | 3   | 4,229             | -       | 300             | -       |         |
|   |   | 2467113 (5)-263  | 20-Jun-24 | Night time | 1   | 122               | -       | 200-300         | -       | Fail    |
| 126                                     | Area : S2 Plant : 1st Floor : PS Sect : ห้องพักเบรก PS & RW           | 2467113 (5)-264  | 20-Jun-24 | Day time   | 1   | 299               | 227     | 25              | 50      | Pass    |
|   |   | 2467113 (5)-265  | 20-Jun-24 | Day time   | 2   | 209               |         |                 |         |         |
|   |   | 2467113 (5)-266  | 20-Jun-24 | Day time   | 3   | 185               |         |                 |         |         |
|   |   | 2467113 (5)-267  | 20-Jun-24 | Day time   | 4   | 215               |         |                 |         |         |
|   |   | 2467113 (5)-268  | 20-Jun-24 | Night time | 1   | 225               | 278     | 25              | 50      | Pass    |
|   |   | 2467113 (5)-269  | 20-Jun-24 | Night time | 2   | 368               |         |                 |         |         |
|   |   | 2467113 (5)-270  | 20-Jun-24 | Night time | 3   | 305               |         |                 |         |         |
|   |   | 2467113 (5)-271  | 20-Jun-24 | Night time | 4   | 216               |         |                 |         |         |
| 127                                     | Area : S2 Plant : 1st Floor : PS Sect : ห้องพักเบรก Check reel        | 2467113 (5)-272  | 20-Jun-24 | Day time   | 1   | 444               | 446     | 25              | 50      | Pass    |
|   |   | 2467113 (5)-273  | 20-Jun-24 | Day time   | 2   | 448               |         |                 |         |         |
|   |   | 2467113 (5)-274  | 20-Jun-24 | Night time | 1   | 326               | 322     | 25              | 50      | Pass    |
| 130                                     | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณวันฉกาณต์  | 2467113 (5)-276  | 20-Jun-24 | Day time   | 1   | 218               | -       | 400-500         | -       | Fail    |
|   |   |                  |           |            |     |                   |         |                 |         |         |
| 131                                     | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน คุณเบรมฤดี    | 2467113 (5)-277  | 20-Jun-24 | Day time   | 1   | 259               | -       | 400-500         | -       | Fail    |
| 133                                     | Area : S2 Plant : 1st Floor : MN Sect. : Spare Part Room No.1 (ในโรง) | 2467113 (5)-278  | 20-Jun-24 | Day time   | 1   | 478               | 418     | 100             | 200     | Pass    |
|   |   | 2467113 (5)-279  | 20-Jun-24 | Day time   | 2   | 330               |         |                 |         |         |
|   |   | 2467113 (5)-280  | 20-Jun-24 | Day time   | 3   | 448               |         |                 |         |         |
|   |   | 2467113 (5)-281  | 20-Jun-24 | Day time   | 4   | 414               |         |                 |         |         |
|   |   | 2467113 (5)-282  | 20-Jun-24 | Day time   | 5   | 409               |         |                 |         |         |
|   |   | 2467113 (5)-283  | 20-Jun-24 | Day time   | 6   | 426               |         |                 |         |         |
|   |   | 2467113 (5)-284  | 20-Jun-24 | Night time | 1   | 413               | 388     | 100             | 200     | Pass    |
|   |   | 2467113 (5)-285  | 20-Jun-24 | Night time | 2   | 365               |         |                 |         |         |
|   |   | 2467113 (5)-286  | 20-Jun-24 | Night time | 3   | 385               |         |                 |         |         |
|   |   | 2467113 (5)-287  | 20-Jun-24 | Night time | 4   | 290               |         |                 |         |         |
|   |   | 2467113 (5)-288  | 20-Jun-24 | Night time | 5   | 486               |         |                 |         |         |
|   |   | 2467113 (5)-289  | 20-Jun-24 | Night time | 6   | 391               |         |                 |         |         |

Technical Management

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 134                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-017 | 2467113 (5)-290  | 20-Jun-24 | Day time   | 1   | 235               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-291  | 20-Jun-24 | Night time | 1   | 184               | -       | 200-300         | -       | Fail    |
| 135                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-030 | 2467113 (5)-292  | 20-Jun-24 | Day time   | 1   | 447               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-293  | 20-Jun-24 | Night time | 1   | 158               | -       | 200-300         | -       | Fail    |
| 136                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-051 | 2467113 (5)-294  | 20-Jun-24 | Day time   | 1   | 321               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-295  | 20-Jun-24 | Night time | 1   | 85                | -       | 200-300         | -       | Fail    |
| 137                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-095 | 2467113 (5)-296  | 20-Jun-24 | Day time   | 1   | 964               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-297  | 20-Jun-24 | Night time | 1   | 80                | -       | 200-300         | -       | Fail    |
| 138                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-110 | 2467113 (5)-298  | 20-Jun-24 | Day time   | 1   | 250               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-299  | 20-Jun-24 | Night time | 1   | 205               | -       | 200-300         | -       | Pass    |
| 139                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-130 | 2467113 (5)-300  | 20-Jun-24 | Day time   | 1   | 418               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-301  | 20-Jun-24 | Night time | 1   | 170               | -       | 200-300         | -       | Fail    |
| 140                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-147 | 2467113 (5)-302  | 20-Jun-24 | Day time   | 1   | 414               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-303  | 20-Jun-24 | Night time | 1   | 71                | -       | 200-300         | -       | Fail    |
| 141                                     | Spot : S2 Plant : 1st Floor : Standing line/RHA-162 | 2467113 (5)-304  | 20-Jun-24 | Day time   | 1   | 967               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-305  | 20-Jun-24 | Night time | 1   | 100               | -       | 200-300         | -       | Fail    |
| 142                                     | Spot : S2 Plant : 1st Floor : Standing line/DT-208  | 2467113 (5)-306  | 20-Jun-24 | Day time   | 1   | 849               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-307  | 20-Jun-24 | Night time | 1   | 136               | -       | 200-300         | -       | Fail    |
| 143                                     | Spot : S2 Plant : 1st Floor : Standing line/DT-220  | 2467113 (5)-308  | 20-Jun-24 | Day time   | 1   | 648               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-309  | 20-Jun-24 | Night time | 1   | 186               | -       | 200-300         | -       | Fail    |
| 144                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-239 | 2467113 (5)-310  | 20-Jun-24 | Day time   | 1   | 257               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-311  | 20-Jun-24 | Night time | 1   | 127               | -       | 200-300         | -       | Fail    |
| 145                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-252 | 2467113 (5)-312  | 20-Jun-24 | Day time   | 1   | 203               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-313  | 20-Jun-24 | Night time | 1   | 112               | -       | 200-300         | -       | Fail    |
| 146                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-274 | 2467113 (5)-314  | 20-Jun-24 | Day time   | 1   | 244               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-315  | 20-Jun-24 | Night time | 1   | 132               | -       | 200-300         | -       | Fail    |
| 147                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-295 | 2467113 (5)-316  | 20-Jun-24 | Day time   | 1   | 320               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-317  | 20-Jun-24 | Night time | 1   | 108               | -       | 200-300         | -       | Fail    |

Technical Management

  
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Section Head

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 148                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-302              | 2467113 (5)-318  | 20-Jun-24 | Day time   | 1   | 403               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-319  | 20-Jun-24 | Night time | 1   | 171               | -       | 200-300         | -       | Fail    |
| 149                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-310              | 2467113 (5)-320  | 20-Jun-24 | Day time   | 1   | 359               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-321  | 20-Jun-24 | Night time | 1   | 206               | -       | 200-300         | -       | Pass    |
| 150                                     | Spot : S2 Plant : 1st Floor : Standing line/DT2-322              | 2467113 (5)-322  | 20-Jun-24 | Day time   | 1   | 449               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-323  | 20-Jun-24 | Night time | 1   | 209               | -       | 200-300         | -       | Pass    |
| 152                                     | Spot : S2 Plant : 1st Floor : Standing line/DT-328               | 2467113 (5)-324  | 20-Jun-24 | Day time   | 1   | 227               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-325  | 20-Jun-24 | Night time | 1   | 159               | -       | 200-300         | -       | Fail    |
| 153                                     | Spot : S2 Plant : 1st Floor : Standing line/RHC-410              | 2467113 (5)-326  | 20-Jun-24 | Day time   | 1   | 849               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-327  | 20-Jun-24 | Night time | 1   | 140               | -       | 200-300         | -       | Fail    |
| 154                                     | Spot : S2 Plant : 1st Floor : Standing line/RHC-400              | 2467113 (5)-328  | 20-Jun-24 | Day time   | 1   | 826               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-329  | 20-Jun-24 | Night time | 1   | 179               | -       | 200-300         | -       | Fail    |
| 155                                     | Spot : S2 Plant : 1st Floor : Standing line/A-608                | 2467113 (5)-330  | 20-Jun-24 | Day time   | 1   | 767               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-331  | 20-Jun-24 | Night time | 1   | 161               | -       | 200-300         | -       | Fail    |
| 156                                     | Spot : S2 Plant : 1st Floor : Standing line/A-632                | 2467113 (5)-332  | 20-Jun-24 | Day time   | 1   | 818               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-333  | 20-Jun-24 | Night time | 1   | 203               | -       | 200-300         | -       | Pass    |
| 157                                     | Spot : S2 Plant : 1st Floor : Standing line/A-645                | 2467113 (5)-334  | 20-Jun-24 | Day time   | 1   | 979               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-335  | 20-Jun-24 | Night time | 1   | 170               | -       | 200-300         | -       | Fail    |
| 158                                     | Spot : S2 Plant : 1st Floor : Standing line/A-663                | 2467113 (5)-336  | 20-Jun-24 | Day time   | 1   | 640               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-337  | 20-Jun-24 | Night time | 1   | 182               | -       | 200-300         | -       | Fail    |
| 159                                     | Spot : S2 Plant : 1st Floor : Standing line/A-681                | 2467113 (5)-338  | 20-Jun-24 | Day time   | 1   | 685               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-339  | 20-Jun-24 | Night time | 1   | 188               | -       | 200-300         | -       | Fail    |
| 161                                     | Spot : S2 Plant : 1st Floor : WD Sect. : Wet Drawing Line/WD-108 | 2467113 (5)-340  | 20-Jun-24 | Day time   | 1   | 238               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-341  | 20-Jun-24 | Night time | 1   | 148               | -       | 200-300         | -       | Fail    |
| 162                                     | Spot : S2 Plant : 1st Floor : WD Sect. : Wet Drawing Line/WD-124 | 2467113 (5)-342  | 20-Jun-24 | Day time   | 1   | 285               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-343  | 20-Jun-24 | Night time | 1   | 130               | -       | 200-300         | -       | Fail    |
| 163                                     | Spot : S2 Plant : 1st Floor : WD Sect. : Wet Drawing Line/WD-137 | 2467113 (5)-344  | 20-Jun-24 | Day time   | 1   | 357               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-345  | 20-Jun-24 | Night time | 1   | 203               | -       | 200-300         | -       | Pass    |

Technical Management

  
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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
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Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 164                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-150 | 2467113 (5)-346  | 20-Jun-24 | Day time   | 1   | 1,977             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-347  | 20-Jun-24 | Day time   | 2   | 1,835             | -       | 300             | -       |         |
|   |   | 2467113 (5)-348  | 20-Jun-24 | Day time   | 3   | 1,716             | -       | 200             | -       |         |
|   |   | 2467113 (5)-349  | 20-Jun-24 | Night time | 1   | 210               | -       | 200-300         | -       | Pass    |
| 165                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-210 | 2467113 (5)-350  | 20-Jun-24 | Day time   | 1   | 526               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-351  | 20-Jun-24 | Night time | 1   | 156               | -       | 200-300         | -       | Fail    |
| 166                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-225 | 2467113 (5)-352  | 20-Jun-24 | Day time   | 1   | 475               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-353  | 20-Jun-24 | Night time | 1   | 174               | -       | 200-300         | -       | Fail    |
| 167                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-240 | 2467113 (5)-354  | 20-Jun-24 | Day time   | 1   | 1,282             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-355  | 20-Jun-24 | Day time   | 2   | 1,236             | -       | 300             | -       |         |
|   |   | 2467113 (5)-356  | 20-Jun-24 | Day time   | 3   | 1,211             | -       | 200             | -       |         |
|   |   | 2467113 (5)-357  | 20-Jun-24 | Night time | 1   | 252               | -       | 200-300         | -       | Pass    |
| 168                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-250 | 2467113 (5)-358  | 20-Jun-24 | Day time   | 1   | 1,680             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-359  | 20-Jun-24 | Day time   | 2   | 1,129             | -       | 300             | -       |         |
|   |   | 2467113 (5)-360  | 20-Jun-24 | Day time   | 3   | 1,238             | -       | 200             | -       |         |
|   |   | 2467113 (5)-361  | 20-Jun-24 | Night time | 1   | 224               | -       | 200-300         | -       | Pass    |
| 169                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-312 | 2467113 (5)-362  | 20-Jun-24 | Day time   | 1   | 213               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-363  | 20-Jun-24 | Night time | 1   | 163               | -       | 200-300         | -       | Fail    |
| 170                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-320 | 2467113 (5)-364  | 20-Jun-24 | Day time   | 1   | 310               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-365  | 20-Jun-24 | Night time | 1   | 184               | -       | 200-300         | -       | Fail    |
| 171                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-332 | 2467113 (5)-366  | 20-Jun-24 | Day time   | 1   | 345               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-367  | 20-Jun-24 | Night time | 1   | 255               | -       | 200-300         | -       | Pass    |
| 172                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-350 | 2467113 (5)-368  | 20-Jun-24 | Day time   | 1   | 1,533             | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-369  | 20-Jun-24 | Day time   | 2   | 1,326             | -       | 300             | -       |         |
|   |   | 2467113 (5)-370  | 20-Jun-24 | Day time   | 3   | 1,421             | -       | 200             | -       |         |
|   |   | 2467113 (5)-371  | 20-Jun-24 | Night time | 1   | 237               | -       | 200-300         | -       | Pass    |
| 173                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-403 | 2467113 (5)-372  | 20-Jun-24 | Day time   | 1   | 202               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-373  | 20-Jun-24 | Night time | 1   | 224               | -       | 200-300         | -       | Pass    |
| 174                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-412 | 2467113 (5)-374  | 20-Jun-24 | Day time   | 1   | 163               | -       | 200-300         | -       | Fail    |
|   |   | 2467113 (5)-375  | 20-Jun-24 | Night time | 1   | 99                | -       | 200-300         | -       | Fail    |
| 175                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-420 | 2467113 (5)-376  | 20-Jun-24 | Day time   | 1   | 398               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-377  | 20-Jun-24 | Night time | 1   | 262               | -       | 200-300         | -       | Pass    |

Technical Management

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Section Head

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Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location :

Lot ID: 2467113 (5)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 176                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-427  | 2467113 (5)-378  | 20-Jun-24 | Day time   | 1   | 427               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-379  | 20-Jun-24 | Night time | 1   | 227               | -       | 200-300         | -       | Pass    |
| 177                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-505  | 2467113 (5)-380  | 20-Jun-24 | Day time   | 1   | 1,086             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-381  | 20-Jun-24 | Day time   | 2   | 1,121             | -       | 300             | -       |         |
|   |  | 2467113 (5)-382  | 20-Jun-24 | Day time   | 3   | 1,098             | -       | 200             | -       |         |
|   |  | 2467113 (5)-383  | 20-Jun-24 | Night time | 1   | 127               | -       | 200-300         | -       | Fail    |
| 178                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-512  | 2467113 (5)-384  | 20-Jun-24 | Day time   | 1   | 1,481             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-385  | 20-Jun-24 | Day time   | 2   | 1,236             | -       | 300             | -       |         |
|   |  | 2467113 (5)-386  | 20-Jun-24 | Day time   | 3   | 1,360             | -       | 200             | -       |         |
|   |  | 2467113 (5)-387  | 20-Jun-24 | Night time | 1   | 145               | -       | 200-300         | -       | Fail    |
| 179                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-520  | 2467113 (5)-388  | 20-Jun-24 | Day time   | 1   | 361               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-389  | 20-Jun-24 | Night time | 1   | 120               | -       | 200-300         | -       | Fail    |
| 180                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-525  | 2467113 (5)-390  | 20-Jun-24 | Day time   | 1   | 525               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-391  | 20-Jun-24 | Night time | 1   | 129               | -       | 200-300         | -       | Fail    |
| 181                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>Wet Drawing Line/WD-534  | 2467113 (5)-392  | 20-Jun-24 | Day time   | 1   | 958               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-393  | 20-Jun-24 | Night time | 1   | 188               | -       | 200-300         | -       | Fail    |
| 182                                     | Spot : S2 Plant : 1st Floor : WD Sect. :<br>จุดขึงน้ำหนักเส้นลวด     | 2467113 (5)-394  | 20-Jun-24 | Day time   | 1   | 164               | -       | 200-300         | -       | Fail    |
|   |  | 2467113 (5)-395  | 20-Jun-24 | Night time | 1   | 101               | -       | 200-300         | -       | Fail    |
| 183                                     | Spot : S2 Plant : 1st Floor : PS Sect. :<br>RW Machine No.23         | 2467113 (5)-396  | 20-Jun-24 | Day time   | 1   | 374               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-397  | 20-Jun-24 | Night time | 1   | 350               | -       | 200-300         | -       | Pass    |
| 185                                     | Spot : S2 Plant : 1st Floor : RW Sect. :<br>เครื่องทอถลาย Check reel | 2467113 (5)-398  | 20-Jun-24 | Day time   | 1   | 249               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-399  | 20-Jun-24 | Night time | 1   | 128               | -       | 200-300         | -       | Fail    |
| 186                                     | Spot : S2 Plant : 1st Floor : RW Sect. :<br>โต๊ะข้อม Reel            | 2467113 (5)-400  | 20-Jun-24 | Day time   | 1   | 349               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-401  | 20-Jun-24 | Night time | 1   | 100               | -       | 200-300         | -       | Fail    |
| 187                                     | Spot : S2 Plant : 1st Floor : RW Sect. :<br>จุดล้างแผ่น Separator    | 2467113 (5)-402  | 20-Jun-24 | Day time   | 1   | 1,901             | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-403  | 20-Jun-24 | Day time   | 2   | 1,872             | -       | 300             | -       |         |
|   |  | 2467113 (5)-404  | 20-Jun-24 | Day time   | 3   | 1,989             | -       | 200             | -       |         |
|   |  | 2467113 (5)-405  | 20-Jun-24 | Night time | 1   | 213               | -       | 200-300         | -       | Pass    |
| 188                                     | Spot : S2 Plant : 1st Floor : PS Sect. :<br>Air Balancer No.5        | 2467113 (5)-406  | 20-Jun-24 | Day time   | 1   | 500               | -       | 200-300         | -       | Pass    |
|   |  | 2467113 (5)-407  | 20-Jun-24 | Night time | 1   | 943               | -       | 200-300         | -       | Pass    |

Technical Management

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (5)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (5)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 189                                     | Spot : S2 Plant : 1st Floor : PS Sect. : Air Balancer No.9            | 2467113 (5)-408  | 20-Jun-24 | Day time   | 1   | 488               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-409  | 20-Jun-24 | Night time | 1   | 599               | -       | 200-300         | -       | Pass    |
| 190                                     | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงานชุด ปล่อยตุลดา | 2467113 (5)-410  | 20-Jun-24 | Day time   | 1   | 204               | -       | 400-500         | -       | Fail    |
| 191                                     | Spot : S2 Plant : 1st Floor : MN Sect (SC2) : โต๊ะทำงาน ชุดบ๊วยธิดา   | 2467113 (5)-411  | 20-Jun-24 | Day time   | 1   | 564               | -       | 400-500         | -       | Pass    |
| 192                                     | Spot : S2 Plant : 1st Floor : Office S2 : โต๊ะทำงาน ชุดสุริยา         | 2467113 (5)-412  | 20-Jun-24 | Day time   | 1   | 639               | -       | 400-500         | -       | Pass    |
| 193                                     | Spot : S2 Plant : 1st Floor : Office S2 : โต๊ะทำงาน ชุดนกกลีบทศ       | 2467113 (5)-413  | 20-Jun-24 | Day time   | 1   | 678               | -       | 400-500         | -       | Pass    |
| 194                                     | Spot : S2 Plant : 1st Floor : WD Sect. : Wet Drawing Line/WD-523      | 2467113 (5)-414  | 20-Jun-24 | Day time   | 1   | 914               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-415  | 20-Jun-24 | Night time | 1   | 143               | -       | 200-300         | -       | Fail    |
| 195                                     | Spot : S2 Plant : 1st Floor : PS Sect. : โต๊ะทำงาน ชุด Check Reel     | 2467113 (5)-416  | 20-Jun-24 | Day time   | 1   | 259               | -       | 400-500         | -       | Fail    |
|   |   | 2467113 (5)-417  | 20-Jun-24 | Night time | 1   | 192               | -       | 400-500         | -       | Fail    |
| 196                                     | Spot : S2 Plant : 1st Floor : RW Sect. : เครื่องขมขี้เหล็กาเจล 2      | 2467113 (5)-418  | 20-Jun-24 | Day time   | 1   | 364               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-419  | 20-Jun-24 | Night time | 1   | 232               | -       | 200-300         | -       | Pass    |
| 197                                     | Spot : S2 Plant : 1st Floor : เครื่องกลั่น Reel No.2                  | 2467113 (5)-420  | 20-Jun-24 | Day time   | 1   | 339               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-421  | 20-Jun-24 | Night time | 1   | 114               | -       | 200-300         | -       | Fail    |
| 198                                     | Spot : S2 Plant : 1st Floor : เครื่องกลั่น Reel No.1                  | 2467113 (5)-422  | 20-Jun-24 | Day time   | 1   | 475               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-423  | 20-Jun-24 | Night time | 1   | 119               | -       | 200-300         | -       | Fail    |
| 199                                     | Spot : S2 Plant : 1st Floor : เครื่องกลั่น Reel 24 นิ้ว               | 2467113 (5)-424  | 20-Jun-24 | Day time   | 1   | 327               | -       | 200-300         | -       | Pass    |
|   |   | 2467113 (5)-425  | 20-Jun-24 | Night time | 1   | 77                | -       | 200-300         | -       | Fail    |

Measurement by : Wikrom Meesiri

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Approved by

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (6)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (6)-1

Page 1 of 5

| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |            |     |                   |         |                 |         |         |
|---|---|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 1                                       | Area : S2 Plant : 2nd Floor : หน้า Office : บันไดทางเดินหน้า Office | 2467113 (6)-1    | 20-Jun-24 | Day time   | 1   | 413               | 363     | 50              | 100     | Pass    |
|   |   | 2467113 (6)-2    | 20-Jun-24 | Day time   | 2   | 155               |         |                 |         |         |
|   |   | 2467113 (6)-3    | 20-Jun-24 | Day time   | 3   | 201               |         |                 |         |         |
|   |   | 2467113 (6)-4    | 20-Jun-24 | Day time   | 4   | 371               |         |                 |         |         |
|   |   | 2467113 (6)-5    | 20-Jun-24 | Day time   | 5   | 675               |         |                 |         |         |
|   |   | 2467113 (6)-6    | 20-Jun-24 | Night time | 1   | 112               | 148     | 50              | 100     |         |
|   |   | 2467113 (6)-7    | 20-Jun-24 | Night time | 2   | 156               |         |                 |         |         |
|   |   | 2467113 (6)-8    | 20-Jun-24 | Night time | 3   | 165               |         |                 |         |         |
|   |   | 2467113 (6)-9    | 20-Jun-24 | Night time | 4   | 169               |         |                 |         |         |
|   |   | 2467113 (6)-10   | 20-Jun-24 | Night time | 5   | 138               |         |                 |         |         |
| 2                                       | Area : S2 Plant : 2nd Floor : หน้าห้อง ประชุม 5                     | 2467113 (6)-11   | 20-Jun-24 | Day time   | 1   | 849               | 1036    | 150             | 300     | Pass    |
|   |   | 2467113 (6)-12   | 20-Jun-24 | Day time   | 2   | 871               |         |                 |         |         |
|   |   | 2467113 (6)-13   | 20-Jun-24 | Day time   | 3   | 863               |         |                 |         |         |
|   |   | 2467113 (6)-14   | 20-Jun-24 | Day time   | 4   | 1,273             |         |                 |         |         |
|   |   | 2467113 (6)-15   | 20-Jun-24 | Day time   | 5   | 1,228             |         |                 |         |         |
|   |   | 2467113 (6)-16   | 20-Jun-24 | Day time   | 6   | 1,135             |         |                 |         |         |
| 4                                       | Spot : S2 Plant : 2nd Floor : หน้า Office : ห้องกรรมการผู้จัดการ    | 2467113 (6)-17   | 20-Jun-24 | Day time   | 1   | 1,559             | -       | 400-500         | -       | Pass    |
|   |   | 2467113 (6)-18   | 20-Jun-24 | Day time   | 2   | 1,407             | -       | 300             | -       |         |
|   |   | 2467113 (6)-19   | 20-Jun-24 | Day time   | 3   | 1,376             | -       | 200             | -       |         |
| 5                                       | Area : S2 Plant : 2nd Floor : หน้า Office : ห้องนำหญิง              | 2467113 (6)-20   | 20-Jun-24 | Day time   | 1   | 389               | 390     | 50              | 100     | Pass    |
|   |   | 2467113 (6)-21   | 20-Jun-24 | Day time   | 2   | 392               |         |                 |         |         |
| 6                                       | Area : S2 Plant : 2nd Floor : หน้า Office : ห้องนำชาย               | 2467113 (6)-22   | 20-Jun-24 | Day time   | 1   | 317               | 319     | 50              | 100     | Pass    |
|   |   | 2467113 (6)-23   | 20-Jun-24 | Day time   | 2   | 321               |         |                 |         |         |
| 7                                       | Area : S2 Plant : 2nd Floor : หน้า Office : ห้องรับรอง 3            | 2467113 (6)-24   | 20-Jun-24 | Day time   | 1   | 710               | 772     | 150             | 300     | Pass    |
|   |   | 2467113 (6)-25   | 20-Jun-24 | Day time   | 2   | 782               |         |                 |         |         |
|   |   | 2467113 (6)-26   | 20-Jun-24 | Day time   | 3   | 785               |         |                 |         |         |
|   |   | 2467113 (6)-27   | 20-Jun-24 | Day time   | 4   | 811               |         |                 |         |         |
|   |   |                  |           |            |     |                   |         |                 |         |         |
| 8                                       | Area : S2 Plant : 2nd Floor : หน้า Office : ห้องรับรอง 2            | 2467113 (6)-28   | 20-Jun-24 | Day time   | 1   | 849               | 893     | 150             | 300     | Pass    |
|   |   | 2467113 (6)-29   | 20-Jun-24 | Day time   | 2   | 836               |         |                 |         |         |
|   |   | 2467113 (6)-30   | 20-Jun-24 | Day time   | 3   | 935               |         |                 |         |         |
|   |   | 2467113 (6)-31   | 20-Jun-24 | Day time   | 4   | 952               |         |                 |         |         |
|   |   |                  |           |            |     |                   |         |                 |         |         |
| 9                                       | Area : S2 Plant : 2nd Floor : หน้า Office : ห้องรับรอง 1            | 2467113 (6)-32   | 20-Jun-24 | Day time   | 1   | 1,380             | 1408    | 150             | 300     | Pass    |
|   |   | 2467113 (6)-33   | 20-Jun-24 | Day time   | 2   | 1,426             |         |                 |         |         |
|   |   | 2467113 (6)-34   | 20-Jun-24 | Day time   | 3   | 1,448             |         |                 |         |         |
|   |   | 2467113 (6)-35   | 20-Jun-24 | Day time   | 4   | 1,379             |         |                 |         |         |
|   |   |                  |           |            |     |                   |         |                 |         |         |

Technical Management

*Supot S*  
Supot Salamteah  
Section Head

Approved by

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Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (6)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (6)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |           |          |     |                   |         |                 |         |         |
|---|---|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 10                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องเก็บของ 1         | 2467113 (6)-36   | 20-Jun-24 | Day time | 1   | 525               | 538     | 100             | 200     | Pass    |
|   |   | 2467113 (6)-37   | 20-Jun-24 | Day time | 2   | 551               |         |                 |         |         |
| 11                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องเก็บเอกสารบัญชี   | 2467113 (6)-38   | 20-Jun-24 | Day time | 1   | 703               | 673     | 100             | 200     | Pass    |
|   |   | 2467113 (6)-39   | 20-Jun-24 | Day time | 2   | 643               |         |                 |         |         |
| 12                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องประชุม 4          | 2467113 (6)-40   | 20-Jun-24 | Day time | 1   | 524               | 842     | 150             | 300     | Pass    |
|   |   | 2467113 (6)-41   | 20-Jun-24 | Day time | 2   | 939               |         |                 |         |         |
|   |   | 2467113 (6)-42   | 20-Jun-24 | Day time | 3   | 985               |         |                 |         |         |
|   |   | 2467113 (6)-43   | 20-Jun-24 | Day time | 4   | 922               |         |                 |         |         |
| 13                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องประชุม 3          | 2467113 (6)-44   | 20-Jun-24 | Day time | 1   | 1,050             | 1016    | 150             | 300     | Pass    |
|   |   | 2467113 (6)-45   | 20-Jun-24 | Day time | 2   | 1,145             |         |                 |         |         |
|   |   | 2467113 (6)-46   | 20-Jun-24 | Day time | 3   | 864               |         |                 |         |         |
|   |   | 2467113 (6)-47   | 20-Jun-24 | Day time | 4   | 986               |         |                 |         |         |
|   |   | 2467113 (6)-48   | 20-Jun-24 | Day time | 5   | 1,129             |         |                 |         |         |
|   |   | 2467113 (6)-49   | 20-Jun-24 | Day time | 6   | 919               |         |                 |         |         |
| 14                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องเก็บของ 2         | 2467113 (6)-50   | 20-Jun-24 | Day time | 1   | 753               | 803     | 100             | 200     | Pass    |
|   |   | 2467113 (6)-51   | 20-Jun-24 | Day time | 2   | 853               |         |                 |         |         |
| 15                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องประชุม 2          | 2467113 (6)-52   | 20-Jun-24 | Day time | 1   | 553               | 558     | 150             | 300     | Pass    |
|   |   | 2467113 (6)-53   | 20-Jun-24 | Day time | 2   | 562               |         |                 |         |         |
| 16                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องเซิร์ฟเวอร์       | 2467113 (6)-54   | 20-Jun-24 | Day time | 1   | 339               | 364     | 100             | 200     | Pass    |
|   |   | 2467113 (6)-55   | 20-Jun-24 | Day time | 2   | 389               |         |                 |         |         |
| 17                                      | Area : S2 Plant : 2nd Floor : Main Office : ห้องประชุม 1          | 2467113 (6)-56   | 20-Jun-24 | Day time | 1   | 523               | 550     | 150             | 300     | Pass    |
|   |   | 2467113 (6)-57   | 20-Jun-24 | Day time | 2   | 605               |         |                 |         |         |
|   |   | 2467113 (6)-58   | 20-Jun-24 | Day time | 3   | 617               |         |                 |         |         |
|   |   | 2467113 (6)-59   | 20-Jun-24 | Day time | 4   | 453               |         |                 |         |         |
| 18                                      | Spot : S2 Plant : 2nd Floor : Main Office : เครื่องถ่ายเอกสาร     | 2467113 (6)-60   | 20-Jun-24 | Day time | 1   | 639               | -       | 300-400         | -       | Pass    |
| 19                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณพงษ์เพชร | 2467113 (6)-61   | 20-Jun-24 | Day time | 1   | 591               | -       | 400-500         | -       | Pass    |
| 20                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณณัฐธรา   | 2467113 (6)-62   | 20-Jun-24 | Day time | 1   | 648               | -       | 400-500         | -       | Pass    |
| 21                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณณฤศพร    | 2467113 (6)-63   | 20-Jun-24 | Day time | 1   | 677               | -       | 400-500         | -       | Pass    |

Technical Management

*Supot S*  
Supot Salamteah  
Section Head

Approved by

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Assistant Manager

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## Analysis / Test Report

Client : Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

P/O :  
Project Name :  
Project Location:

Lot ID: 2467113 (6)

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (6)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |          |     |                   |         |                 |         |         |
|---|--|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 22                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน K. Jeong               | 2467113 (6)-64   | 20-Jun-24 | Day time | 1   | 582               | -       | 400-500         | -       | Pass    |
| 23                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณสุศักดิ์            | 2467113 (6)-65   | 20-Jun-24 | Day time | 1   | 743               | -       | 400-500         | -       | Pass    |
| 24                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน K. Jin                 | 2467113 (6)-66   | 20-Jun-24 | Day time | 1   | 564               | -       | 400-500         | -       | Pass    |
| 25                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน K. Matsuoka            | 2467113 (6)-67   | 20-Jun-24 | Day time | 1   | 638               | -       | 400-500         | -       | Pass    |
| 26                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณรัชชัย              | 2467113 (6)-68   | 20-Jun-24 | Day time | 1   | 731               | -       | 400-500         | -       | Pass    |
| 27                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณวรวิทย์             | 2467113 (6)-69   | 20-Jun-24 | Day time | 1   | 643               | -       | 400-500         | -       | Pass    |
| 28                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณณัฐยสิทธิ์ (Safety) | 2467113 (6)-70   | 20-Jun-24 | Day time | 1   | 787               | -       | 400-500         | -       | Pass    |
| 29                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณกันต์ปิ่นทิพย์      | 2467113 (6)-71   | 20-Jun-24 | Day time | 1   | 568               | -       | 400-500         | -       | Pass    |
| 30                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณเนตรนรงค์           | 2467113 (6)-72   | 20-Jun-24 | Day time | 1   | 863               | -       | 400-500         | -       | Pass    |
| 31                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณณัฐนันทา            | 2467113 (6)-73   | 20-Jun-24 | Day time | 1   | 633               | -       | 400-500         | -       | Pass    |
| 32                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณดาวิณี              | 2467113 (6)-74   | 20-Jun-24 | Day time | 1   | 726               | -       | 400-500         | -       | Pass    |
| 33                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณสุภาพร              | 2467113 (6)-75   | 20-Jun-24 | Day time | 1   | 768               | -       | 400-500         | -       | Pass    |
| 34                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน K. Matsui              | 2467113 (6)-76   | 20-Jun-24 | Day time | 1   | 570               | -       | 400-500         | -       | Pass    |
| 35                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณเกศติมา             | 2467113 (6)-77   | 20-Jun-24 | Day time | 1   | 785               | -       | 400-500         | -       | Pass    |
| 36                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณกรรณิกา             | 2467113 (6)-78   | 20-Jun-24 | Day time | 1   | 794               | -       | 400-500         | -       | Pass    |
| 37                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณสมณฤดี              | 2467113 (6)-79   | 20-Jun-24 | Day time | 1   | 753               | -       | 400-500         | -       | Pass    |
| 39                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณศิริวิมลอร          | 2467113 (6)-80   | 20-Jun-24 | Day time | 1   | 817               | -       | 400-500         | -       | Pass    |

Technical Management

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Section Head

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Assistant Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (6)**

Date Received : Jun 22, 2024  
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Report Number: 2467113 (6)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |  |                  |           |            |     |                   |         |                 |         |         |
|---|--|------------------|-----------|------------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location   | Reference Number | Date      | Time       | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |  |                  |           |            |     | Spot              | Average | Spot/Min        | Average |         |
| 40                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณสุชีรา          | 2467113 (6)-81   | 20-Jun-24 | Day time   | 1   | 533               | -       | 400-500         | -       | Pass    |
| 41                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณวรางคณา         | 2467113 (6)-82   | 20-Jun-24 | Day time   | 1   | 605               | -       | 400-500         | -       | Pass    |
| 43                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณพัชรินทร์       | 2467113 (6)-83   | 20-Jun-24 | Day time   | 1   | 710               | -       | 400-500         | -       | Pass    |
| 44                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณชยณัฏฐ์         | 2467113 (6)-84   | 20-Jun-24 | Day time   | 1   | 640               | -       | 400-500         | -       | Pass    |
| 45                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณกนกวรรณ         | 2467113 (6)-85   | 20-Jun-24 | Day time   | 1   | 768               | -       | 400-500         | -       | Pass    |
| 46                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณพิรยา           | 2467113 (6)-86   | 20-Jun-24 | Day time   | 1   | 835               | -       | 400-500         | -       | Pass    |
| 47                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณเศรษฐ์ณิษฐ์     | 2467113 (6)-87   | 20-Jun-24 | Day time   | 1   | 803               | -       | 400-500         | -       | Pass    |
| 48                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณวาสนา           | 2467113 (6)-88   | 20-Jun-24 | Day time   | 1   | 764               | -       | 400-500         | -       | Pass    |
| 49                                      | Area : S2 Plant : 2nd Floor : Main Office : มินิโถงทางเดินหลัง Office    | 2467113 (6)-89   | 20-Jun-24 | Day time   | 1   | 180               | 451     | 50              | 100     | Pass    |
|   |  | 2467113 (6)-90   | 20-Jun-24 | Day time   | 2   | 170               |         |                 |         |         |
|   |  | 2467113 (6)-91   | 20-Jun-24 | Day time   | 3   | 219               |         |                 |         |         |
|   |  | 2467113 (6)-92   | 20-Jun-24 | Day time   | 4   | 266               |         |                 |         |         |
|   |  | 2467113 (6)-93   | 20-Jun-24 | Day time   | 5   | 1,420             |         |                 |         |         |
|   |  | 2467113 (6)-94   | 20-Jun-24 | Night time | 1   | 124               |         | 50              | 100     | Pass    |
|   |  | 2467113 (6)-95   | 20-Jun-24 | Night time | 2   | 140               |         |                 |         |         |
|   |  | 2467113 (6)-96   | 20-Jun-24 | Night time | 3   | 154               |         |                 |         |         |
|   |  | 2467113 (6)-97   | 20-Jun-24 | Night time | 4   | 210               |         |                 |         |         |
|   |  | 2467113 (6)-98   | 20-Jun-24 | Night time | 5   | 119               |         |                 |         |         |
| 50                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณจริยา           | 2467113 (6)-99   | 20-Jun-24 | Day time   | 1   | 823               | -       | 400-500         | -       | Pass    |
| 51                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณณัฐณิษฐ์ (Envi) | 2467113 (6)-100  | 20-Jun-24 | Day time   | 1   | 793               | -       | 400-500         | -       | Pass    |
| 52                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณสุนันทา         | 2467113 (6)-101  | 20-Jun-24 | Day time   | 1   | 400               | -       | 400-500         | -       | Pass    |
| 53                                      | Spot : S2 Plant : 2nd Floor : Main Office : โต๊ะทำงาน คุณแจวรี           | 2467113 (6)-102  | 20-Jun-24 | Day time   | 1   | 712               | -       | 400-500         | -       | Pass    |

Measurement by : Wikrom Meesiri

Technical Management

  
Supot Salamteh  
Section Head

Approved by

  
Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**P/O :**  
**Project Name :**  
**Project Location:**

**Lot ID: 2467113 (6)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (6)-1

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| Sumiden Steel Wire (Thailand) Co., Ltd. |   |                  |      |      |     |                   |         |                 |         |         |
|---|---|------------------|------|------|-----|-------------------|---------|-----------------|---------|---------|
| Lay out No.                             | Location  | Reference Number | Date | Time | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|   |   |                  |      |      |     | Spot              | Average | Spot/Min        | Average |         |
| Guideline :                             | Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018) |                  |      |      |     |                   |         |                 |         |         |

Technical Management

  
Supot Salamteh  
Section Head

Approved by

  
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Assistant Manager

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**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140

**Lot ID: 2467113 (7)**

Date Received : Jun 22, 2024  
Date Reported : Jul 03, 2024  
Report Number: 2467113 (7)-1

**P/O :**  
**Project Name :**  
**Project Location:**

Page 1 of 1

### Sumiden Steel Wire (Thailand) Co., Ltd.

| Lay out No. | Location  | Reference Number | Date      | Time     | No. | Illuminance (Lux) |         | Guideline Limit |         | Comment |
|-------------|---|------------------|-----------|----------|-----|-------------------|---------|-----------------|---------|---------|
|             |   |                  |           |          |     | Spot              | Average | Spot/Min        | Average |         |
| 1           | Spot : S1 Plant : 2nd Floor :<br>Wastewater Treatment Plant : เครื่องวัด<br>ตะกอน | 2467113 (7)-1    | 20-Jun-24 | Day time | 1   | 240               | -       | 200-300         | -       | Pass    |

**Measurement by :** Wikrom Meesiri

**Guideline :** Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

  
Supot Salamteh  
Section Head

Approved by

  
Wichan Choonharat  
Assistant Manager

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## ภาคผนวก ค-9

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คุณภาพอากาศในสถานประกอบการที่ตัวพนักงาน





## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-17  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** DD\_บริเวณถังยึดลวดแบบแรง จุดที่ 1 (T1)  
**Personal Sampling** คุณสมุทธิ์ รอดแสง  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                      | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|-----------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                             |           |                  |
| Respirable Dust    | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.28   | 5               | Based on NIOSH (1998), 0600 | OSHA      | Rayong           |
| Total Dust         | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.88   | 15              | Based on NIOSH (1994), 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-18  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบหลังการชุบ จุดที่ 1 (T2)  
**Personal Sampling** คุณอุดม แผ่นแก้ว  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                      | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|-----------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                             |           |                  |
| Respirable Dust    | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | <0.15  | 5               | Based on NIOSH (1998), 0600 | OSHA      | Rayong           |
| Total Dust         | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.48   | 15              | Based on NIOSH (1994), 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

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*Sawitree N.*

Sawitree Noisangiam  
Manager

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## Analysis / Test Report

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-19  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบลวด จุดที่ 1 (T3)  
**Personal Sampling** คุณสมคิด ชันทะนัน  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into two filter papers placed in each cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.0 °C

| Analyte            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                      | Guideline | Testing Location |
|--------------------|---------------------|-------|-----|-----------|--------|-----------------|-----------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |       |     |           |        |                 |                             |           |                  |
| Respirable Dust    | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.28   | 5               | Based on NIOSH (1998), 0600 | OSHA      | Rayong           |
| Total Dust         | 10:00 AM - 12:00 PM | mg/m3 | -   | 0.15      | 0.40   | 15              | Based on NIOSH (1994), 0500 | OSHA      | Rayong           |

**Guideline :**  
OSHA : Occupational Safety and Health Administration  
**Sampled By :** Dunlayaphon Sonnok

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

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Sawitree Noisangiam  
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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
Date Received : May 29, 2024  
Date Reported : Jun 21, 2024  
Report Number : 2992912-1

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**Sample Number** 2454729-16  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PK\_บริเวณล้างวัตถุดิบเส้นลวดเหล็ก (HC1)  
**Personal Sampling** คุณธนินทร์ เข้มมสอาด  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one sorbent tube, refrigerated  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte            | Sampled Date/time   | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method                   | Guideline | Testing Location |
|--------------------|---------------------|------|-----|-----------|--------|-----------------|--------------------------|-----------|------------------|
| <b>Air Testing</b> |                     |      |     |           |        |                 |                          |           |                  |
| Hydrogen chloride  | 08:30 AM - 10:30 AM | ppm  | -   | 0.05      | <0.05  | 5(C)            | Based on OSHA, ID-174-SG | MOL       | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

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

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Sawitree Noisangiam  
Manager

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
**Date Received :** May 29, 2024  
**Date Reported :** Jun 21, 2024  
**Report Number :** 2992912-1

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**Sample Number** 2454729-20  
**Sampled Date** May 27, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเตาอบ จุดที่ 1 (Si1)  
**Personal Sampling** คุณอุดม แผ่นแก้ว  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one filter paper placed in plastic cassette  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 35.7 °C

| Analyte               | Sampled Date/time  | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method             | Guideline | Testing Location |
|-----------------------|--------------------|-------|-----|-----------|--------|-----------------|--------------------|-----------|------------------|
| <b>Air Testing</b>    |                    |       |     |           |        |                 |                    |           |                  |
| Silica (Cristobalite) | 10:00AM - 01:00 PM | mg/m3 | -   | 0.02      | <0.020 | 0.025(R)        | NIOSH (2003), 7500 | MOL       | Bangkok          |
| Silica (Quartz)       | 10:00AM - 01:00 PM | mg/m3 | -   | 0.02      | <0.020 | 0.025(R)        | NIOSH (2003), 7500 | MOL       | Bangkok          |
| Silica (Tridymite)    | 10:00AM - 01:00 PM | mg/m3 | -   | 0.08      | <0.080 | No Standard     | NIOSH (2003), 7500 | -         | Bangkok          |

**Guideline :**  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

**Remark :**  
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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454729**  
**Date Received :** May 29, 2024  
**Date Reported :** Jun 21, 2024  
**Report Number :** 2992912-1

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**Sample Number** 2454729-21  
**Sampled Date** May 28, 2024  
**Sample Description** Air Quality  
**Location** PT\_บริเวณเขมเบคส์อบเส้ลวด จุดที่ 1 (PL1)-line1  
**Personal Sampling** คุณอุดม แผ่นแก้ว  
**Date Analysis Commenced** May 30, 2024  
**Condition of Sample** Drawn into one filter paper placed in plastic cassette and one sorbent tube, refrigerated  
**Barometric Pressure** 747 mmHg  
**Atmospheric Temperature** 36.5 °C

| Analyte                            | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method                   | Guideline | Testing Location |
|------------------------------------|---------------------|-------|-----|-----------|--------|-----------------|--------------------------|-----------|------------------|
| <b>Air Testing</b>                 |                     |       |     |           |        |                 |                          |           |                  |
| Nitric acid                        | 08:00 AM - 10:00 AM | ppm   | -   | 0.05      | <0.05  | 2               | Based on OSHA, ID-174-SG | MOL       | Bangkok          |
| Sulfuric acid                      | 08:00 AM - 10:00 AM | mg/m3 | -   | 0.05      | <0.05  | 1               | Based on OSHA, ID-174-SG | MOL       | Bangkok          |
| <b>Metals Testing</b>              |                     |       |     |           |        |                 |                          |           |                  |
| Copper (Fume)                      | 08:00 AM - 10:00 AM | mg/m3 | -   | 0.001     | 0.02   | 0.2             | NIOSH (2003), 7301       | ACGIH     | Bangkok          |
| Zinc Oxide (Inhalable dust) (Fume) | 08:00 AM - 10:00 AM | mg/m3 | -   | 0.002     | 0.008  | 5               | NIOSH (2003), 7301       | MOL       | Bangkok          |

**Guideline :**  
ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2024).  
MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)  
**Sampled By :** Dunlayaphon Sonnok

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

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Manager

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## ภาคผนวก ค-10

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ระดับเสียงเฉลี่ยตลอดระยะเวลาการทำงาน (noise Dose)



## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240996  
**Project Name :**  
**Project Location :**

**Lot ID: 2467140**  
Date Received : Jun 26, 2024  
Date Reported : Jul 03, 2024  
Report Number : 3023037-1

Page 1 of 1

**Sample Number** 2467140-1  
**Sampled Date** Jun 26, 2024  
**Sample Description** Noise Dose  
**Location** PK.บริเวณสำนักงานสิ่งแวดล้อมเล็ก (C1)  
**Personal Sampling** คุณอุษณฯ ชนทอง  
**Date Analysis Commenced** Jul 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 08:00 AM - 04:00 PM | %     | -   | 1         | 87.1   | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 08:00 AM - 04:00 PM | dB(A) | -   | -         | 84.4   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Norranon Tathongkham

### Remark :

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

Approved by

*Supot S*

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-2  
**Sampled Date** May 27, 2024  
**Sample Description** Noise Dose  
**Location** DD.เครื่องตั้งยัดหลอดแบบแห้ง จุดที่ 1 (C2)  
**Personal Sampling** คุณเดชณรินทร์ จันดากร  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 09:00 AM - 05:00 PM | %     | -   | 1         | 74.1   | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 09:00 AM - 05:00 PM | dB(A) | -   | -         | 83.7   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

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2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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

Approved by

*Supot S*

Supot Salamteh  
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**Client :** Sumiden Steel Wire (Thailand) Co., Ltd.  
7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-4  
**Sampled Date** May 27, 2024  
**Sample Description** Noise Dose  
**Location** WD\_เครื่องตั้งมีดลวดแบบเบี่ยง จุดที่ 1 (C3)  
**Personal Sampling** คุณวีรศักดิ์ จิราวรรณ  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 09:00 AM - 05:00 PM | %     | -   | 1         | 275    | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 09:00 AM - 05:00 PM | dB(A) | -   | -         | 89.4   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-5  
**Sampled Date** May 27, 2024  
**Sample Description** Noise Dose  
**Location** WD\_เครื่องตั้งมีดลวดแบบเบี่ยง จุดที่ 1 (C3)  
**Personal Sampling** คุณณณมศักดิ์ ภาคำ  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 09:00 AM - 05:00 PM | %     | -   | 1         | 257    | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 09:00 AM - 05:00 PM | dB(A) | -   | -         | 89.1   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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## Analysis / Test Report

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7/325 Moo 6, Tambol Mabyangporn, Amphur Pluakdaeng, Rayong Thailand 21140  
**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-6  
**Sampled Date** May 28, 2024  
**Sample Description** Noise Dose  
**Location** ST\_เครื่องตีเกลียวเส้นลวด จุดที่ 1 (C4)  
**Personal Sampling** คุณพงษ์ศักดิ์ ไสสาร  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 08:30 AM - 04:30 PM | %     | -   | 1         | 339    | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 08:30 AM - 04:30 PM | dB(A) | -   | -         | 90.3   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-7  
**Sampled Date** May 28, 2024  
**Sample Description** Noise Dose  
**Location** ST\_เครื่องตีเกลียวเส้นลวด จุดที่ 1 (C4)  
**Personal Sampling** คุณรุ่งทิวา นะลาวงศ์  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 08:30 AM - 04:30 PM | %     | -   | 1         | 170    | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 08:30 AM - 04:30 PM | dB(A) | -   | -         | 87.3   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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**P/O :** SmfC240531  
**Project Name :**  
**Project Location :**

**Lot ID: 2454740**  
Date Received : May 29, 2024  
Date Reported : Jun 04, 2024  
Report Number : 2992928-1

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**Sample Number** 2454740-3  
**Sampled Date** May 27, 2024  
**Sample Description** Noise Dose  
**Location** PT\_บริเวณชุมชนเคหะร่มเกล้า จุดที่ 1 (C5)  
**Personal Sampling** คุณกันตพล สีสลา  
**Date Analysis Commenced** Jun 01, 2024

| Analyte             | Sampled Date/time   | Unit  | LOD | LOQ (LOR) | Result | Guideline Limit | Method   | Guideline | Testing Location |
|---------------------|---------------------|-------|-----|-----------|--------|-----------------|--|-----------|------------------|
| <b>Air Testing</b>  |                     |       |     |           |        |                 |  |           |                  |
| Noise Dose (8 hrs.) | 09:00 AM - 05:00 PM | %     | -   | 1         | 85.1   | No Standard     | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |
| TWA (8 hrs.)        | 09:00 AM - 05:00 PM | dB(A) | -   | -         | 84.3   | 85              | MOL, Department Labour Protection and Welfare (B.E.2561) | MOL       | Rayong           |

### Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)  
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

**Sampled By :** Wikrom Meesiri

### Remark :

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