

ภาคผนวกที่ 1

---

ผลการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม

Request No. LA66-0925

Report No. 66010-0031

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : Outlet Dust Collector of Melting Casting Stack

SAMPLE NO. : 04609

SAMPLING DATE : 13/09/2023

SAMPLING TIME : 11:20-11:55

RECEIVED DATE : 18/09/2023

REPORTED DATE : 06/10/2023

TESTED DATE : 18-21/09/2023

**STACK DESCRIPTION**

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	47.00	°C	Oxygen Content :	20.90 %
Air Velocity :	20.35	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>2</sup> :	12.41	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	3.15	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	11:20-11:55	16.5	400	mg/m <sup>3</sup>

**REMARK:**

- <sup>1/</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2/</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Nichaphon Tonglor (จ-003-ก-0032)
- <sup>3/</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

06/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

06/10/2023

COPY



Request No. LA66-0925

Report No. 6610-0032

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : Outlet Dust Collector of Melting Casting Stack SAMPLE NO. : 04610  
 SAMPLING DATE : 13/09/2023 SAMPLING TIME : 11:20-11:55  
 RECEIVED DATE : 18/09/2023 REPORTED DATE : 06/10/2023  
 TESTED DATE : 18/09/2023-05/10/2023

**STACK DESCRIPTION**

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	47.00	°C	Oxygen Content :	20.90 %
Air Velocity :	20.35	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>1</sup> :	12.41	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	3.15	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Zinc as Zinc Oxide	Isokinetic, Digestion, ICP (U.S. EPA Method 29)	11:20-11:55	6.77	mg/m <sup>3</sup>

**REMARK:**

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Nitchaphon Tonglor
- Parameter Outside The Scope of The Registration of The Department of Industrial Works.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By Thongchai Boonsak

(Mr. Thongchai Boonsak)

06/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. LA66-0925

Report No. 6610-0027

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : Hot Mill Stack (New Slab Heater) SAMPLE NO. : 04605  
SAMPLING DATE : 13/09/2023 SAMPLING TIME : 09:20-09:50  
RECEIVED DATE : 18/09/2023 REPORTED DATE : 06/10/2023  
TESTED DATE : 18-21/09/2023

## STACK DESCRIPTION

Height :	30.00	m	Type of Process :	Combustion
Diameter :	2.00	m	Type of Fuel :	Natural Gas
Temperature :	228.00	°C	Operation Capacity :	6 piece /hr.
Air Velocity :	12.12	m/s	Oxygen Content :	6.07 %
Flow rate <sup>2</sup> :	21.01	m <sup>3</sup> /s	Barometric Pressure :	757.00 mmHg
Moisture Content :	6.84	%	Atmospheric Temperature :	33.00 °C

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			6.07 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	09:20-09:50	42.1	39.5	320	mg/m <sup>3</sup>

## REMARK:

- <sup>1/1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2/2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Nichaphon Tonglor (จ-003-ก-0032)
- <sup>4/4</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By



(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

06/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

06/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0925

Report No. 6610-0029

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : Hot Mill Stack (New Slab Heater) SAMPLE NO. : 04607  
SAMPLING DATE : 13/09/2023 SAMPLING TIME : 09:55-10:00  
RECEIVED DATE : 18/09/2023 REPORTED DATE : 06/10/2023  
TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	30.00	m	Type of Process :	Combustion
Diameter :	2.00	m	Type of Fuel :	Natural Gas
Temperature :	228.00	°C	Operation Capacity :	6 piece /hr.
Air Velocity :	12.12	m/s	Oxygen Content :	6.07 %
Flow rate <sup>2</sup> :	21.01	m <sup>3</sup> /s	Barometric Pressure :	757.00 mmHg
Moisture Content :	6.84	%	Atmospheric Temperature :	33.00 °C

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			6.07 % O <sub>2</sub>	7 % O <sub>2</sub>		
Oxides of Nitrogen	Absorption, Phenoldisulfonic Acid	09:55-10:00	19.3	18.1	376	mg/m <sup>3</sup>
(NO <sub>x</sub> as-NO <sub>2</sub> )	(U.S. EPA Method 7)		10.3	9.7	200	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (ว-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

06/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(ว-003-ก-0012)

06/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0925

Report No. 6610-0028

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : Hot Mill Stack (New Slab Heater) SAMPLE NO. : 04606  
SAMPLING DATE : 13/09/2023 SAMPLING TIME : 09:20-09:50  
RECEIVED DATE : 18/09/2023 REPORTED DATE : 06/10/2023  
TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	30.00	m	Type of Process :	Combustion
Diameter :	2.00	m	Type of Fuel :	Natural Gas
Temperature :	228.00	°C	Operation Capacity :	6 piece /hr.
Air Velocity :	12.12	m/s	Oxygen Content :	6.07 %
Flow rate <sup>2</sup> :	21.01	m <sup>3</sup> /s	Barometric Pressure :	757.00 mmHg
Moisture Content :	6.84	%	Atmospheric Temperature :	33.00 °C

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			6.07 % O <sub>2</sub>	7 % O <sub>2</sub>		
Sulfur Dioxide	Absorption, Barium-Thorin	09:20-09:50	<3.4	<3.2	157	mg/m <sup>3</sup>
(SO <sub>2</sub> )	Titrimetric (U.S. EPA Method 6)		<1.3	<1.2	60	ppm

**REMARK:**

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (ว-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

06/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(ว-003-ก-0012)

06/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0229

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : ปล่องกระบวนการล้าง (PK-01) SAMPLE NO. : 04603

SAMPLING DATE : 14/09/2023 SAMPLING TIME : 09:30-09:35

RECEIVED DATE : 18/09/2023 REPORTED DATE : 25/09/2023

TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	12.00	m	Type of Process :	Wet Scrubber
Diameter :	0.80	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	7.45	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>1</sup> :	3.59	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.11	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Oxides of Nitrogen	Absorption, Phenoldisulfonic Acid	09:30-09:35	<2.0	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	(U.S. EPA Method 7)		<1.0	ppm

## REMARK:

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (จ-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0228

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ปล่องกระบวนการถลุง (PK-01) SAMPLE NO. : 04602  
 SAMPLING DATE : 14/09/2023 SAMPLING TIME : 09:25-09:55  
 RECEIVED DATE : 18/09/2023 REPORTED DATE : 25/09/2023  
 TESTED DATE : 18-21/09/2023  
 STACK DESCRIPTION<sup>®</sup>

Height :	12.00	m	Type of Process :	Wet Scrubber
Diameter :	0.80	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	7.45	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	3.59	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.11	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide	Absorption, Barium-Thorin	09:25-09:55	<3.4	1,310	mg/m <sup>3</sup>
(SO <sub>2</sub> )	Titrimetric (U.S. EPA Method 6)		<1.3	500	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (ว-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(ว-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0227

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : ปล่องกระบวนการล้าง (PK-01) SAMPLE NO. : 04601

SAMPLING DATE : 14/09/2023 SAMPLING TIME : 09:25-10:00

RECEIVED DATE : 18/09/2023 REPORTED DATE : 25/09/2023

TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	12.00	m	Type of Process :	Wet Scrubber
Diameter :	0.80	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	7.45	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	3.59	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.11	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfuric Acid	Isokinetic, Barium-Thorin Titrimetric	09:25-10:00	<0.05	100	mg/m <sup>3</sup>
(H <sub>2</sub> SO <sub>4</sub> )	(U.S. EPA Method 8)		<0.01	25	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (ว-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(ว-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0221

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : ปล่องกระบวนการถลุง (AP-02) SAMPLE NO. : 04595

SAMPLING DATE : 13/09/2023 SAMPLING TIME : 10:15-10:20

RECEIVED DATE : 18/09/2023 REPORTED DATE : 25/09/2023

TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.46	m	Type of Fuel :	-
Temperature :	33.00	°C	Oxygen Content :	20.90 %
Air Velocity :	6.90	m/s	Barometric Pressure :	757.00 mm.Hg
Flow rate <sup>1</sup> :	1.09	m <sup>3</sup> /s	Atmospheric Temperature :	34.00 °C
Moisture Content :	2.51	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Oxides of Nitrogen	Absorption, Phenoldisulfonic Acid	10:15-10:20	5.0	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	(U.S. EPA Method 7)		2.7	ppm

**REMARK:**

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (๖-003-ก-0035)
- <sup>๕</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(๖-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(๖-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0219

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ปล่องกระบวนการถลุง (AP-02) SAMPLE NO. : 04593  
 SAMPLING DATE : 13/09/2023 SAMPLING TIME : 10:10-10:40  
 RECEIVED DATE : 18/09/2023 REPORTED DATE : 25/09/2023  
 TESTED DATE : 18-21/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.46	m	Type of Fuel :	-
Temperature :	33.00	°C	Oxygen Content :	20.90 %
Air Velocity :	6.90	m/s	Barometric Pressure :	757.00 mm.Hg
Flow rate <sup>2</sup> :	1.09	m <sup>3</sup> /s	Atmospheric Temperature :	34.00 °C
Moisture Content :	2.51	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide	Absorption, Barium-Thorin	10:10-10:40	<3.4	1,310	mg/m <sup>3</sup>
(SO <sub>2</sub> )	Titrimetric (U.S. EPA Method 6)		<1.3	500	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (จ-003-ก-0035)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

25/09/2023

REPOF.TED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS R EPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABCRATORY

COPY

Request No. LA66-0924

Report No. 6609-0220

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : ปล่องกระบวนการล้าง (AP-02)

SAMPLE NO. : 04594

SAMPLING DATE : 13/09/2023

SAMPLING TIME : 10:10-10:45

RECEIVED DATE : 18/09/2023

REPORTED DATE : 25/09/2023

TESTED DATE : 18-21/09/2023

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.46	m	Type of Fuel :	-
Temperature :	33.00	°C	Oxygen Content :	20.90 %
Air Velocity :	6.90	m/s	Barometric Pressure :	757.00 mm.Hg
Flow rate <sup>2</sup> :	1.09	m <sup>3</sup> /s	Atmospheric Temperature :	34.00 °C
Moisture Content :	2.51	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfuric Acid	Isokinetic, Barium-Thorin Titrimetric	10:10-10:45	<0.05	100	mg/m <sup>3</sup>
(H <sub>2</sub> SO <sub>4</sub> )	(U.S. EPA Method 8)		<0.01	25	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (1-003-ก-0035)
- <sup>3</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....



(Miss Apiradee Chuen-arom)

(1-003-ก-0007)

25/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(Mr. Thongchai Boonsak)

(1-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0932

Report No. 6609-0309

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tung Sukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ปล่องกระบวนการถลุง (PK-03) SAMPLE NO. : 04659  
SAMPLING DATE : 18/09/2023 SAMPLING TIME : 15:40-15:45  
RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/06/2023  
TESTED DATE : 20-25/09/2023  
STACK DESCRIPTION<sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	34.00	°C	Oxygen Content :	20.90 %
Air Velocity :	14.36	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>1/</sup> :	5.16	m <sup>3</sup> /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	3.06	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1/</sup>	UNIT
Oxides of Nitrogen	Absorption, Phenold:sulfonic Acid	15:40-15:45	<2.0	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	(U.S. EPA Method 7)		<1.0	ppm

## REMARK:

- <sup>1/</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr. Audomsub Jenjobjing (1-003-จ-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(1-003-ค-0007)

29/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(1-003-ค-0012)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0932

Report No. 6609-0306

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ปล่องกระบวนการถลุง (PK-03) SAMPLE NO. : 04656  
 SAMPLING DATE : 18/09/2023 SAMPLING TIME : 15:30-16:00  
 RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/09/2023  
 TESTED DATE : 20-26/09/2023

STACK DESCRIPTION<sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	34.00	°C	Oxygen Content :	20.90 %
Air Velocity :	14.36	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>2</sup> :	5.16	m <sup>3</sup> /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	3.06	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide	Absorption, Barium-Thorin	15:30-16:00	<3.4	1,310	mg/m <sup>3</sup>
(SO <sub>2</sub> )	Titrimetric (U.S. EPA Method 6)		<1.3	500	ppm

## REMARK:

- 1.<sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- 2.<sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- 3.<sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
4. Sampling By Mr. Audomsub Jenjobjing (1-003-0-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(1-003-0-0007)

29/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(Mr. Thongchai Boonsak)

(1-003-0-0012)

29/09/2023

COPY

Request No. LA66-0932

Report No. 6609-0308

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tung Sukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ปล่องกระบวนการล้าง (PK-03) SAMPLE NO. : 04658  
SAMPLING DATE : 18/09/2023 SAMPLING TIME : 15:30-16:10  
RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/09/2023  
TESTED DATE : 20-26/09/2023  
STACK DESCRIPTION<sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	34.00	°C	Oxygen Content :	20.90 %
Air Velocity :	14.36	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>2</sup> :	5.16	m <sup>3</sup> /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	3.06	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfuric Acid	Isokinetic, Titrimetric	15:30-16:10	<0.05	100	mg/m <sup>3</sup>
(H <sub>2</sub> SO <sub>4</sub> )	(U.S. EPA Method 8)		<0.01	25	ppm

## REMARK:

- 1.<sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- 2.<sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- 3.<sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
4. Sampling By Mr. Audomsub Jenjobing (จ-003-จ-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

29/09/2023



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ค-0012)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0932

Report No. 6609-0307

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungskula A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ปล่องกระบวนการล้าง (PK-03) SAMPLE NO. : 04657  
SAMPLING DATE : 18/09/2023 SAMPLING TIME : 15:30-16:00  
RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/09/2023  
TESTED DATE : 20-26/09/2023

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	34.00	°C	Oxygen Content :	20.90 %
Air Velocity :	14.36	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>1</sup> :	5.16	m <sup>3</sup> /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	3.06	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Nitric acid	Absorption, Ion Chromatography	15:30-16:00	0.636	mg/m <sup>3</sup>
(HNO <sub>3</sub> )	(U.S.EPA Method 26A)		0.247	ppm

## REMARK:

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Audomsub Jenjobjing
- Parameter Outside The Scope of The Registration of The Department of Industrial Works.



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By: *Thongchai Boonsak*

(Mr. Thongchai Boonsak)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. LA66-0932

Report No. 6609-0304

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ปล่องกระบวนการล้าง (PK-07) SAMPLE NO. : 04654  
SAMPLING DATE : 18/09/2023 SAMPLING TIME : 14:40-14:45  
RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/06/2023  
TESTED DATE : 20-25/09/2023

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.67	m	Type of Fuel :	-
Temperature :	35.00	°C	Oxygen Content :	20.90 %
Air Velocity :	4.97	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>1</sup> :	1.63	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.93	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Oxides of Nitrogen	Absorption, Phenoldisulfonic Acid	14:40-14:45	<2.0	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	(U.S. EPA Method 7)		<1.0	ppm

## REMARK:

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>2</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr. Audomsub Jenjobjijng (จ-003-ท-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

29/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ค-0012)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0932

Report No. 6609-0302

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ปล่องกระบวนการถลุง (PK-07) SAMPLE NO. : 04652  
SAMPLING DATE : 18/09/2023 SAMPLING TIME : 14:30-15:00  
RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/09/2023  
TESTED DATE : 20-26/09/2023

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.67	m	Type of Fuel :	-
Temperature :	35.00	°C	Oxygen Content :	20.90 %
Air Velocity :	4.97	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>2</sup> :	1.63	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.93	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide	Absorption, Barium-Thorin	14:30-15:00	<3.4	1,310	mg/m <sup>3</sup>
(SO <sub>2</sub> )	Titrimetric (U.S. EPA Method 6)		<1.3	500	ppm

## REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr. Audomsub Jenjobjing (จ-003-ท-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

29/09/2023



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ท-0012)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITH OUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0932

Report No. 6609-0303

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungskul A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ปล่องกระบวนการล้าง (PK-07) SAMPLE NO. : 04653  
 SAMPLING DATE : 18/09/2023 SAMPLING TIME : 14:30-15:10  
 RECEIVED DATE : 20/09/2023 REPORTED DATE : 29/09/2023  
 TESTED DATE : 20-26/09/2023  
 STACK DESCRIPTION <sup>®</sup>

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.67	m	Type of Fuel :	-
Temperature :	35.00	°C	Oxygen Content :	20.90 %
Air Velocity :	4.97	m/s	Barometric Pressure :	754.75 mm.Hg
Flow rate <sup>2</sup> :	1.63	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	2.93	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfuric Acid	Isokinetic, Titrimetric	14:30-15:10	<0.05	100	mg/m <sup>3</sup>
(H <sub>2</sub> SO <sub>4</sub> )			<0.01	25	ppm

**REMARK:**

- 1.<sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- 2.<sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- 3.<sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
4. Sampling By Mr. Audomsub Jenjobjing (1-003-ก-0009)

Examined By.....

(Miss Apiradee Chuen-arom)

(1-003-ก-0007)

29/09/2023



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(1-003-ก-0012)

29/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607052

Report No. 6607-0594 - 6607-0596

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE NAME : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070594 - A66070596  
TESTED DATE : 19/07/2023-24/07/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>/1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2023	0.057	0.33	mg/m <sup>3</sup>
		12-13/07/2023	0.052	0.33	mg/m <sup>3</sup>
		13-14/07/2023	0.053	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>/1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoon)

03/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607052

Report No. 6607-0597 - 6607-0599

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE NAME : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070597 - A66070599  
TESTED DATE : 19/07/2023-01/08/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	11-12/07/2023	< 0.01	mg/m <sup>3</sup>
		12-13/07/2023	< 0.01	mg/m <sup>3</sup>
		13-14/07/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoapon)

03/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609043

Report No. 6609-0884 - 6609-0886

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090884 - A66090886  
 TESTED DATE : 20/09/2023-25/09/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2023	0.067	0.33	mg/m <sup>3</sup>
		13-14/09/2023	0.075	0.33	mg/m <sup>3</sup>
		14-15/09/2023	0.066	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsopon)

09/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609043

Report No. 6609-0887 - 6609-0889

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090887 - A66090889  
TESTED DATE : 20/09/2023-09/10/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2023	< 0.01	mg/m <sup>3</sup>
		13-14/09/2023	< 0.01	mg/m <sup>3</sup>
		14-15/09/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsohon)

09/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611030

Report No. 6611-0491 - 6611-0493

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110491 - A66110493  
 TESTED DATE : 16/11/2023-17/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	08-09/11/2023	0.069	0.33	mg/m <sup>3</sup>
		09-10/11/2023	0.138	0.33	mg/m <sup>3</sup>
		10-11/11/2023	0.089	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoon)

22/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611030

Report No. 6611-0494 - 6611-0496

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณที่ทำการข่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110494 - A66110496  
 TESTED DATE : 16/11/2023-20/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	08-09/11/2023	< 0.01	mg/m <sup>3</sup>
		09-10/11/2023	< 0.01	mg/m <sup>3</sup>
		10-11/11/2023	< 0.01	mg/m <sup>3</sup>

## REMARK:

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
 (Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By

(Miss Thanatporn Klinsoon)

22/11/2023

COPY

Request No. ATR6607052

Report No. 6607-0588 - 6607-0590

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
 RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070588 - A66070590  
 TESTED DATE : 19/07/2023-24/07/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2023	0.033	0.33	mg/m <sup>3</sup>
		12-13/07/2023	0.034	0.33	mg/m <sup>3</sup>
		13-14/07/2023	0.031	0.33	mg/m <sup>3</sup>

**REMARK:**<sup>1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoon)

03/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6607052

Report No. 6607-0591 - 6607-0593

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070591 - A66070593  
TESTED DATE : 19/07/2023-01/08/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration, ICP-OES Method	11-12/07/2023	< 0.01	mg/m <sup>3</sup>
		12-13/07/2023	< 0.01	mg/m <sup>3</sup>
		13-14/07/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsopon)

03/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609043

Report No. 6609-0890 - 6609-0892

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090890 - A66090892  
TESTED DATE : 20/09/2023-25/09/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2023	0.024	0.33	mg/m <sup>3</sup>
		13-14/09/2023	0.031	0.33	mg/m <sup>3</sup>
		14-15/09/2023	0.029	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>1/</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By   
(Miss Thanatporn Klinsoon)  
09/10/2023

COPY

Request No. ATR6609043

Report No. 6609-0893 - 6609-0895

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090893 - A66090895  
TESTED DATE : 20/09/2023-09/10/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2023	< 0.01	mg/m <sup>3</sup>
		13-14/09/2023	< 0.01	mg/m <sup>3</sup>
		14-15/09/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsopon)

09/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. ATR6611030

Report No. 6611-0485 - 6611-0487

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
 RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110485 - A66110487  
 TESTED DATE : 16/11/2023-17/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	08-09/11/2023	0.063	0.33	mg/m <sup>3</sup>
		09-10/11/2023	0.080	0.33	mg/m <sup>3</sup>
		10-11/11/2023	0.062	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



Approved By .....

(Miss Thanatporn Klinsoyon)

22/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611030

Report No. 6611-0488 - 6611-0490

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
 RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110488 - A66110490  
 TESTED DATE : 16/11/2023-20/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	08-09/11/2023	< 0.01	mg/m <sup>3</sup>
		09-10/11/2023	< 0.01	mg/m <sup>3</sup>
		10-11/11/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
 (Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsonpon)

22/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607052

Report No. 6607-0600 - 6607-0602

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070600 - A66070602  
 TESTED DATE : 19/07/2023-24/07/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2023	0.056	0.33	mg/m <sup>3</sup>
		12-13/07/2023	0.063	0.33	mg/m <sup>3</sup>
		13-14/07/2023	0.046	0.33	mg/m <sup>3</sup>

**REMARK:**<sup>1/</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Miss Thanatporn Klinsopon)

03/08/2023

COPY

Request No. ATR6607052

Report No. 6607-0603 - 6607-0605

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
RECEIVED DATE : 19/07/2023 SAMPLE NO. : A66070603 - A66070605  
TESTED DATE : 19/07/2023-01/08/2023 REPORTED DATE : 03/08/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	11-12/07/2023	< 0.01	mg/m <sup>3</sup>
		12-13/07/2023	< 0.01	mg/m <sup>3</sup>
		13-14/07/2023	< 0.01	mg/m <sup>3</sup>

## REMARK:

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Miss Thanatporn Klinsopon)

03/08/2023

COPY

Request No. ATR6609043

Report No. 6609-0896 - 6609-0898

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090896 - A66090898  
 TESTED DATE : 20/09/2023-25/09/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2023	0.046	0.33	mg/m <sup>3</sup>
		13-14/09/2023	0.059	0.33	mg/m <sup>3</sup>
		14-15/09/2023	0.047	0.33	mg/m <sup>3</sup>

**REMARK:**<sup>1/</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoapon)

09/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609043

Report No. 6609-0899 - 6609-0901

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
RECEIVED DATE : 20/09/2023 SAMPLE NO. : A66090899 - A66090901  
TESTED DATE : 20/09/2023-09/10/2023 REPORTED DATE : 09/10/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2023	< 0.01	mg/m <sup>3</sup>
		13-14/09/2023	< 0.01	mg/m <sup>3</sup>
		14-15/09/2023	< 0.01	mg/m <sup>3</sup>

## REMARK:

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsopon)

09/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611030

Report No. 6611-0497 - 6611-0499

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110497 - A66110499  
TESTED DATE : 16/11/2023-17/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	08-09/11/2023	0.115	0.33	mg/m <sup>3</sup>
		09-10/11/2023	0.130	0.33	mg/m <sup>3</sup>
		10-11/11/2023	0.094	0.33	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoapon)

22/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611030

Report No. 6611-0500 - 6611-0502

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังท่าประมาณ 0.5 กม.  
RECEIVED DATE : 16/11/2023 SAMPLE NO. : A66110500 - A66110502  
TESTED DATE : 16/11/2023-20/11/2023 REPORTED DATE : 22/11/2023

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	08-09/11/2023	< 0.01	mg/m <sup>3</sup>
		09-10/11/2023	< 0.01	mg/m <sup>3</sup>
		10-11/11/2023	< 0.01	mg/m <sup>3</sup>

**REMARK:**

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Sampling By Mr. Tummarat Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Miss Thanatporn Klinsoyon)

22/11/2023

COPY

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA66-R0760

Report No. R6607-2417 - R6607-2419

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณที่ทำการข่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 19598-19600  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 11-14/07/2023  
 INSTRUMENT : API Model T200 S/N 6758 RECEIVED DATE : 14/07/2023  
 REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
10:00 - 11:00 <sup>2</sup>	0.013	0.015	0.013	ppm
11:00 - 12:00	0.019	0.016	0.014	ppm
12:00 - 13:00	0.018	0.014	0.013	ppm
13:00 - 14:00	0.017	0.017	0.020	ppm
14:00 - 15:00	0.018	0.017	0.019	ppm
15:00 - 16:00	0.023	0.015	0.016	ppm
16:00 - 17:00	0.026	0.018	0.020	ppm
17:00 - 18:00	0.031	0.018	0.030	ppm
18:00 - 19:00	0.026	0.029	0.026	ppm
19:00 - 20:00	0.025	0.033	0.031	ppm
20:00 - 21:00	0.029	0.039	0.030	ppm
21:00 - 22:00	0.024	0.036	0.027	ppm
22:00 - 23:00	0.019	0.028	0.024	ppm
23:00 - 00:00	0.017	0.020	0.019	ppm
00:00 - 01:00	0.017	0.022	0.021	ppm
01:00 - 02:00	0.016	0.018	0.016	ppm
02:00 - 03:00	0.019	0.017	0.020	ppm
03:00 - 04:00	0.019	0.017	0.018	ppm
04:00 - 05:00	0.018	0.016	0.019	ppm
05:00 - 06:00	0.018	0.014	0.012	ppm
06:00 - 07:00	0.017	0.010	0.014	ppm
07:00 - 08:00	0.016	0.008	0.017	ppm
08:00 - 09:00	0.023	0.028	0.015	ppm
09:00 - 10:00	0.019	0.015	0.018	ppm
Maximum 1 hr.	0.031	0.039	0.031	ppm
Average 24 hr.	0.020	0.020	0.020	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummat...Approved By: 

(MS. THANATPORN KLINSOPON)

24/07/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0955

Report No. R6609-1739 - R6609-1741

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณที่ทำการชื้อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 28605-28607  
DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 12-15/09/2023  
INSTRUMENT : API Model T200 S/N 6756 RECEIVED DATE : 15/09/2023  
REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
09:00 - 10:00 <sup>2</sup>	0.009	0.011	0.016	ppm
10:00 - 11:00	0.007	0.010	0.012	ppm
11:00 - 12:00	0.007	0.010	0.011	ppm
12:00 - 13:00	0.008	0.010	0.011	ppm
13:00 - 14:00	0.007	0.009	0.010	ppm
14:00 - 15:00	0.007	0.012	0.011	ppm
15:00 - 16:00	0.010	0.012	0.011	ppm
16:00 - 17:00	0.013	0.013	0.013	ppm
17:00 - 18:00	0.012	0.015	0.011	ppm
18:00 - 19:00	0.014	0.014	0.010	ppm
19:00 - 20:00	0.011	0.010	0.009	ppm
20:00 - 21:00	0.011	0.010	0.010	ppm
21:00 - 22:00	0.010	0.011	0.011	ppm
22:00 - 23:00	0.011	0.014	0.010	ppm
23:00 - 00:00	0.010	0.012	0.009	ppm
00:00 - 01:00	0.008	0.007	0.008	ppm
01:00 - 02:00	0.010	0.005	0.006	ppm
02:00 - 03:00	0.011	0.004	0.006	ppm
03:00 - 04:00	0.009	0.004	0.007	ppm
04:00 - 05:00	0.008	0.005	0.011	ppm
05:00 - 06:00	0.009	0.006	0.014	ppm
06:00 - 07:00	0.010	0.007	0.010	ppm
07:00 - 08:00	0.011	0.007	0.012	ppm
08:00 - 09:00	0.012	0.014	0.010	ppm
Maximum 1 hr.	0.014	0.015	0.016	ppm
Average 24 hr.	0.010	0.010	0.010	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photanahum)

Approved By.....

(MS. THANATPORN KLINSOPON)

21/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R1143

Report No. R6611-0913 - R6611-0915

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

PARAMETER\* : Nitrogen Dioxide

SAMPLE NO. : 33141-33143

DETERMINATION METHOD : Chemiluminescence

SAMPLING DATE : 08-11/11/2023

INSTRUMENT : API Model T200 S/N 7355

RECEIVED DATE : 11/11/2023

REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
09:00 - 10:00 <sup>2</sup>	0.019	0.021	0.031	ppm
10:00 - 11:00	0.020	0.025	0.030	ppm
11:00 - 12:00	0.023	0.024	0.031	ppm
12:00 - 13:00	0.020	0.014	0.027	ppm
13:00 - 14:00	0.015	0.012	0.022	ppm
14:00 - 15:00	0.016	0.015	0.032	ppm
15:00 - 16:00	0.017	0.022	0.040	ppm
16:00 - 17:00	0.016	0.024	0.043	ppm
17:00 - 18:00	0.028	0.032	0.035	ppm
18:00 - 19:00	0.026	0.034	0.041	ppm
19:00 - 20:00	0.023	0.031	0.038	ppm
20:00 - 21:00	0.024	0.032	0.033	ppm
21:00 - 22:00	0.023	0.031	0.032	ppm
22:00 - 23:00	0.021	0.026	0.033	ppm
23:00 - 00:00	0.022	0.024	0.027	ppm
00:00 - 01:00	0.021	0.022	0.028	ppm
01:00 - 02:00	0.021	0.022	0.026	ppm
02:00 - 03:00	0.021	0.022	0.022	ppm
03:00 - 04:00	0.019	0.020	0.018	ppm
04:00 - 05:00	0.017	0.019	0.018	ppm
05:00 - 06:00	0.019	0.020	0.019	ppm
06:00 - 07:00	0.019	0.019	0.017	ppm
07:00 - 08:00	0.020	0.018	0.017	ppm
08:00 - 09:00	0.020	0.023	0.021	ppm
Maximum 1 hr.	0.028	0.034	0.043	ppm
Average 24 hr.	0.020	0.023	0.028	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Pholachon)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

16/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0760

Report No. R6607-2423 - R6607-2425

## TEST REPORT

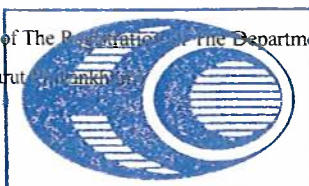
CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
 PARAMETER\* : Nitrogen Dioxide  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model M200E S/N 4084

SAMPLE NO. : 19604-19606  
 SAMPLING DATE : 11-14/07/2023  
 RECEIVED DATE : 14/07/2023  
 REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
09:00 - 10:00 <sup>2</sup>	0.023	0.031	0.034	ppm
10:00 - 11:00	0.035	0.032	0.034	ppm
11:00 - 12:00	0.040	0.035	0.033	ppm
12:00 - 13:00	0.037	0.034	0.030	ppm
13:00 - 14:00	0.034	0.037	0.038	ppm
14:00 - 15:00	0.043	0.035	0.040	ppm
15:00 - 16:00	0.043	0.038	0.040	ppm
16:00 - 17:00	0.042	0.038	0.036	ppm
17:00 - 18:00	0.041	0.038	0.041	ppm
18:00 - 19:00	0.040	0.039	0.037	ppm
19:00 - 20:00	0.039	0.040	0.045	ppm
20:00 - 21:00	0.040	0.045	0.046	ppm
21:00 - 22:00	0.042	0.045	0.043	ppm
22:00 - 23:00	0.038	0.043	0.040	ppm
23:00 - 00:00	0.040	0.039	0.041	ppm
00:00 - 01:00	0.037	0.037	0.041	ppm
01:00 - 02:00	0.037	0.035	0.033	ppm
02:00 - 03:00	0.036	0.035	0.033	ppm
03:00 - 04:00	0.034	0.037	0.033	ppm
04:00 - 05:00	0.031	0.036	0.030	ppm
05:00 - 06:00	0.035	0.036	0.030	ppm
06:00 - 07:00	0.035	0.035	0.026	ppm
07:00 - 08:00	0.031	0.038	0.031	ppm
08:00 - 09:00	0.038	0.039	0.038	ppm
Maximum 1 hr.	0.043	0.045	0.046	ppm
Average 24 hr.	0.037	0.037	0.036	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time

\* Parameter Outside The Scope of The Regulation of The Department of Industrial Works  
 (Measurement By Mr. Tummarut Chonchun)

Approved By: 

(MS. THANATPORN KLINSOPON)

24/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0955


Report No. R6609-1733 - R6609-1735

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 2005

SAMPLE NO. : 28599-28601  
SAMPLING DATE : 12-15/09/2023  
RECEIVED DATE : 15/09/2023  
REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
09:00 - 10:00 <sup>2</sup>	0.022	0.019	0.023	ppm
10:00 - 11:00	0.023	0.013	0.022	ppm
11:00 - 12:00	0.020	0.013	0.017	ppm
12:00 - 13:00	0.018	0.010	0.012	ppm
13:00 - 14:00	0.021	0.013	0.011	ppm
14:00 - 15:00	0.019	0.010	0.011	ppm
15:00 - 16:00	0.016	0.010	0.016	ppm
16:00 - 17:00	0.016	0.010	0.015	ppm
17:00 - 18:00	0.016	0.010	0.016	ppm
18:00 - 19:00	0.015	0.012	0.014	ppm
19:00 - 20:00	0.018	0.016	0.014	ppm
20:00 - 21:00	0.026	0.035	0.019	ppm
21:00 - 22:00	0.037	0.040	0.023	ppm
22:00 - 23:00	0.033	0.047	0.022	ppm
23:00 - 00:00	0.028	0.051	0.028	ppm
00:00 - 01:00	0.027	0.036	0.034	ppm
01:00 - 02:00	0.030	0.035	0.034	ppm
02:00 - 03:00	0.031	0.031	0.030	ppm
03:00 - 04:00	0.023	0.031	0.029	ppm
04:00 - 05:00	0.029	0.017	0.028	ppm
05:00 - 06:00	0.024	0.018	0.031	ppm
06:00 - 07:00	0.026	0.031	0.034	ppm
07:00 - 08:00	0.033	0.042	0.046	ppm
08:00 - 09:00	0.037	0.031	0.027	ppm
Maximum 1 hr.	0.037	0.051	0.046	ppm
Average 24 hr.	0.024	0.024	0.023	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Phomkham)Approved By:   
(MS. THANATPORN KLINSOPON)

21/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1143

Report No. R6611-0907 - R6611-0909

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 6757

SAMPLE NO. : 33135-33137  
SAMPLING DATE : 08-11/11/2023  
RECEIVED DATE : 11/11/2023  
REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
09:00 - 10:00 <sup>2</sup>	0.014	0.022	0.020	ppm
10:00 - 11:00	0.029	0.021	0.020	ppm
11:00 - 12:00	0.024	0.021	0.025	ppm
12:00 - 13:00	0.019	0.011	0.022	ppm
13:00 - 14:00	0.019	0.011	0.018	ppm
14:00 - 15:00	0.017	0.012	0.020	ppm
15:00 - 16:00	0.020	0.016	0.021	ppm
16:00 - 17:00	0.019	0.018	0.026	ppm
17:00 - 18:00	0.018	0.023	0.024	ppm
18:00 - 19:00	0.019	0.028	0.028	ppm
19:00 - 20:00	0.024	0.022	0.030	ppm
20:00 - 21:00	0.025	0.030	0.029	ppm
21:00 - 22:00	0.025	0.028	0.026	ppm
22:00 - 23:00	0.018	0.024	0.031	ppm
23:00 - 00:00	0.025	0.022	0.027	ppm
00:00 - 01:00	0.023	0.021	0.026	ppm
01:00 - 02:00	0.021	0.020	0.029	ppm
02:00 - 03:00	0.020	0.019	0.027	ppm
03:00 - 04:00	0.020	0.019	0.019	ppm
04:00 - 05:00	0.017	0.018	0.016	ppm
05:00 - 06:00	0.016	0.018	0.018	ppm
06:00 - 07:00	0.017	0.018	0.016	ppm
07:00 - 08:00	0.016	0.020	0.016	ppm
08:00 - 09:00	0.019	0.023	0.021	ppm
Maximum 1 hr.	0.029	0.030	0.031	ppm
Average 24 hr.	0.020	0.020	0.023	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Pholankom)Approved By: 

(MS. THANATPORN KLINSOPON)

16/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

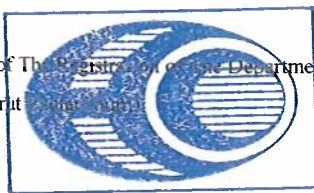
Request No. LA66-R0760

Report No. R6607-2411 - R6607-2413

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 19592-19594  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 11-14/07/2023  
 INSTRUMENT : API Model T200 S/N 2005 RECEIVED DATE : 14/07/2023  
 REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
10:00 - 11:00 <sup>2</sup>	0.008	0.008	0.012	ppm
11:00 - 12:00	0.008	0.008	0.013	ppm
12:00 - 13:00	0.008	0.009	0.011	ppm
13:00 - 14:00	0.008	0.007	0.010	ppm
14:00 - 15:00	0.012	0.011	0.009	ppm
15:00 - 16:00	0.010	0.012	0.009	ppm
16:00 - 17:00	0.016	0.012	0.011	ppm
17:00 - 18:00	0.015	0.013	0.015	ppm
18:00 - 19:00	0.010	0.017	0.017	ppm
19:00 - 20:00	0.011	0.020	0.018	ppm
20:00 - 21:00	0.012	0.020	0.016	ppm
21:00 - 22:00	0.011	0.019	0.015	ppm
22:00 - 23:00	0.011	0.017	0.013	ppm
23:00 - 00:00	0.010	0.012	0.011	ppm
00:00 - 01:00	0.009	0.008	0.011	ppm
01:00 - 02:00	0.009	0.006	0.007	ppm
02:00 - 03:00	0.009	0.006	0.005	ppm
03:00 - 04:00	0.009	0.007	0.005	ppm
04:00 - 05:00	0.007	0.007	0.004	ppm
05:00 - 06:00	0.008	0.008	0.005	ppm
06:00 - 07:00	0.011	0.008	0.007	ppm
07:00 - 08:00	0.010	0.010	0.009	ppm
08:00 - 09:00	0.012	0.012	0.008	ppm
09:00 - 10:00	0.008	0.010	0.007	ppm
Maximum 1 hr.	0.016	0.020	0.018	ppm
Average 24 hr.	0.010	0.011	0.010	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of the Department of Industrial Works  
(Measurement By Mr. Tummarat Kongsakul)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

24/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0955

Report No. R6609-1727 - R6609-1729

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 28593-28595  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 12-15/09/2023  
 INSTRUMENT : API Model T200 S/N 7355 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
10:00 - 11:00 <sup>2</sup>	0.003	0.012	0.011	ppm
11:00 - 12:00	0.004	0.011	0.012	ppm
12:00 - 13:00	0.009	0.010	0.012	ppm
13:00 - 14:00	0.009	0.009	0.013	ppm
14:00 - 15:00	0.009	0.011	0.012	ppm
15:00 - 16:00	0.010	0.012	0.013	ppm
16:00 - 17:00	0.011	0.012	0.014	ppm
17:00 - 18:00	0.011	0.013	0.017	ppm
18:00 - 19:00	0.013	0.014	0.019	ppm
19:00 - 20:00	0.014	0.017	0.019	ppm
20:00 - 21:00	0.011	0.019	0.018	ppm
21:00 - 22:00	0.013	0.017	0.017	ppm
22:00 - 23:00	0.014	0.015	0.019	ppm
23:00 - 00:00	0.010	0.018	0.016	ppm
00:00 - 01:00	0.009	0.010	0.015	ppm
01:00 - 02:00	0.009	0.008	0.012	ppm
02:00 - 03:00	0.008	0.010	0.010	ppm
03:00 - 04:00	0.014	0.009	0.023	ppm
04:00 - 05:00	0.013	0.016	0.013	ppm
05:00 - 06:00	0.013	0.014	0.013	ppm
06:00 - 07:00	0.011	0.013	0.016	ppm
07:00 - 08:00	0.012	0.018	0.022	ppm
08:00 - 09:00	0.011	0.024	0.022	ppm
09:00 - 10:00	0.010	0.013	0.014	ppm
Maximum 1 hr.	0.014	0.024	0.023	ppm
Average 24 hr.	0.011	0.014	0.015	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Phumkham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

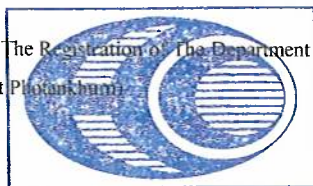
Request No. LA66-R1143

Report No. R6611-0919 - R6611-0921

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 33147-33149  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 08-11/11/2023  
 INSTRUMENT : API Model T200 S/N 2005 RECEIVED DATE : 11/11/2023  
 REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
10:00 - 11:00 <sup>2</sup>	0.026	0.037	0.052	ppm
11:00 - 12:00	0.035	0.032	0.050	ppm
12:00 - 13:00	0.033	0.030	0.055	ppm
13:00 - 14:00	0.048	0.021	0.051	ppm
14:00 - 15:00	0.052	0.035	0.033	ppm
15:00 - 16:00	0.045	0.046	0.048	ppm
16:00 - 17:00	0.043	0.036	0.047	ppm
17:00 - 18:00	0.045	0.054	0.053	ppm
18:00 - 19:00	0.027	0.035	0.055	ppm
19:00 - 20:00	0.034	0.033	0.032	ppm
20:00 - 21:00	0.028	0.022	0.036	ppm
21:00 - 22:00	0.030	0.020	0.041	ppm
22:00 - 23:00	0.011	0.036	0.045	ppm
23:00 - 00:00	0.009	0.032	0.045	ppm
00:00 - 01:00	0.035	0.033	0.048	ppm
01:00 - 02:00	0.035	0.037	0.047	ppm
02:00 - 03:00	0.025	0.025	0.047	ppm
03:00 - 04:00	0.016	0.028	0.048	ppm
04:00 - 05:00	0.030	0.036	0.050	ppm
05:00 - 06:00	0.042	0.034	0.048	ppm
06:00 - 07:00	0.053	0.044	0.046	ppm
07:00 - 08:00	0.053	0.049	0.055	ppm
08:00 - 09:00	0.040	0.050	0.055	ppm
09:00 - 10:00	0.048	0.052	0.052	ppm
Maximum 1 hr.	0.053	0.054	0.055	ppm
Average 24 hr.	0.035	0.036	0.047	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photanichum)Approved By: 

(MS. THANATPORN KLINSOPON)

16/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

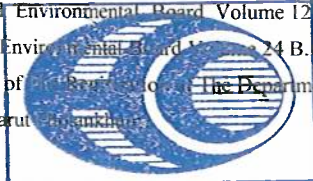
Request No. LA66-R0760

Report No. R6607-2414 - R6607-2416

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 19595-19597  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 11-14/07/2023  
 INSTRUMENT : API Model M100E S/N 3220 RECEIVED DATE : 14/07/2023  
 REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
10:00 - 11:00 <sup>3</sup>	0.012	0.009	0.008	ppm
11:00 - 12:00	0.010	0.010	0.008	ppm
12:00 - 13:00	0.010	0.009	0.007	ppm
13:00 - 14:00	0.009	0.008	0.007	ppm
14:00 - 15:00	0.010	0.009	0.008	ppm
15:00 - 16:00	0.012	0.009	0.009	ppm
16:00 - 17:00	0.014	0.009	0.010	ppm
17:00 - 18:00	0.016	0.010	0.009	ppm
18:00 - 19:00	0.016	0.010	0.010	ppm
19:00 - 20:00	0.012	0.010	0.010	ppm
20:00 - 21:00	0.011	0.010	0.012	ppm
21:00 - 22:00	0.010	0.010	0.011	ppm
22:00 - 23:00	0.010	0.009	0.011	ppm
23:00 - 00:00	0.009	0.008	0.010	ppm
00:00 - 01:00	0.009	0.009	0.010	ppm
01:00 - 02:00	0.009	0.008	0.010	ppm
02:00 - 03:00	0.009	0.009	0.010	ppm
03:00 - 04:00	0.009	0.008	0.009	ppm
04:00 - 05:00	0.010	0.008	0.009	ppm
05:00 - 06:00	0.010	0.009	0.009	ppm
06:00 - 07:00	0.009	0.009	0.009	ppm
07:00 - 08:00	0.009	0.008	0.009	ppm
08:00 - 09:00	0.009	0.008	0.008	ppm
09:00 - 10:00	0.008	0.008	0.009	ppm
Maximum 1 hr.	0.016	0.010	0.012	ppm
Average 24 hr.	0.010	0.009	0.009	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Department of Industrial Works  
(Measurement By Mr. Tummarut Sornkhan)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

24/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0955

Report No. R6609-1736 - R6609-1738

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungskula A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 28602-28604  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 12-15/09/2023  
 INSTRUMENT : API Model M100E S/N 3138 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
09:00 - 10:00 <sup>3</sup>	0.016	0.014	0.014	ppm
10:00 - 11:00	0.015	0.014	0.014	ppm
11:00 - 12:00	0.015	0.014	0.013	ppm
12:00 - 13:00	0.014	0.013	0.014	ppm
13:00 - 14:00	0.014	0.013	0.013	ppm
14:00 - 15:00	0.014	0.013	0.013	ppm
15:00 - 16:00	0.014	0.013	0.013	ppm
16:00 - 17:00	0.014	0.014	0.013	ppm
17:00 - 18:00	0.014	0.014	0.014	ppm
18:00 - 19:00	0.014	0.014	0.014	ppm
19:00 - 20:00	0.014	0.014	0.014	ppm
20:00 - 21:00	0.014	0.014	0.014	ppm
21:00 - 22:00	0.014	0.014	0.014	ppm
22:00 - 23:00	0.014	0.014	0.014	ppm
23:00 - 00:00	0.014	0.014	0.013	ppm
00:00 - 01:00	0.014	0.014	0.014	ppm
01:00 - 02:00	0.014	0.013	0.013	ppm
02:00 - 03:00	0.014	0.014	0.014	ppm
03:00 - 04:00	0.014	0.014	0.014	ppm
04:00 - 05:00	0.014	0.014	0.014	ppm
05:00 - 06:00	0.014	0.014	0.013	ppm
06:00 - 07:00	0.014	0.014	0.014	ppm
07:00 - 08:00	0.014	0.014	0.014	ppm
08:00 - 09:00	0.014	0.014	0.014	ppm
Maximum 1 hr.	0.016	0.014	0.014	ppm
Average 24 hr.	0.014	0.014	0.014	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Pholamkham)Approved By: 

(MS. THANATPORN KLINSOPON)

21/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1143

Report No. R6611-0910 - R6611-0912

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออกของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.  
 PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 33138-33140  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 08-11/11/2023  
 INSTRUMENT : API Model T100 S/N 6459 RECEIVED DATE : 11/11/2023  
 REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
09:00 - 10:00 <sup>3</sup>	0.003	0.002	0.002	ppm
10:00 - 11:00	0.003	0.001	0.002	ppm
11:00 - 12:00	0.005	0.001	0.001	ppm
12:00 - 13:00	0.001	0.001	0.001	ppm
13:00 - 14:00	0.001	0.001	0.001	ppm
14:00 - 15:00	0.005	0.001	0.001	ppm
15:00 - 16:00	0.004	0.001	0.001	ppm
16:00 - 17:00	0.003	0.001	0.001	ppm
17:00 - 18:00	0.004	0.002	0.002	ppm
18:00 - 19:00	0.003	0.001	0.002	ppm
19:00 - 20:00	0.003	0.001	0.002	ppm
20:00 - 21:00	0.002	0.002	0.002	ppm
21:00 - 22:00	0.002	0.002	0.002	ppm
22:00 - 23:00	0.001	0.002	0.002	ppm
23:00 - 00:00	0.002	0.002	0.002	ppm
00:00 - 01:00	0.002	0.002	0.002	ppm
01:00 - 02:00	0.004	0.002	0.002	ppm
02:00 - 03:00	0.003	0.002	0.002	ppm
03:00 - 04:00	0.003	0.002	0.002	ppm
04:00 - 05:00	0.002	0.002	0.002	ppm
05:00 - 06:00	0.002	0.002	0.001	ppm
06:00 - 07:00	0.002	0.002	0.002	ppm
07:00 - 08:00	0.001	0.002	0.002	ppm
08:00 - 09:00	0.002	0.002	0.002	ppm
Maximum 1 hr.	0.005	0.002	0.002	ppm
Average 24 hr.	0.003	0.001	0.002	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Pholaporn)

Approved By.....

(MS. THANATPORN KLINSOPON)

16/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0760

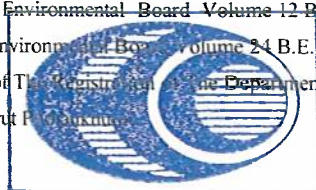
Report No. R6607-2420 - R6607-2422

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
PARAMETER\* : Sulfur Dioxide  
DETERMINATION METHOD : UV-Fluorescence  
INSTRUMENT : API Model T100 S/N 6459

SAMPLE NO. : 19601-19603  
SAMPLING DATE : 11-14/07/2023  
RECEIVED DATE : 14/07/2023  
REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
09:00 - 10:00 <sup>1/3</sup>	0.002	0.001	0.001	ppm
10:00 - 11:00	0.001	0.001	0.001	ppm
11:00 - 12:00	0.002	0.001	0.001	ppm
12:00 - 13:00	0.002	0.001	0.001	ppm
13:00 - 14:00	0.002	0.001	0.001	ppm
14:00 - 15:00	0.002	<0.001	0.001	ppm
15:00 - 16:00	0.001	0.001	0.001	ppm
16:00 - 17:00	0.001	<0.001	0.001	ppm
17:00 - 18:00	0.001	<0.001	0.001	ppm
18:00 - 19:00	0.001	<0.001	0.001	ppm
19:00 - 20:00	0.001	<0.001	0.001	ppm
20:00 - 21:00	0.001	<0.001	0.001	ppm
21:00 - 22:00	0.001	<0.001	0.001	ppm
22:00 - 23:00	0.001	<0.001	0.001	ppm
23:00 - 00:00	0.001	<0.001	0.001	ppm
00:00 - 01:00	0.001	0.001	0.001	ppm
01:00 - 02:00	0.001	<0.001	0.001	ppm
02:00 - 03:00	0.001	0.001	0.001	ppm
03:00 - 04:00	0.001	0.001	0.001	ppm
04:00 - 05:00	0.001	0.001	0.001	ppm
05:00 - 06:00	0.001	0.001	0.001	ppm
06:00 - 07:00	0.001	0.001	0.001	ppm
07:00 - 08:00	0.001	0.001	0.001	ppm
08:00 - 09:00	0.001	0.001	0.001	ppm
Maximum 1 hr.	0.002	0.001	0.001	ppm
Average 24 hr.	0.001	0.001	0.001	ppm
Standard (1 hr.) <sup>1/1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>1/2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1/1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>1/2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>1/3</sup> Start Time\* Parameter Outside The Scope of The Registration of the Department of Industrial Works  
(Measurement By Mr. Tummarut P. Chakraborty)

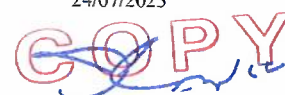
บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

24/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0955

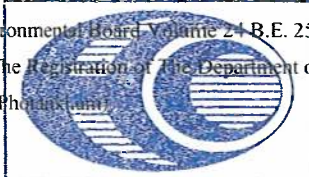
Report No. R6609-1730 - R6609-1732

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
PARAMETER\* : Sulfur Dioxide  
DETERMINATION METHOD : UV-Fluorescence  
INSTRUMENT : API Model T100 S/N 6459

SAMPLE NO. : 28596-28598  
SAMPLING DATE : 12-15/09/2023  
RECEIVED DATE : 15/09/2023  
REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
09:00 - 10:00 <sup>3</sup>	0.007	0.006	0.005	ppm
10:00 - 11:00	0.007	0.006	0.006	ppm
11:00 - 12:00	0.004	0.006	0.006	ppm
12:00 - 13:00	0.004	0.006	0.006	ppm
13:00 - 14:00	0.005	0.006	0.006	ppm
14:00 - 15:00	0.006	0.006	0.006	ppm
15:00 - 16:00	0.006	0.006	0.006	ppm
16:00 - 17:00	0.007	0.006	0.006	ppm
17:00 - 18:00	0.006	0.006	0.006	ppm
18:00 - 19:00	0.006	0.007	0.007	ppm
19:00 - 20:00	0.006	0.007	0.007	ppm
20:00 - 21:00	0.006	0.007	0.007	ppm
21:00 - 22:00	0.006	0.006	0.006	ppm
22:00 - 23:00	0.006	0.006	0.006	ppm
23:00 - 00:00	0.006	0.006	0.006	ppm
00:00 - 01:00	0.006	0.006	0.006	ppm
01:00 - 02:00	0.006	0.006	0.006	ppm
02:00 - 03:00	0.006	0.006	0.006	ppm
03:00 - 04:00	0.006	0.006	0.006	ppm
04:00 - 05:00	0.006	0.006	0.006	ppm
05:00 - 06:00	0.006	0.006	0.006	ppm
06:00 - 07:00	0.006	0.006	0.006	ppm
07:00 - 08:00	0.006	0.006	0.006	ppm
08:00 - 09:00	0.005	0.006	0.006	ppm
Maximum 1 hr.	0.007	0.007	0.007	ppm
Average 24 hr.	0.006	0.006	0.006	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Phomkuntum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1143

Report No. R6611-0904 - R6611-0906

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
PARAMETER\* : Sulfur Dioxide  
DETERMINATION METHOD : UV-Fluorescence  
INSTRUMENT : API Model T100 S/N 5700

SAMPLE NO. : 33132-33134  
SAMPLING DATE : 08-11/11/2023  
RECEIVED DATE : 11/11/2023  
REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
09:00 - 10:00 <sup>3</sup>	0.006	0.006	0.007	ppm
10:00 - 11:00	0.007	0.006	0.006	ppm
11:00 - 12:00	0.003	0.006	0.006	ppm
12:00 - 13:00	0.004	0.006	0.006	ppm
13:00 - 14:00	0.005	0.006	0.007	ppm
14:00 - 15:00	0.005	0.006	0.007	ppm
15:00 - 16:00	0.005	0.007	0.007	ppm
16:00 - 17:00	0.005	0.006	0.007	ppm
17:00 - 18:00	0.006	0.007	0.008	ppm
18:00 - 19:00	0.006	0.006	0.008	ppm
19:00 - 20:00	0.006	0.007	0.007	ppm
20:00 - 21:00	0.006	0.007	0.008	ppm
21:00 - 22:00	0.006	0.007	0.007	ppm
22:00 - 23:00	0.006	0.007	0.007	ppm
23:00 - 00:00	0.007	0.007	0.007	ppm
00:00 - 01:00	0.007	0.007	0.007	ppm
01:00 - 02:00	0.007	0.007	0.008	ppm
02:00 - 03:00	0.006	0.006	0.008	ppm
03:00 - 04:00	0.006	0.007	0.007	ppm
04:00 - 05:00	0.007	0.007	0.008	ppm
05:00 - 06:00	0.007	0.007	0.008	ppm
06:00 - 07:00	0.007	0.007	0.008	ppm
07:00 - 08:00	0.006	0.007	0.008	ppm
08:00 - 09:00	0.007	0.007	0.008	ppm
Maximum 1 hr.	0.007	0.007	0.008	ppm
Average 24 hr.	0.006	0.007	0.007	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)  
<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004) <sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Phichaiyuan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

16/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0760

Report No. R6607-2408 - R6607-2410

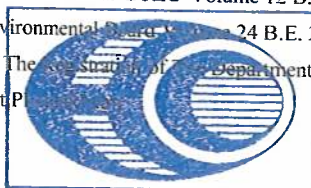
## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
PARAMETER\* : Sulfur Dioxide  
DETERMINATION METHOD : UV-Fluorescence  
INSTRUMENT : API Model T100 S/N 6457

SAMPLE NO. : 19589-19591  
SAMPLING DATE : 11-14/07/2023  
RECEIVED DATE : 14/07/2023  
REPORTED DATE : 24/07/2023

TIME / DATE	11-12/07/2023	12-13/07/2023	13-14/07/2023	UNIT
10:00 - 11:00 <sup>3</sup>	0.001	0.001	0.001	ppm
11:00 - 12:00	0.001	0.001	0.001	ppm
12:00 - 13:00	<0.001	0.001	<0.001	ppm
13:00 - 14:00	<0.001	0.001	0.001	ppm
14:00 - 15:00	0.001	0.001	0.001	ppm
15:00 - 16:00	<0.001	0.001	0.001	ppm
16:00 - 17:00	0.001	0.001	0.001	ppm
17:00 - 18:00	0.001	0.002	0.001	ppm
18:00 - 19:00	0.001	0.002	0.001	ppm
19:00 - 20:00	0.001	0.001	0.001	ppm
20:00 - 21:00	0.001	0.001	0.001	ppm
21:00 - 22:00	0.001	0.001	0.001	ppm
22:00 - 23:00	<0.001	0.001	0.001	ppm
23:00 - 00:00	<0.001	0.001	0.001	ppm
00:00 - 01:00	<0.001	<0.001	0.001	ppm
01:00 - 02:00	<0.001	<0.001	<0.001	ppm
02:00 - 03:00	<0.001	<0.001	<0.001	ppm
03:00 - 04:00	0.001	<0.001	<0.001	ppm
04:00 - 05:00	0.001	<0.001	<0.001	ppm
05:00 - 06:00	0.001	<0.001	<0.001	ppm
06:00 - 07:00	0.001	0.001	0.001	ppm
07:00 - 08:00	0.001	0.001	0.001	ppm
08:00 - 09:00	0.001	0.001	0.001	ppm
09:00 - 10:00	0.001	0.001	0.001	ppm
Maximum 1 hr.	0.001	0.002	0.001	ppm
Average 24 hr.	0.001	0.001	0.001	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)  
<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Measurement of The Department of Industrial Works  
(Measurement By Mr. Tummarut P.)

Approved By: 

(MS. THANATPORN KLINSOPON)

24/07/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0955

Report No. R6609-1724 - R6609-1726

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : บริเวณเขตรุกีการล้างของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 28590-28592  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 12-15/09/2023  
 INSTRUMENT : API Model T100 S/N 6457 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME / DATE	12-13/09/2023	13-14/09/2023	14-15/09/2023	UNIT
10:00 - 11:00 <sup>3</sup>	0.001	0.001	0.001	ppm
11:00 - 12:00	0.001	0.001	0.001	ppm
12:00 - 13:00	<0.001	0.001	0.001	ppm
13:00 - 14:00	0.001	0.001	0.001	ppm
14:00 - 15:00	0.001	0.001	0.001	ppm
15:00 - 16:00	0.001	0.001	0.001	ppm
16:00 - 17:00	0.001	0.001	0.001	ppm
17:00 - 18:00	0.001	0.001	0.001	ppm
18:00 - 19:00	0.001	0.001	0.001	ppm
19:00 - 20:00	0.001	0.001	0.001	ppm
20:00 - 21:00	0.001	0.001	0.001	ppm
21:00 - 22:00	0.001	0.001	0.001	ppm
22:00 - 23:00	0.001	0.001	0.001	ppm
23:00 - 00:00	0.001	0.001	0.001	ppm
00:00 - 01:00	0.001	0.001	0.001	ppm
01:00 - 02:00	0.001	0.001	0.001	ppm
02:00 - 03:00	0.001	0.001	0.001	ppm
03:00 - 04:00	0.001	0.001	0.001	ppm
04:00 - 05:00	0.001	0.001	0.001	ppm
05:00 - 06:00	0.001	0.001	0.001	ppm
06:00 - 07:00	0.001	0.001	0.001	ppm
07:00 - 08:00	0.001	0.002	0.001	ppm
08:00 - 09:00	0.001	0.002	0.001	ppm
09:00 - 10:00	0.001	0.001	0.001	ppm
Maximum 1 hr.	0.001	0.002	0.001	ppm
Average 24 hr.	0.001	0.001	0.001	ppm
Standard (1 hr.) <sup>1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)<sup>2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Regulation of The Department of Industrial Works  
(Measurement By Mr. Tummarut Phorakham)

Approved By.....

(MS. THANATPORN KLINSOPON)

21/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R1143

Report No. R6611-0916 - R6611-0918

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 33144-33146  
DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 08-11/11/2023  
INSTRUMENT : Environnement SA. Model AF22e S/N 913 RECEIVED DATE : 11/11/2023  
REPORTED DATE : 16/11/2023

TIME / DATE	08-09/11/2023	09-10/11/2023	10-11/11/2023	UNIT
10:00 - 11:00 <sup>3</sup>	0.003	0.003	0.003	ppm
11:00 - 12:00	0.003	0.003	0.003	ppm
12:00 - 13:00	0.003	0.002	0.003	ppm
13:00 - 14:00	0.002	0.003	0.003	ppm
14:00 - 15:00	0.003	0.003	0.002	ppm
15:00 - 16:00	0.002	0.003	0.003	ppm
16:00 - 17:00	0.003	0.003	0.003	ppm
17:00 - 18:00	0.003	0.003	0.003	ppm
18:00 - 19:00	0.003	0.003	0.003	ppm
19:00 - 20:00	0.003	0.003	0.003	ppm
20:00 - 21:00	0.003	0.003	0.004	ppm
21:00 - 22:00	0.003	0.003	0.003	ppm
22:00 - 23:00	0.003	0.003	0.003	ppm
23:00 - 00:00	0.003	0.003	0.003	ppm
00:00 - 01:00	0.003	0.003	0.002	ppm
01:00 - 02:00	0.003	0.003	0.002	ppm
02:00 - 03:00	0.003	0.003	0.003	ppm
03:00 - 04:00	0.002	0.003	0.003	ppm
04:00 - 05:00	0.003	0.003	0.003	ppm
05:00 - 06:00	0.003	0.002	0.003	ppm
06:00 - 07:00	0.002	0.003	0.002	ppm
07:00 - 08:00	0.003	0.003	0.003	ppm
08:00 - 09:00	0.003	0.003	0.003	ppm
09:00 - 10:00	0.003	0.003	0.003	ppm
Maximum 1 hr.	0.003	0.003	0.004	ppm
Average 24 hr.	0.003	0.003	0.003	ppm
Standard (1 hr.) <sup>1/1</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>2/2</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>1/1</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E. 2544 (2001)  
<sup>2/2</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004) <sup>3/3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of 15 Department of Industrial Works  
(Measurement By Mr. Tummarut Phornkham)



Approved By.....

(MS. THANATPORN KLINSOPON)

16/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R0760

Siam Poongsan Metal Co., Ltd.

Sample No. 19608

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : July 11-14, 2023

Time	July 11-12, 2023		July 12-13, 2023		July 13-14, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	0.4	WNW	0.4	NW
11:00-12:00	0.0	-	0.9	WNW	0.9	NW
12:00-13:00	0.4	WNW	0.9	WNW	0.4	WNW
13:00-14:00	0.4	WNW	0.4	WNW	0.4	WNW
14:00-15:00	0.0	-	0.4	WNW	0.9	WNW
15:00-16:00	0.0	-	0.4	WNW	0.4	WNW
16:00-17:00	0.0	-	0.4	WNW	0.0	-
17:00-18:00	0.0	-	0.0	-	0.0	-
18:00-19:00	0.0	-	0.0	-	0.0	-
19:00-20:00	0.0	-	0.0	-	0.0	-
20:00-21:00	0.0	-	0.0	-	0.0	-
21:00-22:00	0.0	-	0.0	-	0.0	-
22:00-23:00	0.0	-	0.0	-	0.0	-
23:00-00:00	0.0	-	0.0	-	0.0	-
00:00-01:00	0.0	-	0.0	-	0.0	-
01:00-02:00	0.0	-	0.0	-	0.4	WNW
02:00-03:00	0.0	-	0.0	-	0.4	WNW
03:00-04:00	0.0	-	0.0	-	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-
05:00-06:00	0.0	-	0.0	-	0.0	-
06:00-07:00	0.0	-	0.0	-	0.0	-
07:00-08:00	0.0	-	0.0	-	0.0	-
08:00-09:00	0.0	-	0.0	-	0.4	WNW
09:00-10:00	0.0	-	0.4	N	0.0	-

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R0955

Siam Poongsan Metal Co., Ltd.

Sample No. 28609

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : September 12-15, 2023

Time	September 12-13, 2023		September 13-14, 2023		September 14-15, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	0.0	-	0.4	WNW	0.0	-
10:00-11:00	0.4	WNW	0.4	WNW	0.0	-
11:00-12:00	0.4	WNW	0.4	WNW	0.4	NW
12:00-13:00	0.9	WNW	0.9	WNW	0.4	WNW
13:00-14:00	0.9	NW	0.9	WNW	0.4	WNW
14:00-15:00	0.4	WNW	0.9	WNW	0.4	WNW
15:00-16:00	0.9	WNW	0.9	NW	0.4	WNW
16:00-17:00	0.9	WNW	0.4	WNW	0.4	WNW
17:00-18:00	0.9	NW	0.4	W	0.4	WNW
18:00-19:00	0.4	NW	0.0	-	0.4	WNW
19:00-20:00	0.4	WNW	0.4	WNW	0.9	WNW
20:00-21:00	0.4	WNW	0.0	-	0.4	NW
21:00-22:00	0.4	WNW	0.0	-	0.0	-
22:00-23:00	0.4	NW	0.0	-	0.0	-
23:00-00:00	0.4	NW	0.0	-	0.0	-
00:00-01:00	0.4	NW	0.4	WNW	0.0	-
01:00-02:00	0.4	NW	0.0	-	0.0	-
02:00-03:00	0.0	-	0.0	-	0.0	-
03:00-04:00	0.0	-	0.0	-	0.0	-
04:00-05:00	0.4	WNW	0.0	-	0.0	-
05:00-06:00	0.4	WNW	0.0	-	0.0	-
06:00-07:00	0.0	-	0.0	-	0.0	-
07:00-08:00	0.0	-	0.0	-	0.0	-
08:00-09:00	0.4	WNW	0.0	-	0.0	-

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

Sample No. 33152

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : November 8-11, 2023

Time	November 8-9, 2023		November 9-10, 2023		November 10-11, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	0.0	-	0.0	-	0.0	-
10:00-11:00	0.0	-	0.0	-	0.0	-
11:00-12:00	0.0	-	0.0	-	0.0	-
12:00-13:00	0.0	-	0.4	E	0.0	-
13:00-14:00	0.0	-	0.9	E	0.4	NW
14:00-15:00	0.4	WNW	0.4	E	0.0	-
15:00-16:00	0.4	NW	0.0	-	0.0	-
16:00-17:00	0.0	-	0.0	-	0.0	-
17:00-18:00	0.9	SSE	0.0	-	0.0	-
18:00-19:00	0.4	ESE	0.0	-	0.0	-
19:00-20:00	0.0	-	0.0	-	0.0	-
20:00-21:00	0.0	-	0.0	-	0.0	-
21:00-22:00	0.0	-	0.0	-	0.0	-
22:00-23:00	0.0	-	0.0	-	0.0	-
23:00-00:00	0.0	-	0.0	-	0.0	-
00:00-01:00	0.0	-	0.0	-	0.0	-
01:00-02:00	0.0	-	0.0	-	0.0	-
02:00-03:00	0.0	-	0.0	-	0.0	-
03:00-04:00	0.0	-	0.0	-	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-
05:00-06:00	0.0	-	0.0	-	0.0	-
06:00-07:00	0.0	-	0.0	-	0.0	-
07:00-08:00	0.0	-	0.0	-	0.4	ENE
08:00-09:00	0.0	-	0.0	-	0.0	-

## Wind Speed &amp; Wind Direction

Request No. LA66-R0760

Siam Poongsan Metal Co., Ltd.

Sample No. 19609

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : July 11-14, 2023

Time	July 11-12, 2023		July 12-13, 2023		July 13-14, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	2.2	SSE	1.3	S	1.8	W
10:00-11:00	2.2	SSE	1.8	SSW	1.8	W
11:00-12:00	2.2	S	2.2	S	2.2	W
12:00-13:00	1.8	S	2.2	W	1.8	W
13:00-14:00	2.2	S	1.8	SSW	2.2	W
14:00-15:00	2.2	SSW	1.3	W	2.2	W
15:00-16:00	2.2	SSW	1.3	W	2.2	W
16:00-17:00	1.8	S	1.8	WSW	1.3	WSW
17:00-18:00	1.3	SSE	0.9	SSE	0.9	SSW
18:00-19:00	1.3	SSE	0.9	S	0.9	SSE
19:00-20:00	1.3	SSE	0.4	SSW	0.9	SSE
20:00-21:00	1.3	SSE	0.9	SSE	1.3	S
21:00-22:00	0.4	SSE	0.4	S	0.4	SSE
22:00-23:00	0.9	ENE	0.4	SSE	0.9	S
23:00-00:00	0.4	SE	0.9	SE	0.9	S
00:00-01:00	0.4	SE	0.9	SE	0.9	S
01:00-02:00	0.4	SE	0.4	SSE	1.3	W
02:00-03:00	0.9	SE	0.4	SE	3.1	W
03:00-04:00	1.3	S	0.4	SE	2.7	W
04:00-05:00	1.3	S	0.4	SE	2.2	W
05:00-06:00	1.3	SSW	0.9	SE	1.8	WSW
06:00-07:00	0.9	S	1.8	W	0.4	WSW
07:00-08:00	0.4	SSW	1.3	W	0.4	WSW
08:00-09:00	0.9	SSW	1.8	W	1.3	W

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R0955

Siam Poongsan Metal Co., Ltd.

Sample No. 28608

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : September 12-15, 2023

Time	September 12-13, 2023		September 13-14, 2023		September 14-15, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	2.2	SW	3.1	WSW	1.8	SW
10:00-11:00	3.1	SW	3.1	SW	2.2	SW
11:00-12:00	3.6	SW	3.6	SW	1.8	SW
12:00-13:00	3.1	SW	3.1	SW	2.7	WSW
13:00-14:00	3.6	SW	3.1	SW	1.8	WSW
14:00-15:00	3.6	SW	3.6	SW	2.2	SW
15:00-16:00	4.0	SW	2.7	SW	2.7	SW
16:00-17:00	3.1	SW	2.7	SW	3.1	SW
17:00-18:00	2.7	WSW	2.2	SW	3.1	SW
18:00-19:00	2.7	SW	1.8	WSW	2.2	SW
19:00-20:00	2.7	SW	0.9	SW	1.3	NW
20:00-21:00	2.7	SW	0.9	SW	0.0	-
21:00-22:00	1.3	SW	0.9	SSW	0.4	SE
22:00-23:00	1.3	W	1.8	SW	0.4	SSW
23:00-00:00	2.2	NW	1.8	WSW	0.0	-
00:00-01:00	1.8	NW	0.4	WNW	0.0	-
01:00-02:00	0.9	WSW	0.0	-	0.0	-
02:00-03:00	1.3	WSW	0.4	SW	0.9	SW
03:00-04:00	2.2	SW	0.9	WSW	0.9	SW
04:00-05:00	2.2	SW	0.9	SW	0.9	WSW
05:00-06:00	1.8	SW	0.4	WNW	0.4	SW
06:00-07:00	1.8	SW	0.0	-	0.4	SW
07:00-08:00	2.2	SW	0.4	WSW	0.4	SSW
08:00-09:00	2.7	WSW	1.3	WSW	1.3	WSW

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

Sample No. 33150

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : November 8-11, 2023

Time	November 8-9, 2023		November 9-10, 2023		November 10-11, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	0.4	WNW	1.8	NE	0.9	NW
10:00-11:00	1.8	NNE	2.7	N	1.3	NW
11:00-12:00	1.8	NNE	2.2	NE	2.2	NW
12:00-13:00	1.8	N	2.7	NNE	2.2	NW
13:00-14:00	2.2	N	2.2	NE	2.2	NW
14:00-15:00	2.7	NW	1.3	ENE	2.7	WNW
15:00-16:00	2.7	NW	0.9	SSW	1.3	SW
16:00-17:00	2.7	WNW	0.4	SW	1.3	SSW
17:00-18:00	2.2	WNW	0.4	SSW	0.9	NNW
18:00-19:00	1.8	ESE	0.4	WSW	0.0	-
19:00-20:00	0.9	SE	0.0	-	0.0	-
20:00-21:00	1.3	ESE	0.0	-	0.4	ENE
21:00-22:00	0.4	ESE	0.9	E	0.4	E
22:00-23:00	0.4	E	0.4	SE	0.4	E
23:00-00:00	0.4	S	0.4	SE	0.9	ENE
00:00-01:00	0.0	-	0.0	-	0.4	NE
01:00-02:00	0.9	NE	0.0	-	0.4	ENE
02:00-03:00	0.0	-	0.4	E	0.4	SE
03:00-04:00	0.4	SSE	0.4	ENE	0.4	SE
04:00-05:00	0.0	-	0.9	ENE	0.0	-
05:00-06:00	0.0	-	0.4	ENE	0.4	ENE
06:00-07:00	0.4	ESE	0.0	-	0.4	ESE
07:00-08:00	0.4	ESE	0.0	-	0.4	ESE
08:00-09:00	1.3	E	0.0	-	0.4	SE

COPY



## Wind Speed &amp; Wind Direction

Request No. LA66-R0760

Siam Poongsan Metal Co., Ltd.

Sample No. 19607

Sampling Source : บริเวณเขตรูถักการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : July 11-14, 2023

Time	July 11-12, 2023		July 12-13, 2023		July 13-14, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	2.2	SW	1.8	SW	1.8	NE
11:00-12:00	2.2	SW	1.8	SW	2.2	NE
12:00-13:00	2.2	SW	1.8	SW	1.8	NE
13:00-14:00	2.2	SW	1.8	NE	2.2	NE
14:00-15:00	2.7	SW	2.2	NE	2.2	NE
15:00-16:00	2.2	SW	1.3	NE	2.2	NE
16:00-17:00	1.8	SW	1.3	NNE	1.3	NNE
17:00-18:00	1.8	SW	0.9	NNE	0.9	NNE
18:00-19:00	1.3	SW	0.9	NNE	1.3	SW
19:00-20:00	1.3	SW	0.9	WSW	1.8	SW
20:00-21:00	1.8	SW	0.9	SW	1.8	SW
21:00-22:00	0.4	SW	0.9	SW	1.3	SW
22:00-23:00	0.0	-	0.9	SW	1.3	SW
23:00-00:00	0.4	WSW	0.4	SW	1.8	SW
00:00-01:00	0.4	SW	1.8	SW	1.3	WSW
01:00-02:00	0.4	SSW	0.4	SW	1.8	NE
02:00-03:00	0.9	SSW	0.4	WSW	2.2	NE
03:00-04:00	1.3	WSW	0.0	-	1.8	NE
04:00-05:00	1.3	WSW	0.0	-	1.8	NE
05:00-06:00	0.9	WSW	0.9	NE	1.8	NE
06:00-07:00	0.9	W	1.3	NE	0.9	NNE
07:00-08:00	0.9	NNE	1.8	NE	0.9	NNE
08:00-09:00	1.3	SW	1.8	NE	2.7	NE
09:00-10:00	2.2	SW	2.2	NE	2.7	NE

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R0955

Siam Poongsan Metal Co., Ltd.

Sample No. 28610

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : September 12-15, 2023

Time	September 12-13, 2023		September 13-14, 2023		September 14-15, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	2.2	E	1.3	ESE
11:00-12:00	3.1	SSE	2.7	E	0.9	ESE
12:00-13:00	3.1	SE	2.7	E	1.3	ESE
13:00-14:00	2.2	SE	2.2	E	1.3	ESE
14:00-15:00	3.1	SE	2.2	E	0.9	WSW
15:00-16:00	2.7	SE	2.7	E	0.9	ESE
16:00-17:00	2.7	SE	2.7	E	1.8	ESE
17:00-18:00	2.2	SE	2.2	E	2.2	ESE
18:00-19:00	1.8	SE	2.2	ESE	2.7	ESE
19:00-20:00	2.2	ESE	0.9	ESE	2.7	ESE
20:00-21:00	2.2	ESE	0.9	ESE	1.3	SSE
21:00-22:00	1.3	SSE	0.9	E	0.0	-
22:00-23:00	1.3	SE	0.9	E	0.0	-
23:00-00:00	1.3	WSW	0.9	ESE	0.0	-
00:00-01:00	2.7	W	0.9	WSW	0.0	-
01:00-02:00	1.8	SW	0.4	WSW	0.0	-
02:00-03:00	0.9	SW	0.0	-	0.0	-
03:00-04:00	0.9	E	0.0	-	0.4	N
04:00-05:00	1.3	E	0.4	SE	0.9	ESE
05:00-06:00	1.3	E	0.4	SE	0.9	SE
06:00-07:00	1.3	E	0.4	WSW	0.4	N
07:00-08:00	1.3	E	0.0	-	0.4	N
08:00-09:00	1.3	E	0.0	-	0.0	-
09:00-10:00	1.8	E	0.9	ESE	0.4	NNW

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

Sample No. 33151

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : November 8-11, 2023

Time	November 8-9, 2023		November 9-10, 2023		November 10-11, 2023	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.4	WNW	1.3	NW	0.9	NW
11:00-12:00	0.9	WNW	0.9	NW	1.8	NW
12:00-13:00	1.8	WNW	0.4	SSW	1.8	NW
13:00-14:00	1.8	NW	0.9	S	1.8	NW
14:00-15:00	1.8	NW	0.0	-	1.8	NW
15:00-16:00	1.3	NW	0.4	S	0.9	S
16:00-17:00	2.2	WNW	0.4	SSE	0.4	S
17:00-18:00	1.8	WNW	0.4	SSE	0.0	-
18:00-19:00	0.4	SSW	0.0	-	0.0	-
19:00-20:00	0.0	-	0.0	-	0.0	-
20:00-21:00	0.0	-	0.0	-	0.0	-
21:00-22:00	0.0	-	0.0	-	0.0	-
22:00-23:00	0.0	-	0.0	-	0.0	-
23:00-00:00	0.0	-	0.0	-	0.0	-
00:00-01:00	0.0	-	0.0	-	0.0	-
01:00-02:00	0.0	-	0.0	-	0.0	-
02:00-03:00	0.0	-	0.0	-	0.0	-
03:00-04:00	0.0	-	0.0	-	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-
05:00-06:00	0.0	-	0.0	-	0.0	-
06:00-07:00	0.0	-	0.0	-	0.0	-
07:00-08:00	0.0	-	0.0	-	0.0	-
08:00-09:00	0.0	-	0.0	-	0.0	-
09:00-10:00	0.9	NW	0.0	-	0.0	-

## Wind Speed &amp; Wind Direction

Request No. LA66-R0760

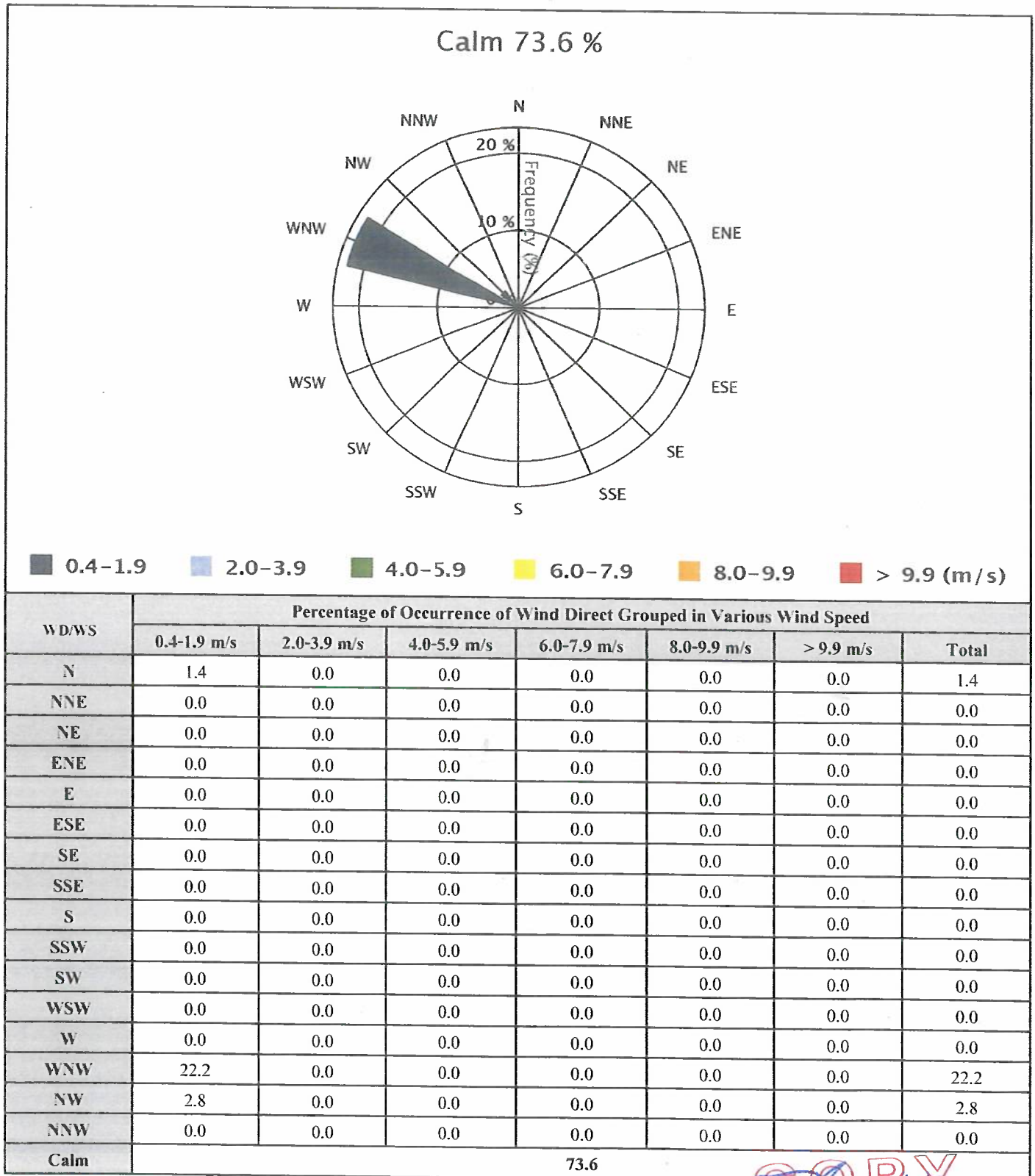
Siam Poongsan Metal Co., Ltd.

Sample No. 19608

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : July 11-14, 2023



COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R0955

Siam Poongsan Metal Co., Ltd.

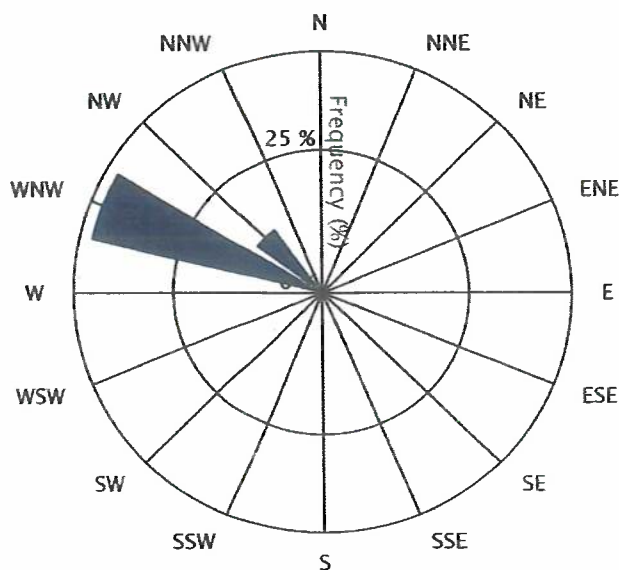
Sample No. 28609

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : September 12-15, 2023

Calm 44.4 %



0.4-1.9
  2.0-3.9
  4.0-5.9
  6.0-7.9
  8.0-9.9
  > 9.9 (m/s)

WD/WS	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.4-1.9 m/s	2.0-3.9 m/s	4.0-5.9 m/s	6.0-7.9 m/s	8.0-9.9 m/s	> 9.9 m/s	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	1.4	0.0	0.0	0.0	0.0	0.0	1.4
WNW	40.3	0.0	0.0	0.0	0.0	0.0	40.3
NW	13.9	0.0	0.0	0.0	0.0	0.0	13.9
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	44.4						

COPY

## Wind Speed &amp; Wind Direction

Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

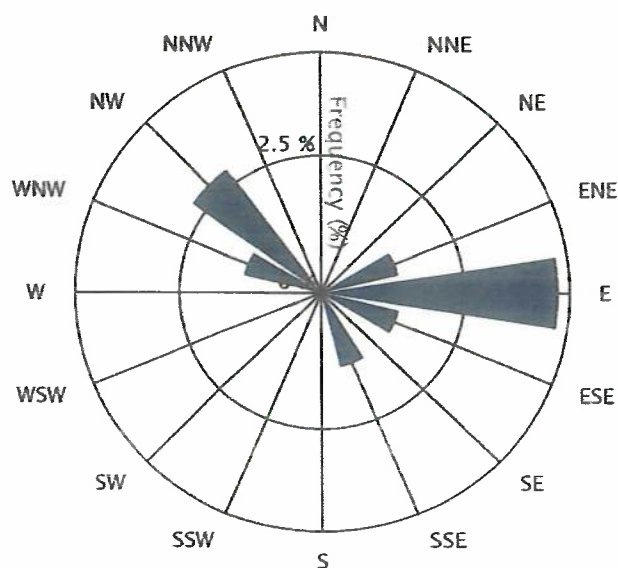
Sample No. 33152

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : November 8-11, 2023

Calm 87.5 %


 0.4-1.9
  2.0-3.9
  4.0-5.9
  6.0-7.9
  8.0-9.9
  > 9.9 (m/s)

WD/WS	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.4-1.9 m/s	2.0-3.9 m/s	4.0-5.9 m/s	6.0-7.9 m/s	8.0-9.9 m/s	> 9.9 m/s	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
E	4.2	0.0	0.0	0.0	0.0	0.0	4.2
ESE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
NW	2.8	0.0	0.0	0.0	0.0	0.0	2.8
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	87.5						

## Wind Speed &amp; Wind Direction

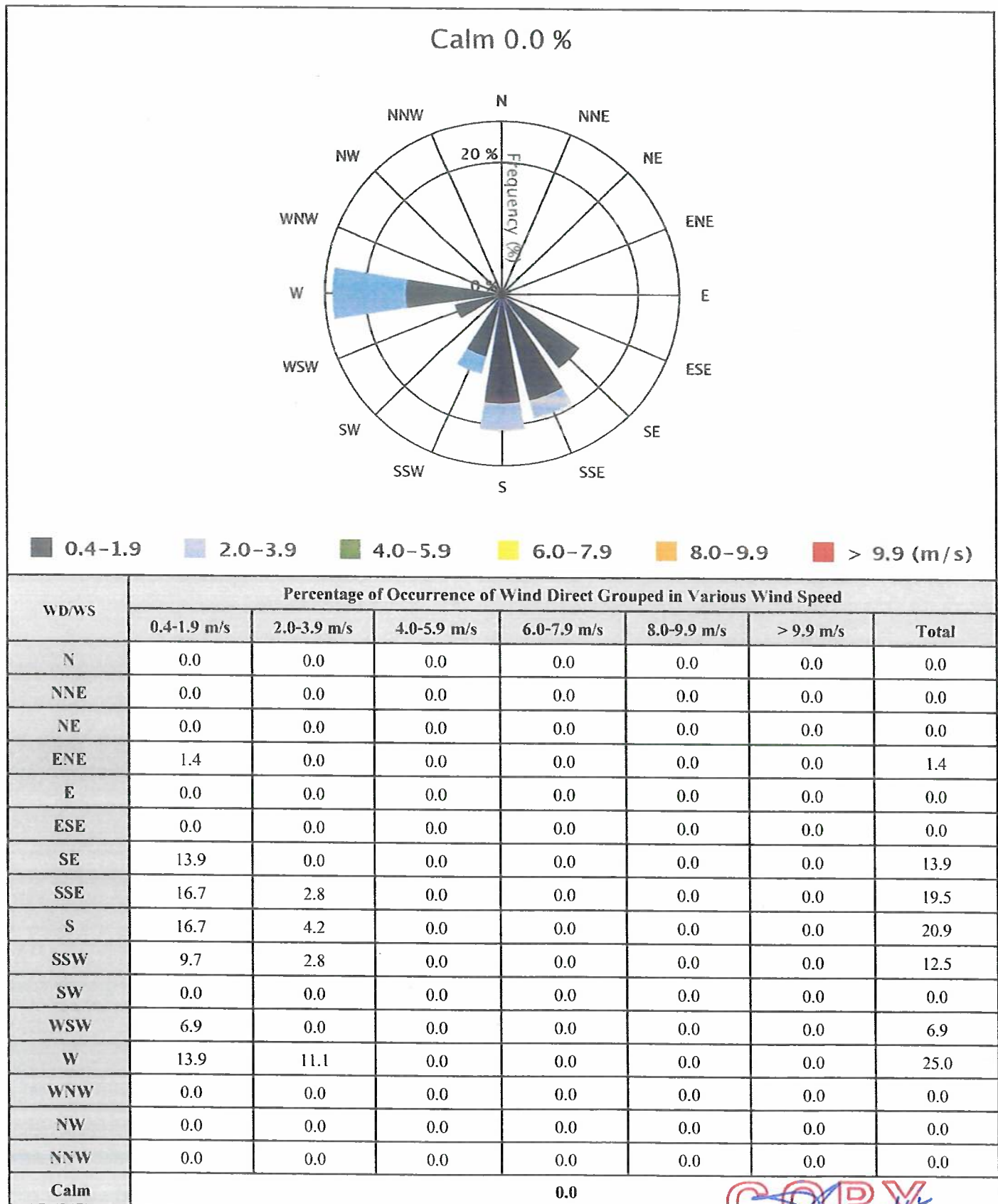
Request No. LA66-R0760

Siam Poongsan Metal Co., Ltd.

Sample No. 19609

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : July 11-14, 2023



## Wind Speed & Wind Direction

Request No. LA66-R0955

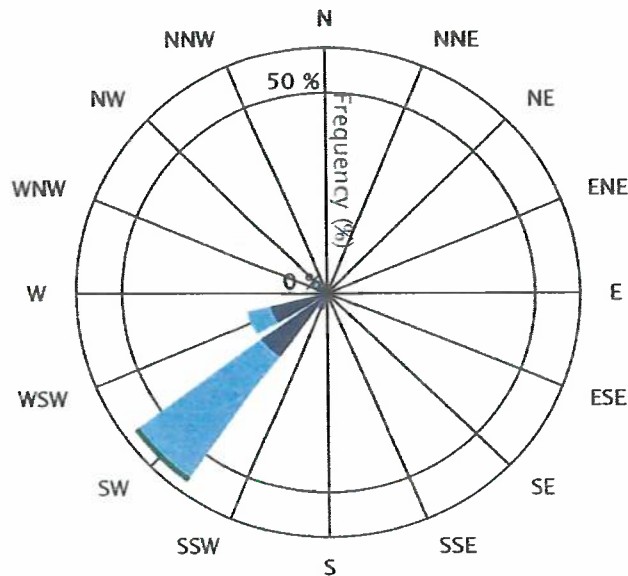
Siam Poongsan Metal Co., Ltd.

Sample No. 28608

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : September 12-15, 2023

Calm 8.3 %



■ 0.4-1.9 ■ 2.0-3.9 ■ 4.0-5.9 ■ 6.0-7.9 ■ 8.0-9.9 ■ > 9.9 (m/s)

WD/WS	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.4-1.9 m/s	2.0-3.9 m/s	4.0-5.9 m/s	6.0-7.9 m/s	8.0-9.9 m/s	> 9.9 m/s	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	4.2	0.0	0.0	0.0	0.0	0.0	4.2
SW	19.4	37.5	1.4	0.0	0.0	0.0	58.3
WSW	13.9	5.6	0.0	0.0	0.0	0.0	19.5
W	1.4	0.0	0.0	0.0	0.0	0.0	1.4
WNW	2.8	0.0	0.0	0.0	0.0	0.0	2.8
NW	2.8	1.4	0.0	0.0	0.0	0.0	4.2
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	8.3						

COPY

## Wind Speed &amp; Wind Direction

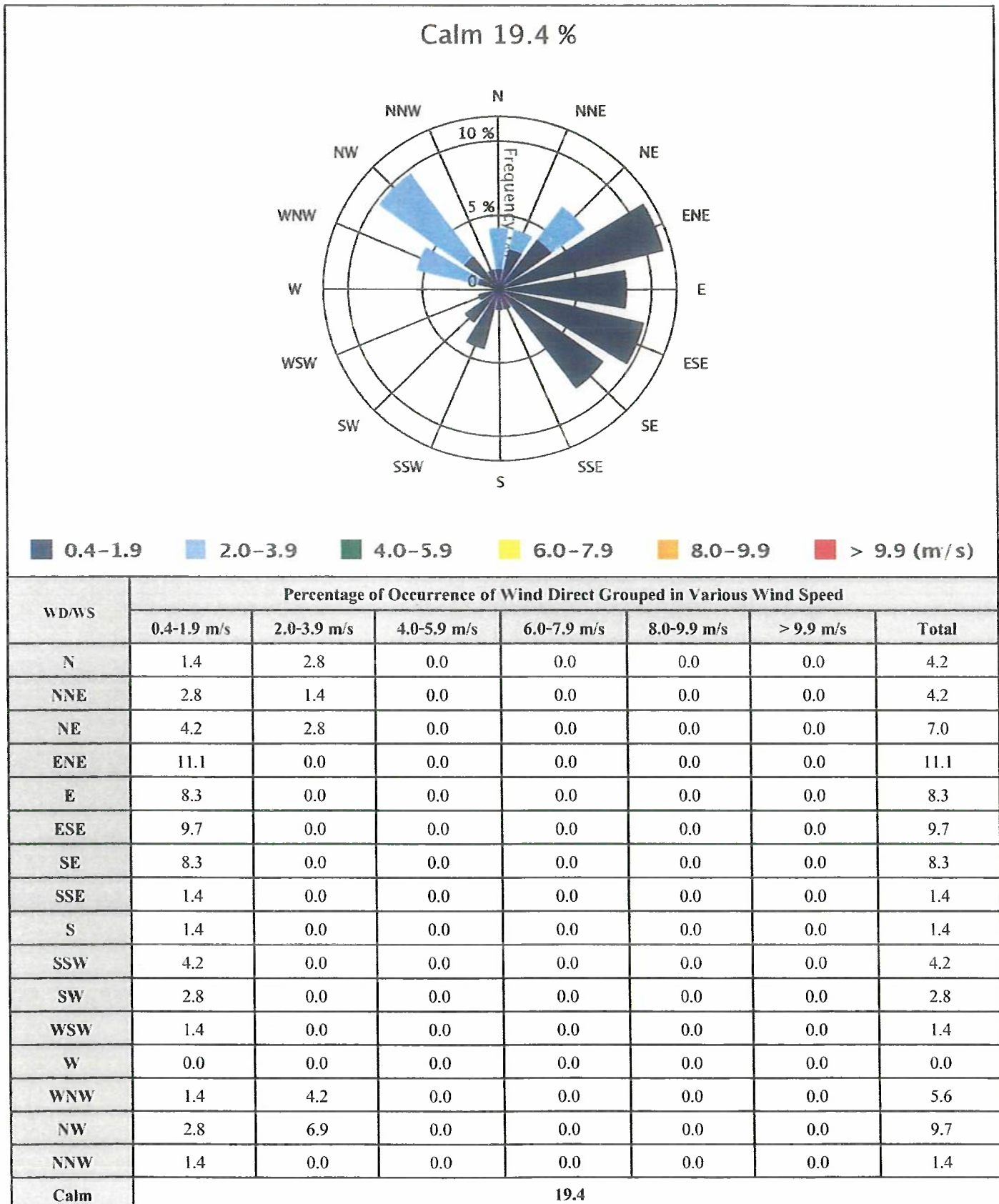
Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

Sample No. 33150

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : November 8-11, 2023



## Wind Speed &amp; Wind Direction

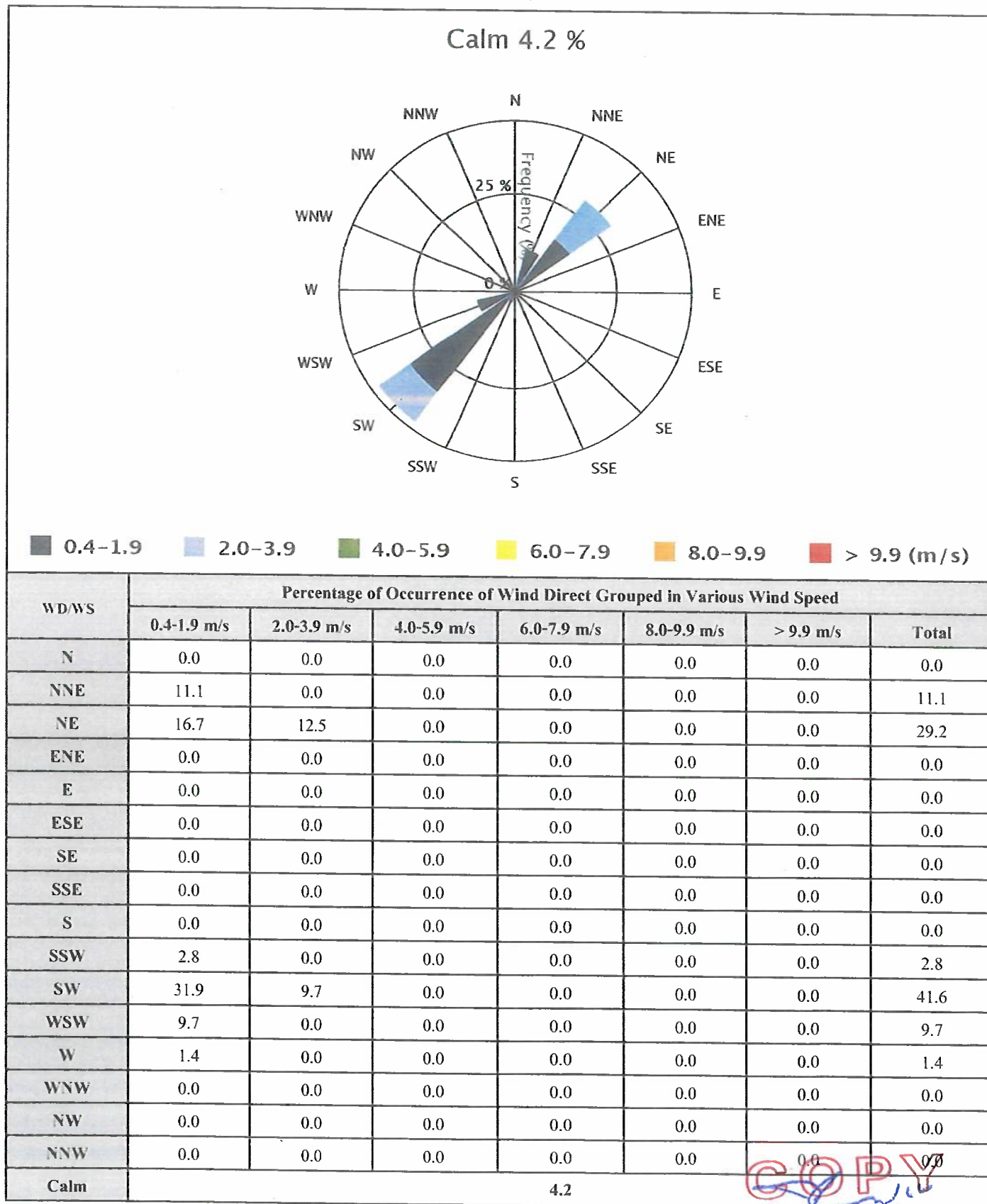
Request No. LA66-R0760

Siam Poongsan Metal Co., Ltd.

Sample No. 19607

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : July 11-14, 2023



## Wind Speed &amp; Wind Direction

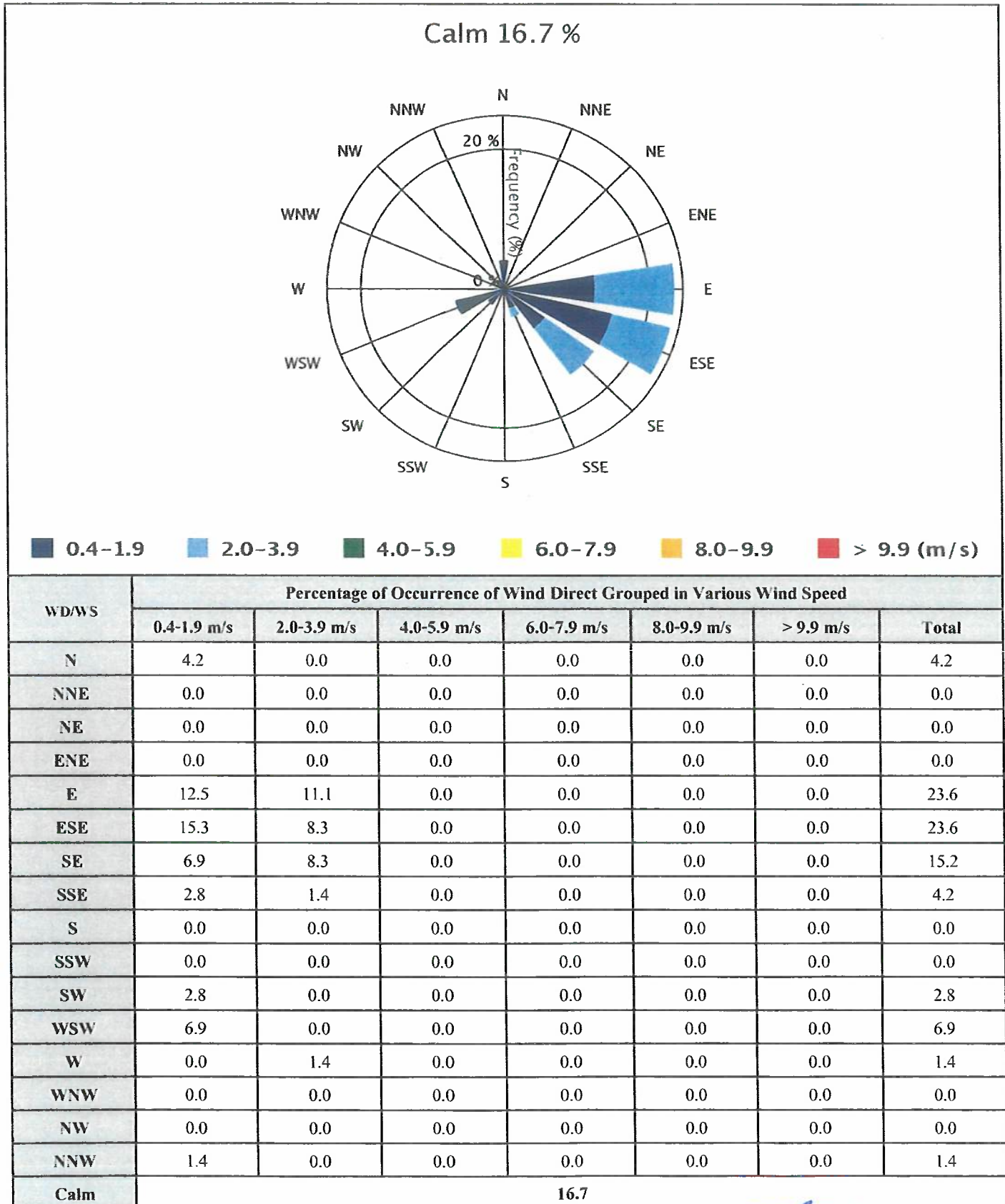
Request No. LA66-R0955

Siam Poongsan Metal Co., Ltd.

Sample No. 28610

Sampling Source : บริเวณเขตรุกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : September 12-15, 2023



COPY

## Wind Speed &amp; Wind Direction

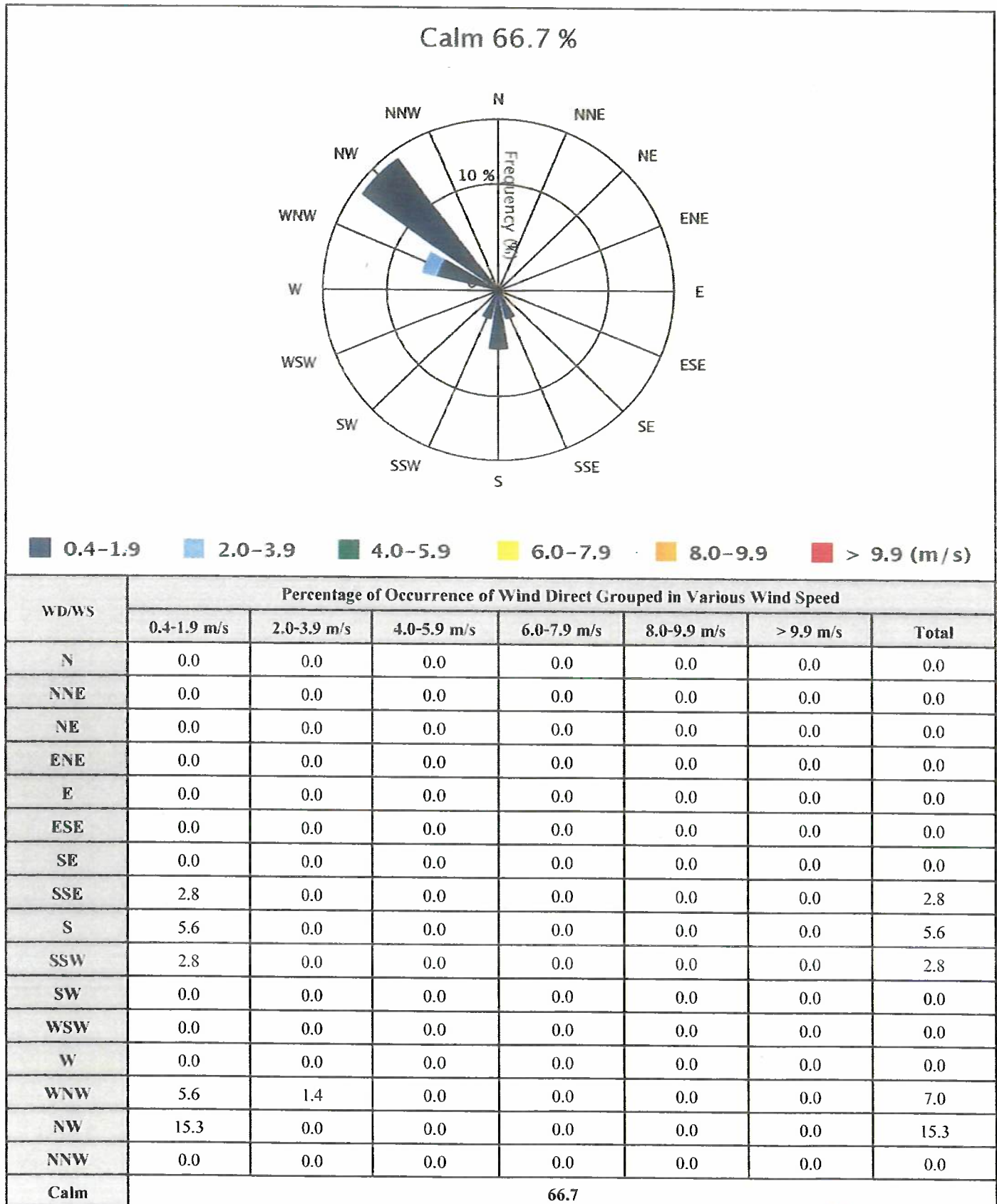
Request No. LA66-R1143

Siam Poongsan Metal Co., Ltd.

Sample No. 33151

Sampling Source : บริเวณเขตรูถักการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : November 8-11, 2023



COPY

Request No. LA66-0721

Report No. 6607-0172

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungskula A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : Inlet Dust Collector of Melting Casting Stack  
SAMPLE NO. : 03855  
SAMPLING DATE : 12/07/2023  
SAMPLING TIME : 09:30-10:02  
RECEIVED DATE : 17/07/2023  
REPORTED DATE : 25/07/2023  
TESTED DATE : 17-22/07/2023

## STACK DESCRIPTION

Height :	-	m	Type of Process :	Exhaust
Diameter :	0.84	m	Type of Fuel :	-
Temperature :	38.00	°C	Oxygen Content :	20.90 %
Air Velocity :	25.40	m/s	Barometric Pressure :	758.50 mm.Hg
Flow rate <sup>1</sup> :	12.76	m <sup>3</sup> /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	3.18	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:30-10:02	80.9	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> DRY BASIS (25°C, 760 mm.Hg)

\* SAMPLING BY MR. AUDOUMSUB JENJOBING (1-003-1-8894)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(1-003-1-4377)

25/07/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

(1-003-1-5618)

25/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-0924

Report No. 6609-0217

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.

ADDRESS : 38/14 Moo 5 T. Tur gsukla A. Sriracha, Chonburi 20230

SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.

SAMPLE POINT : Inlet Dust Collector of Melting Casting Stack

SAMPLE NO. : 04591

SAMPLING DATE : 13/09/2023

SAMPLING TIME : 11:20-11:50

RECEIVED DATE : 18/09/2023

REPORTED DATE : 25/09/2023

TESTED DATE : 18-21/09/2023

## STACK DESCRIPTION

Height : - m  
Diameter : 0.84 m  
Temperature : 45.00 °C  
Air Velocity : 20.09 m/s  
Flow rate<sup>1</sup> : 9.67 m<sup>3</sup>/s  
Moisture Content : 4.92 %

Type of Process : Exhaust  
Type of Fuel : -  
Oxygen Content : 20.90 %  
Barometric Pressure : 757.00 mm.Hg  
Atmospheric Temperature : 35.00 °C

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	11:20-11:50	402.1	mg/m <sup>3</sup>

## REMARK:

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Metee Sukprasert (จ-003-ก-0035)
- <sup>2</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By



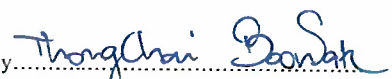
(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

25/09/2023



Approved By



(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

25/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-1124

Report No. 6611-0349

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : Inlet Dust Collector of Melting Casting Stack SAMPLE NO. : 05651  
 SAMPLING DATE : 09/11/2023 SAMPLING TIME : 09:10-09:45  
 RECEIVED DATE : 13/11/2023 REPORTED DATE : 17/11/2023  
 TESTED DATE : 13-17/11/2023

STACK DESCRIPTION<sup>®</sup>

Height :	-	m	Type of Process :	Exhaust
Diameter :	0.84	m	Type of Fuel :	-
Temperature :	42.00	°C	Oxygen Content :	20.90 %
Air Velocity :	23.20	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>1)</sup> :	11.48	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	4.03	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1)</sup>	UNIT
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	09:10-09:45	8.5	mg/m <sup>3</sup>

## REMARK:

- <sup>1)</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Warakorn Vitayasewee (จ-003-ก-0021)
- <sup>2)</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

17/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ก-0012)

17/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. LA66-0721

Report No. 6607-0173

**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : Outlet Dust Collector of Melting Casting Stack      SAMPLE NO. : 03856  
 SAMPLING DATE : 12/07/2023      SAMPLING TIME : 09:30-10:05  
 RECEIVED DATE : 17/07/2023      REPORTED DATE : 25/07/2023  
 TESTED DATE : 17-22/07/2023

**STACK DESCRIPTION**

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	42.00	°C	Oxygen Content :	20.90 %
Air Velocity :	15.17	m/s	Barometric Pressure :	758.50 mm.Hg
Flow rate <sup>2</sup> :	9.43	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.15	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:30-10:05	4.5	400	mg/m <sup>3</sup>

**REMARK:** <sup>1</sup> NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)  
<sup>2</sup> DRY BASIS (25°C, 760 mm.Hg)  
 \* SAMPLING BY MR. AUDOUMSUB JENJOBING (๓-003-๓-8894)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(๓-003-๓-4377)

25/07/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(๓-003-๓-5618)

25/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. LA66-0925

Report No. 66010-0031

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : Outlet Dust Collector of Melting Casting Stack  
 SAMPLING DATE : 13/09/2023  
 RECEIVED DATE : 18/09/2023  
 TESTED DATE : 18-21/09/2023

SAMPLE NO. : 04609  
 SAMPLING TIME : 11:20-11:55  
 REPORTED DATE : 06/10/2023

## STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	47.00	°C	Oxygen Content :	20.90 %
Air Velocity :	20.35	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>2</sup> :	12.41	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	3.15	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	11:20-11:55	16.5	400	mg/m <sup>3</sup>

## REMARK:

- 1.<sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- 2.<sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
3. Sampling By Mr. Ni chaphon Tonglor (จ-003-ก-0032)
- 4.<sup>4</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....  
 (Miss Apiradee Chuen-arom)  
 (จ-003-ก-0007)  
 06/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
 (Mr. Thongchai Boonsak)  
 (จ-003-ก-0012)  
 06/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-1124

Report No. 6611-0348

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tuangsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : Outlet Dust Collector of Melting Casting Stack SAMPLE NO. : 05650  
SAMPLING DATE : 09/11/2023 SAMPLING TIME : 09:10-09:50  
RECEIVED DATE : 13/11/2023 REPORTED DATE : 17/11/2023  
TESTED DATE : 13-17/11/2023

STACK DESCRIPTION <sup>6</sup>

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	40.00	°C	Oxygen Content :	20.90 %
Air Velocity :	16.54	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	10.33	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.31	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Isokinetic, Gravimetric (U.S. EPA Method 5)	09:10-09:50	0.3	400	mg/m <sup>3</sup>

REMARK:

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Sampling By Mr. Warakorn Vitayasewee (ว-003-ก-0021)
- <sup>6</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.

Examined By.....



(Miss Apiradee Chuen-arom)


(ว-003-ก-0007)

17/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(Mr. Thongchai Boonsak)

(ว-003-ก-0012)

17/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6607412

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Report No : 6608-0005

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66071507

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 14/07/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/07/2023

Tested Date : 17/07/2023 - 27/07/2023

Reported Date : 01/08/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	86
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	187
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.43
Oil and Grease *	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
pH (on site) *		Electrometric Method	3.1
Temperature *	°C	Laboratory and Field Method	31
Total Suspended Solids #	mg/L	Dried at 103-105 C (SM:2540D)	7

Physical Appearance : 1. Sample : sky-blue, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (๖-003-๓-๗๒๗) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(๖-003-๓-๔๓๗)

01/08/2023



บริษัท Eastern Thai Consulting 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(๖-003-๓-๔๓๗)

01/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6607412

Report No : 6608-0005

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66071507

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 14/07/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/07/2023

Tested Date : 17/07/2023 - 27/07/2023

Reported Date : 01/08/2023

Parameter	Unit	Method	Result
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	62.5

Physical Apperance : 1. Sample : sky-blue, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ก-7279) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

01/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-4367)

01/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6608369

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Report No : 6609-0001

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66081266

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/08/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:05 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/08/2023

Tested Date : 16/08/2023 - 28/08/2023

Reported Date : 01/09/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	102
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	80.5
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.95
Oil and Grease *	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	36
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	6

Physical Apperance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ก-0031) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
01/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
01/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6608369

Report No : 6609-0001

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66081266

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/08/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:05 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/08/2023

Tested Date : 16/08/2023 - 28/08/2023

Reported Date : 01/09/2023

Parameter	Unit	Method	Result
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	29.6

Physical Appearance : 1. Sample : yellow, lightly SS


2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

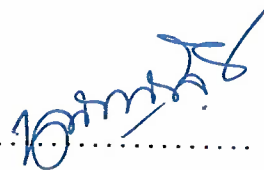
3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ค-0031) \*

4. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)  
(จ-003-ค-0007)  
01/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :   
(Miss Nunnaphat Bakhuntod)  
(จ-003-ค-0005)  
01/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6608369

Customer : Siam Poongsan Metal Co.,Ltd.

Report No : 6609-0001

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230

Sampling Source : Siam Poongsan Metal Co.,Ltd.

Sample No : W 66081266

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 15/08/2023

Sampling By : ETC

Sampling Time : 9:05 AM

Sampling Method : Grab

Received Date : 16/08/2023

Tested Date : 16/08/2023 - 28/08/2023

Reported Date : 01/09/2023

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.1

Physical Apperance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017


2. Parameter Outside The Scope of The Registration of Department of Industrial Works

3. Sampling By Mr. Supharerk Phatklang



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Examined By :   
(Miss Apiradee Chuen-arom)  
01/09/2023



## Test Report

Request No : W6609376

Report No : 6609-1954

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66091396

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 13/09/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:56 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/09/2023

Tested Date : 14/09/2023 - 26/09/2023

Reported Date : 27/09/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	73
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	117
Nickel @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.57
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	3.0
pH (on site) *		Electrometric Method	4.6
Temperature *	°C	Laboratory and Field Method	33

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pompinan Viriyakusolkul (จ-003-ก-0036) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6609376

Report No : 6609-1954

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66091396

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 13/09/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:56 AM\*\*

Sampling Method : Grab \*\*

Received Date : 14/09/2023

Tested Date : 14/09/2023 - 26/09/2023

Reported Date : 27/09/2023

Parameter	Unit	Method	Result
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	69
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	54.3

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ก-0036) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6610290

Report No : 6610-1556

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66101066

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 10/10/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/10/2023

Tested Date : 11/10/2023 - 20/10/2023

Reported Date : 24/10/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	129
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	400
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.04
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	3.2
Temperature *	°C	Laboratory and Field Method	27
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	44

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

24/10/2023



Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Request No : W6610290

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla , A. Sriracha , Chonburi 20230 \*\*

Report No : 6610-1556

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66101066

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 10/10/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/10/2023

Tested Date : 11/10/2023 - 20/10/2023

Reported Date : 24/10/2023

Parameter	Unit	Method	Result
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	88.0

Physical Apperance : 1. Sample : yellowish , lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

24/10/2023



Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



## Test Report

Request No : W6610290

Customer : Siam Poongsan Metal Co.,Ltd.

Report No : 6610-1556

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230

Sampling Source : Siam Poongsan Metal Co.,Ltd.

Sample No : W 66101066

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 10/10/2023

Sampling By : ETC

Sampling Time : 8:45 AM

Sampling Method : Grab

Received Date : 11/10/2023

Tested Date : 11/10/2023 - 20/10/2023

Reported Date : 24/10/2023

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.7

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Parameter Outside The Scope of The Registration of Department of Industrial Works

3. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By : .....

(Miss Apiradee Chuen-arom)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABOFATORY

COPY

## Test Report

Request No : W6611430

Report No : 6611-1922

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66111447

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/11/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/11/2023

Tested Date : 16/11/2023 - 22/11/2023

Reported Date : 24/11/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	139
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	179
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.58
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	30
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	5

Physical Appearance : 1. Sample : greenish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ก-0018) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**



# EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibam 8 Rd., Nongkham, Sriracha, Chonburi 20230  
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



## Test Report

Request No : W6611430

Report No : 6611-1922

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungskula, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66111447

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/11/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/11/2023

Tested Date : 16/11/2023 - 22/11/2023

Reported Date : 24/11/2023

Parameter	Unit	Method	Result
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	51.8

Physical Apperance : 1. Sample : greenish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ท-0018) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ท-0007)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ท-0005)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6611430

Customer : Siam Poongsan Metal Co.,Ltd.

Report No : 6611-1922

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230

Sampling Source : Siam Poongsan Metal Co.,Ltd.

Sample No : W 66111447

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 15/11/2023

Sampling By : ETC

Sampling Time : 10:40 AM

Sampling Method : Grab

Received Date : 16/11/2023

Tested Date : 16/11/2023 - 22/11/2023

Reported Date : 24/11/2023

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.1

Physical Apperance : 1. Sample : greenish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Parameter Outside The Scope of The Registration of Department of Industrial Works

3. Sampling By Miss Janthanee Saiphan



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Examined By : 

(Miss Apiradee Chuen-arom)

24/11/2023

COPY

## Test Report

Request No : W6612382

Report No : 6612-1611

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66121233

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 13/12/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/12/2023

Tested Date : 14/12/2023 - 26/12/2023

Reported Date : 27/12/2023

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	50
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	133
Nickel @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.21
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	37
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	7

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/12/2023



Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Request No : W6612382

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Report No : 6612-1611

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66121233

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 13/12/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/12/2023

Tested Date : 14/12/2023 - 26/12/2023

Reported Date : 27/12/2023

Parameter	Unit	Method	Result
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	59.2

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

2. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

4. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6612382

Customer : Siam Poongsan Metal Co.,Ltd.

Report No : 6612-1611

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230

Sampling Source : Siam Poongsan Metal Co.,Ltd.

Sample No : W 66121233

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 13/12/2023

Sampling By : ETC

Sampling Time : 9:40 AM

Sampling Method : Grab

Received Date : 14/12/2023

Tested Date : 14/12/2023 - 26/12/2023

Reported Date : 27/12/2023

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.4

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works

2. Sampling By Mr. Parkpoom Buasawad



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORYExamined By : 

(Miss Apiradee Chuen-arom)

27/12/2023

COPY

## Test Report

Request No : W6607412

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Report No : 6608-0006

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66071508

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 14/07/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/07/2023

Tested Date : 17/07/2023 - 26/07/2023

Reported Date : 01/08/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	4.6	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	41	≤750
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.42	≤2
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease *	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	7.0	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	28	≤45
Total Suspended Solids #	mg/L	Dried at 103-105 C (SM:2540D)	< 5	≤200

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ก-7279) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

01/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-4367)

01/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6607412

Report No : 6608-0006

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66071508

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 14/07/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/07/2023

Tested Date : 17/07/2023 - 26/07/2023

Reported Date : 01/08/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.29	≤5

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (จ-003-ก-7279) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

01/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-4367)

01/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6608369

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Report No : 6609-0002

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66081267

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/08/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:55 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/08/2023

Tested Date : 16/08/2023 - 25/08/2023

Reported Date : 01/09/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.0	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	60	≤750
Copper *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.74	≤2
Nickel *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease *	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	7.2	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	33	≤45

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ก-0031) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
01/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
01/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

## Test Report

Request No : W6608369

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Report No : 6609-0002

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66081267

Sample Name : น้ำทิ้งผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/08/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:55 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/08/2023

Tested Date : 16/08/2023 - 25/08/2023

Reported Date : 01/09/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	6	≤200
Zinc *	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.06	≤5

Physical Apperance : 1. Sample : yellow, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ก-0031) \*

5. \*\* = These data are non laboratory data.

Examined By : 

(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
01/09/2023



Approved By : 

(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
01/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6609376

Report No : 6609-1955

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungskula, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66091397

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 13/09/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/09/2023

Tested Date : 14/09/2023 - 22/09/2023

Reported Date : 27/09/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	18.5	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	51	≤750
Copper @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.35	≤2
Nickel @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	7.8	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	32	≤45

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ก-0036) \*

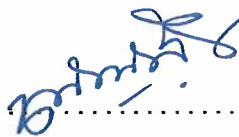
5. \*\* = These data are non laboratory data.

Examined By : 

(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
27/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 

(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
27/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6609376

Report No : 6609-1955

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66091397

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 13/09/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/09/2023

Tested Date : 14/09/2023 - 22/09/2023

Reported Date : 27/09/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200
Zinc @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.23	≤5

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (1-003-ท-0036) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)  
(1-003-ท-0007)  
27/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)  
(1-003-ท-0005)  
27/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6610290

Report No : 6610-1557

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungskula, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66101067

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 10/10/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/10/2023

Tested Date : 11/10/2023 - 18/10/2023

Reported Date : 24/10/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand <sup>#</sup>	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	10.2	≤500
Chemical Oxygen Demand <sup>#</sup>	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	74	≤750
Copper <sup>@</sup>	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.55	≤2
Nickel <sup>@</sup>	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease <sup>@</sup>	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) <sup>*</sup>		Electrometric Method	5.8	5.5 - 9.0
Temperature <sup>*</sup>	°C	Laboratory and Field Method	30	≤45

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /I Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

24/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6610290

Report No : 6610-1557

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66101067

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 10/10/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/10/2023

Tested Date : 11/10/2023 - 18/10/2023

Reported Date : 24/10/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200
Zinc @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.17	≤5

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-0017) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

24/10/2023



Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

24/10/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

## Test Report

Request No : W6611430

Report No : 6611-1923

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66111448

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/11/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/11/2023

Tested Date : 16/11/2023 - 22/11/2023

Reported Date : 24/11/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.6	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	95	≤750
Copper @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.77	≤2
Nickel @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	6.4	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	33	≤45

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ก-0018) \*

5. \*\* = These data are non laboratory data.

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6611430

Report No : 6611-1923

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66111448

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/11/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/11/2023

Tested Date : 16/11/2023 - 22/11/2023

Reported Date : 24/11/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200
Zinc @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.26	≤5

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 PE 1.8 L, G 1.0 L ]

Remark : 1. /I Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Janthanee Saiphan (จ-003-ก-0018) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Request No : W6612382

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Report No : 6612-1612

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66121234

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 13/12/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/12/2023

Tested Date : 14/12/2023 - 26/12/2023

Reported Date : 27/12/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand <sup>#</sup>	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	10.4	≤500
Chemical Oxygen Demand <sup>#</sup>	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Copper <sup>@</sup>	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.37	≤2
Nickel <sup>@</sup>	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤1
Oil and Grease <sup>@</sup>	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) <sup>*</sup>		Electrometric Method	7.0	5.5 - 9.0
Temperature <sup>*</sup>	°C	Laboratory and Field Method	33	≤45

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

5. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Customer : Siam Poongsan Metal Co.,Ltd. \*\*

Address : 38/14 Laemchabang Industrial Estate, Moo 5 T. Tungsukla, A. Sriracha, Chonburi 20230 \*\*

Sampling Source : Siam Poongsan Metal Co.,Ltd. \*\*

Sample No : W 66121234

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 13/12/2023 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/12/2023

Tested Date : 14/12/2023 - 26/12/2023

Reported Date : 27/12/2023

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	6	≤200
Zinc @	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.28	≤5

Physical Apperance : 1. Sample : lightly SS

2. Container : Normal [ PE 0.5 L (2 Bottle), PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)

2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017) \*

5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA66-R0754

Report No. R6607-2131

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ริมรั้วด้านทิศเหนือ  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 00222592 : Class 2

SAMPLE NO. : 19312  
MEASURING DATE : 12-13/07/2023  
RECEIVED DATE : 16/07/2023  
REPORTED DATE : 19/07/2023

TIME \ DATE	12-13/07/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	63.8	dB(A)
10:00 - 11:00	62.9	dB(A)
11:00 - 12:00	63.0	dB(A)
12:00 - 13:00	63.8	dB(A)
13:00 - 14:00	63.6	dB(A)
14:00 - 15:00	63.4	dB(A)
15:00 - 16:00	69.1	dB(A)
16:00 - 17:00	67.2	dB(A)
17:00 - 18:00	66.3	dB(A)
18:00 - 19:00	64.9	dB(A)
19:00 - 20:00	65.9	dB(A)
20:00 - 21:00	63.7	dB(A)
21:00 - 22:00	65.3	dB(A)
22:00 - 23:00	63.7	dB(A)
23:00 - 00:00	65.1	dB(A)
00:00 - 01:00	64.2	dB(A)
01:00 - 02:00	65.3	dB(A)
02:00 - 03:00	63.6	dB(A)
03:00 - 04:00	65.0	dB(A)
04:00 - 05:00	64.2	dB(A)
05:00 - 06:00	65.7	dB(A)
06:00 - 07:00	63.7	dB(A)
07:00 - 08:00	65.8	dB(A)
08:00 - 09:00	63.1	dB(A)
$L_{eq}$ 24 hr.	65.0	dB(A)
$L_{dn}$	71.1	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

REMARK : <sup>/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>/3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Savita Kittinoavarat)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4584

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศเหนือ  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322744 : Class 2

SAMPLE NO. : 25747  
 MEASURING DATE : 15-16/08/2023  
 RECEIVED DATE : 18/08/2023  
 REPORTED DATE : 22/08/2023

TIME \ DATE	15-16/08/2023 ( $L_{eq}$ )	UNIT
08:50 - 09:50 <sup>3</sup>	70.6	dB(A)
09:50 - 10:50	67.6	dB(A)
10:50 - 11:50	62.7	dB(A)
11:50 - 12:50	63.1	dB(A)
12:50 - 13:50	64.3	dB(A)
13:50 - 14:50	65.5	dB(A)
14:50 - 15:50	64.1	dB(A)
15:50 - 16:50	65.6	dB(A)
16:50 - 17:50	64.4	dB(A)
17:50 - 18:50	68.0	dB(A)
18:50 - 19:50	69.3	dB(A)
19:50 - 20:50	64.7	dB(A)
20:50 - 21:50	64.6	dB(A)
21:50 - 22:50	64.6	dB(A)
22:50 - 23:50	63.3	dB(A)
23:50 - 00:50	63.3	dB(A)
00:50 - 01:50	64.1	dB(A)
01:50 - 02:50	62.5	dB(A)
02:50 - 03:50	63.5	dB(A)
03:50 - 04:50	63.3	dB(A)
04:50 - 05:50	62.7	dB(A)
05:50 - 06:50	65.0	dB(A)
06:50 - 07:50	66.4	dB(A)
07:50 - 08:50	64.2	dB(A)
$L_{eq}$ 24 hr.	65.5	dB(A)
$L_{dn}$	70.6	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
 (Measurement By Ms. Jutarat Sulsaget)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1835

## TEST REPORT

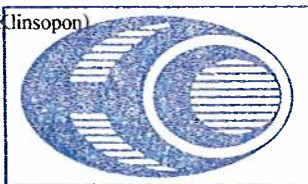
CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศเหนือ  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00222593 : Class 2

SAMPLE NO. : 28714  
 MEASURING DATE : 13-14/09/2023  
 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	66.8	dB(A)
10:00 - 11:00	64.8	dB(A)
11:00 - 12:00	66.5	dB(A)
12:00 - 13:00	65.7	dB(A)
13:00 - 14:00	67.4	dB(A)
14:00 - 15:00	65.5	dB(A)
15:00 - 16:00	66.8	dB(A)
16:00 - 17:00	67.2	dB(A)
17:00 - 18:00	66.5	dB(A)
18:00 - 19:00	67.1	dB(A)
19:00 - 20:00	67.6	dB(A)
20:00 - 21:00	65.1	dB(A)
21:00 - 22:00	66.9	dB(A)
22:00 - 23:00	66.8	dB(A)
23:00 - 00:00	67.1	dB(A)
00:00 - 01:00	66.4	dB(A)
01:00 - 02:00	66.0	dB(A)
02:00 - 03:00	65.9	dB(A)
03:00 - 04:00	66.7	dB(A)
04:00 - 05:00	66.1	dB(A)
05:00 - 06:00	66.6	dB(A)
06:00 - 07:00	68.8	dB(A)
07:00 - 08:00	71.5	dB(A)
08:00 - 09:00	66.3	dB(A)
$L_{eq}$ 24 hr.	67.0	dB(A)
$L_{dn}$	73.3	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

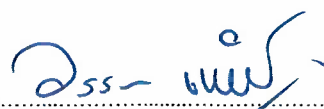
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
 (Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

COPY

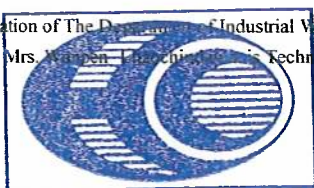
**TEST REPORT**

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : รีมรูด้านทิศเหนือ\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$  #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00222594 : Class 2

SAMPLE NO. : 29871  
MEASURING DATE : 05-06/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	05-06/10/2023 ( $L_{eq}$ )	UNIT
08:40 - 09:40 <sup>3</sup>	67.8	dB(A)
09:40 - 10:40	67.7	dB(A)
10:40 - 11:40	66.0	dB(A)
11:40 - 12:40	64.6	dB(A)
12:40 - 13:40	64.7	dB(A)
13:40 - 14:40	65.6	dB(A)
14:40 - 15:40	66.8	dB(A)
15:40 - 16:40	68.4	dB(A)
16:40 - 17:40	65.0	dB(A)
17:40 - 18:40	67.1	dB(A)
18:40 - 19:40	65.2	dB(A)
19:40 - 20:40	65.6	dB(A)
20:40 - 21:40	65.7	dB(A)
21:40 - 22:40	65.8	dB(A)
22:40 - 23:40	65.0	dB(A)
23:40 - 00:40	64.1	dB(A)
00:40 - 01:40	65.7	dB(A)
01:40 - 02:40	65.1	dB(A)
02:40 - 03:40	64.3	dB(A)
03:40 - 04:40	64.1	dB(A)
04:40 - 05:40	64.9	dB(A)
05:40 - 06:40	65.1	dB(A)
06:40 - 07:40	65.9	dB(A)
07:40 - 08:40	68.5	dB(A)
$L_{eq}$ 24 hr.	66.0	dB(A)
$L_{dn}$ #	71.6	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997.  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997.  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoavarat)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.. Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co.. Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศเหนือ\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$  #  
DETERMINATION METHOD : ISO 1996-1:2016###  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322754 : Class 2


SAMPLE NO. : 32988  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
10:00 - 11:00 <sup>3</sup>	71.9	dB(A)
11:00 - 12:00	67.8	dB(A)
12:00 - 13:00	65.6	dB(A)
13:00 - 14:00	71.5	dB(A)
14:00 - 15:00	72.3	dB(A)
15:00 - 16:00	70.6	dB(A)
16:00 - 17:00	71.6	dB(A)
17:00 - 18:00	70.8	dB(A)
18:00 - 19:00	70.2	dB(A)
19:00 - 20:00	65.2	dB(A)
20:00 - 21:00	68.3	dB(A)
21:00 - 22:00	65.5	dB(A)
22:00 - 23:00	65.0	dB(A)
23:00 - 00:00	64.9	dB(A)
00:00 - 01:00	66.3	dB(A)
01:00 - 02:00	65.5	dB(A)
02:00 - 03:00	66.2	dB(A)
03:00 - 04:00	65.2	dB(A)
04:00 - 05:00	65.1	dB(A)
05:00 - 06:00	65.4	dB(A)
06:00 - 07:00	66.2	dB(A)
07:00 - 08:00	65.9	dB(A)
08:00 - 09:00	71.4	dB(A)
09:00 - 10:00	71.9	dB(A)
$L_{eq}$ 24 hr.	68.8	dB(A)
$L_{dn}$ #	73.0	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
### ISO 1996-1:2016. Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997.  
Notification of The Pollution Control Department on The Calculation of The Noise Level. Dated August 11, 1997.  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance. Noise Level 24-Hour Average and Maximum Noise Level From Factory B.E. 2553. Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศเหนือ\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00222592 : Class 2

SAMPLE NO. : 34781  
MEASURING DATE : 12-13/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	12-13/12/2023 ( $L_{eq}$ )	UNIT
09:40 - 10:40 <sup>3</sup>	68.4	dB(A)
10:40 - 11:40	66.1	dB(A)
11:40 - 12:40	64.3	dB(A)
12:40 - 13:40	68.1	dB(A)
13:40 - 14:40	67.1	dB(A)
14:40 - 15:40	68.6	dB(A)
15:40 - 16:40	66.0	dB(A)
16:40 - 17:40	66.5	dB(A)
17:40 - 18:40	66.9	dB(A)
18:40 - 19:40	66.0	dB(A)
19:40 - 20:40	66.6	dB(A)
20:40 - 21:40	65.1	dB(A)
21:40 - 22:40	65.0	dB(A)
22:40 - 23:40	65.2	dB(A)
23:40 - 00:40	64.4	dB(A)
00:40 - 01:40	65.0	dB(A)
01:40 - 02:40	64.7	dB(A)
02:40 - 03:40	65.0	dB(A)
03:40 - 04:40	64.6	dB(A)
04:40 - 05:40	65.3	dB(A)
05:40 - 06:40	65.5	dB(A)
06:40 - 07:40	66.8	dB(A)
07:40 - 08:40	66.1	dB(A)
08:40 - 09:40	65.6	dB(A)
$L_{eq}$ 24 hr.	66.1	dB(A)
$L_{dn}$ #	71.7	dB(A)
Standard	$70^{/1}, 70^{/2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>/1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>/3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

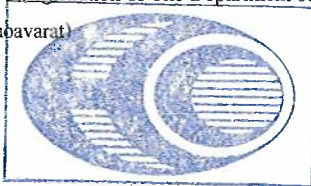
Report No. R6607-2251

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tung Sukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ริมรั้วด้านทิศใต้  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 00322748 : Class 2

SAMPLE NO. : 19432  
MEASURING DATE : 12-13/07/2023  
RECEIVED DATE : 16/07/2023  
REPORTED DATE : 19/07/2023

TIME \ DATE	12-13/07/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	61.3	dB(A)
10:00 - 11:00	58.7	dB(A)
11:00 - 12:00	59.2	dB(A)
12:00 - 13:00	56.8	dB(A)
13:00 - 14:00	60.3	dB(A)
14:00 - 15:00	59.4	dB(A)
15:00 - 16:00	65.1	dB(A)
16:00 - 17:00	59.4	dB(A)
17:00 - 18:00	60.1	dB(A)
18:00 - 19:00	59.0	dB(A)
19:00 - 20:00	57.2	dB(A)
20:00 - 21:00	56.7	dB(A)
21:00 - 22:00	56.1	dB(A)
22:00 - 23:00	55.8	dB(A)
23:00 - 00:00	54.8	dB(A)
00:00 - 01:00	56.7	dB(A)
01:00 - 02:00	55.9	dB(A)
02:00 - 03:00	55.5	dB(A)
03:00 - 04:00	53.6	dB(A)
04:00 - 05:00	52.2	dB(A)
05:00 - 06:00	57.7	dB(A)
06:00 - 07:00	59.4	dB(A)
07:00 - 08:00	58.9	dB(A)
08:00 - 09:00	58.5	dB(A)
$L_{eq}$ 24 hr.	58.7	dB(A)
$L_{dn}$	63.3	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Savita Kittinavarat)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4582

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศใต้  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322746 : Class 2

SAMPLE NO. : 25745  
 MEASURING DATE : 15-16/08/2023  
 RECEIVED DATE : 18/08/2023  
 REPORTED DATE : 22/08/2023

TIME \ DATE	15-16/08/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	65.9	dB(A)
10:00 - 11:00	59.6	dB(A)
11:00 - 12:00	58.7	dB(A)
12:00 - 13:00	56.6	dB(A)
13:00 - 14:00	59.7	dB(A)
14:00 - 15:00	58.1	dB(A)
15:00 - 16:00	64.5	dB(A)
16:00 - 17:00	61.8	dB(A)
17:00 - 18:00	58.5	dB(A)
18:00 - 19:00	65.4	dB(A)
19:00 - 20:00	59.8	dB(A)
20:00 - 21:00	58.8	dB(A)
21:00 - 22:00	57.8	dB(A)
22:00 - 23:00	65.3	dB(A)
23:00 - 00:00	54.8	dB(A)
00:00 - 01:00	65.3	dB(A)
01:00 - 02:00	56.1	dB(A)
02:00 - 03:00	55.2	dB(A)
03:00 - 04:00	55.4	dB(A)
04:00 - 05:00	53.8	dB(A)
05:00 - 06:00	56.7	dB(A)
06:00 - 07:00	60.6	dB(A)
07:00 - 08:00	60.3	dB(A)
08:00 - 09:00	60.3	dB(A)
$L_{eq}$ 24 hr.	61.1	dB(A)
$L_{dn}$	67.0	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
 (Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

  
 (MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1836

## TEST REPORT

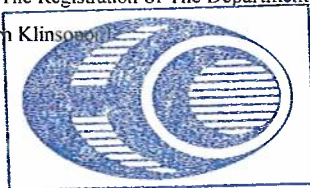
CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ริมรั้วด้านทิศใต้  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 00222592 : Class 2

SAMPLE NO. : 28715  
MEASURING DATE : 13-14/09/2023  
RECEIVED DATE : 15/09/2023  
REPORTED DATE : 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
09:15 - 10:15 <sup>3</sup>	65.9	dB(A)
10:15 - 11:15	58.4	dB(A)
11:15 - 12:15	58.5	dB(A)
12:15 - 13:15	66.8	dB(A)
13:15 - 14:15	60.8	dB(A)
14:15 - 15:15	60.1	dB(A)
15:15 - 16:15	62.1	dB(A)
16:15 - 17:15	60.0	dB(A)
17:15 - 18:15	60.2	dB(A)
18:15 - 19:15	65.4	dB(A)
19:15 - 20:15	58.7	dB(A)
20:15 - 21:15	57.2	dB(A)
21:15 - 22:15	56.8	dB(A)
22:15 - 23:15	61.7	dB(A)
23:15 - 00:15	57.6	dB(A)
00:15 - 01:15	64.5	dB(A)
01:15 - 02:15	56.5	dB(A)
02:15 - 03:15	54.9	dB(A)
03:15 - 04:15	58.4	dB(A)
04:15 - 05:15	57.2	dB(A)
05:15 - 06:15	61.4	dB(A)
06:15 - 07:15	61.2	dB(A)
07:15 - 08:15	61.3	dB(A)
08:15 - 09:15	60.7	dB(A)
$L_{eq}$ 24 hr.	61.4	dB(A)
$L_{dn}$	67.0	dB(A)
Standard	$70^{/1}, 70^{/2}$	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Thanatporn Klinson)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

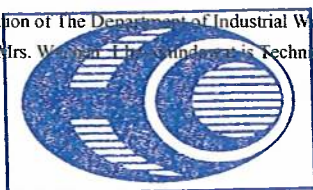
TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศใต้\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322748 : Class 2

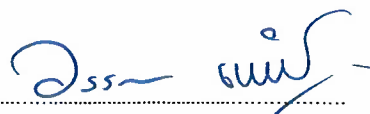
SAMPLE NO. : 29872  
MEASURING DATE : 05-06/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	05-06/10/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	60.7	dB(A)
10:10 - 11:10	59.9	dB(A)
11:10 - 12:10	60.4	dB(A)
12:10 - 13:10	61.9	dB(A)
13:10 - 14:10	63.8	dB(A)
14:10 - 15:10	58.8	dB(A)
15:10 - 16:10	57.2	dB(A)
16:10 - 17:10	58.8	dB(A)
17:10 - 18:10	61.0	dB(A)
18:10 - 19:10	61.8	dB(A)
19:10 - 20:10	63.1	dB(A)
20:10 - 21:10	61.2	dB(A)
21:10 - 22:10	60.9	dB(A)
22:10 - 23:10	61.3	dB(A)
23:10 - 00:10	67.4	dB(A)
00:10 - 01:10	61.6	dB(A)
01:10 - 02:10	57.9	dB(A)
02:10 - 03:10	57.0	dB(A)
03:10 - 04:10	57.8	dB(A)
04:10 - 05:10	57.5	dB(A)
05:10 - 06:10	57.2	dB(A)
06:10 - 07:10	58.1	dB(A)
07:10 - 08:10	56.7	dB(A)
08:10 - 09:10	59.6	dB(A)
$L_{eq}$ 24 hr.	60.9	dB(A)
$L_{dn}$ #	67.5	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016. Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards. Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoavarat)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศใต้\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ \*\*  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322748 : Class 2

SAMPLE NO. : 32991  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
10:15 - 11:15 <sup>3</sup>	59.5	dB(A)
11:15 - 12:15	57.2	dB(A)
12:15 - 13:15	56.7	dB(A)
13:15 - 14:15	64.0	dB(A)
14:15 - 15:15	59.6	dB(A)
15:15 - 16:15	64.6	dB(A)
16:15 - 17:15	61.5	dB(A)
17:15 - 18:15	61.7	dB(A)
18:15 - 19:15	62.1	dB(A)
19:15 - 20:15	64.6	dB(A)
20:15 - 21:15	57.7	dB(A)
21:15 - 22:15	57.4	dB(A)
22:15 - 23:15	57.2	dB(A)
23:15 - 00:15	58.2	dB(A)
00:15 - 01:15	58.1	dB(A)
01:15 - 02:15	56.1	dB(A)
02:15 - 03:15	56.1	dB(A)
03:15 - 04:15	55.0	dB(A)
04:15 - 05:15	55.3	dB(A)
05:15 - 06:15	60.0	dB(A)
06:15 - 07:15	61.3	dB(A)
07:15 - 08:15	59.7	dB(A)
08:15 - 09:15	63.5	dB(A)
09:15 - 10:15	59.5	dB(A)
$L_{eq}$ 24 hr.	60.4	dB(A)
$L_{dn}$ **	65.1	dB(A)
Standard	$70^{/1}$ , $70^{/2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards. Dated March 12, 1997.  
Notification of The Pollution Control Department on The Calculation of The Noise Level. Dated August 11, 1997.  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanaporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศใต้\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00222594 : Class 2

SAMPLE NO. : 34779  
MEASURING DATE : 12-13/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	12-13/12/2023 ( $L_{eq}$ )	UNIT
10:00 - 11:00 <sup>3</sup>	59.8	dB(A)
11:00 - 12:00	59.1	dB(A)
12:00 - 13:00	55.5	dB(A)
13:00 - 14:00	60.9	dB(A)
14:00 - 15:00	58.7	dB(A)
15:00 - 16:00	64.3	dB(A)
16:00 - 17:00	62.1	dB(A)
17:00 - 18:00	61.3	dB(A)
18:00 - 19:00	62.7	dB(A)
19:00 - 20:00	58.5	dB(A)
20:00 - 21:00	63.3	dB(A)
21:00 - 22:00	57.8	dB(A)
22:00 - 23:00	57.4	dB(A)
23:00 - 00:00	56.3	dB(A)
00:00 - 01:00	56.0	dB(A)
01:00 - 02:00	67.1	dB(A)
02:00 - 03:00	56.3	dB(A)
03:00 - 04:00	56.2	dB(A)
04:00 - 05:00	52.8	dB(A)
05:00 - 06:00	57.3	dB(A)
06:00 - 07:00	60.9	dB(A)
07:00 - 08:00	61.3	dB(A)
08:00 - 09:00	62.1	dB(A)
09:00 - 10:00	61.9	dB(A)
$L_{eq}$ 24 hr.	60.8	dB(A)
$L_{dn}$ #	66.7	dB(A)
Standard	$70^{/1}, 70^{/2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>/1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>/3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

GOPY

Request No. LA66-R0754

Report No. R6607-2132

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศตะวันออก  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322747 : Class 2

SAMPLE NO. : 19313  
 MEASURING DATE : 13-14/07/2023  
 RECEIVED DATE : 16/07/2023  
 REPORTED DATE : 19/07/2023

TIME \ DATE	13-14/07/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	58.6	dB(A)
10:00 - 11:00	56.5	dB(A)
11:00 - 12:00	59.3	dB(A)
12:00 - 13:00	59.3	dB(A)
13:00 - 14:00	60.6	dB(A)
14:00 - 15:00	57.8	dB(A)
15:00 - 16:00	56.6	dB(A)
16:00 - 17:00	58.7	dB(A)
17:00 - 18:00	56.9	dB(A)
18:00 - 19:00	58.6	dB(A)
19:00 - 20:00	58.9	dB(A)
20:00 - 21:00	58.6	dB(A)
21:00 - 22:00	58.7	dB(A)
22:00 - 23:00	57.3	dB(A)
23:00 - 00:00	57.4	dB(A)
00:00 - 01:00	57.8	dB(A)
01:00 - 02:00	57.0	dB(A)
02:00 - 03:00	56.2	dB(A)
03:00 - 04:00	56.3	dB(A)
04:00 - 05:00	56.8	dB(A)
05:00 - 06:00	59.3	dB(A)
06:00 - 07:00	61.4	dB(A)
07:00 - 08:00	59.5	dB(A)
08:00 - 09:00	64.4	dB(A)
$L_{eq}$ 24 hr.	58.9	dB(A)
$L_{dn}$	64.7	dB(A)
Standard	70 <sup>1/1</sup> , 70 <sup>1/2</sup>	dB(A)

REMARK : <sup>1/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>1/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>1/3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Savita Kittinoavarat)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4583

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศตะวันออก  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322748 : Class 2

SAMPLE NO. : 25746  
 MEASURING DATE : 15-16/08/2023  
 RECEIVED DATE : 18/08/2023  
 REPORTED DATE : 22/08/2023

TIME \ DATE	15-16/08/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	60.5	dB(A)
10:00 - 11:00	60.4	dB(A)
11:00 - 12:00	57.8	dB(A)
12:00 - 13:00	58.6	dB(A)
13:00 - 14:00	61.5	dB(A)
14:00 - 15:00	59.9	dB(A)
15:00 - 16:00	60.8	dB(A)
16:00 - 17:00	57.9	dB(A)
17:00 - 18:00	57.7	dB(A)
18:00 - 19:00	69.3	dB(A)
19:00 - 20:00	65.8	dB(A)
20:00 - 21:00	61.5	dB(A)
21:00 - 22:00	60.9	dB(A)
22:00 - 23:00	60.8	dB(A)
23:00 - 00:00	60.1	dB(A)
00:00 - 01:00	60.2	dB(A)
01:00 - 02:00	60.3	dB(A)
02:00 - 03:00	60.1	dB(A)
03:00 - 04:00	59.5	dB(A)
04:00 - 05:00	59.0	dB(A)
05:00 - 06:00	59.0	dB(A)
06:00 - 07:00	59.8	dB(A)
07:00 - 08:00	58.3	dB(A)
08:00 - 09:00	63.1	dB(A)
$L_{eq}$ 24 hr.	61.6	dB(A)
$L_{dn}$	66.8	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Jutarat Sukagat)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. LA66-R0963

Report No. R6609-1837

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศตะวันออก  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322748 : Class 2

SAMPLE NO. : 28716  
 MEASURING DATE : 13-14/09/2023  
 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	62.7	dB(A)
10:10 - 11:10	60.3	dB(A)
11:10 - 12:10	58.4	dB(A)
12:10 - 13:10	61.8	dB(A)
13:10 - 14:10	59.7	dB(A)
14:10 - 15:10	59.1	dB(A)
15:10 - 16:10	57.9	dB(A)
16:10 - 17:10	59.0	dB(A)
17:10 - 18:10	58.9	dB(A)
18:10 - 19:10	56.6	dB(A)
19:10 - 20:10	57.4	dB(A)
20:10 - 21:10	57.4	dB(A)
21:10 - 22:10	58.1	dB(A)
22:10 - 23:10	61.0	dB(A)
23:10 - 00:10	58.7	dB(A)
00:10 - 01:10	58.3	dB(A)
01:10 - 02:10	57.9	dB(A)
02:10 - 03:10	57.4	dB(A)
03:10 - 04:10	57.3	dB(A)
04:10 - 05:10	58.3	dB(A)
05:10 - 06:10	58.1	dB(A)
06:10 - 07:10	59.3	dB(A)
07:10 - 08:10	61.3	dB(A)
08:10 - 09:10	59.9	dB(A)
$L_{eq}$ 24 hr.	59.2	dB(A)
$L_{dn}$	65.2	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works

(Measurement By Ms. Thanaporn Klinsonpoo)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศตะวันออก\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$  #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322754 : Class 2

SAMPLE NO. : 29869  
MEASURING DATE : 05-06/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	05-06/10/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	61.6	dB(A)
10:10 - 11:10	62.3	dB(A)
11:10 - 12:10	60.5	dB(A)
12:10 - 13:10	55.9	dB(A)
13:10 - 14:10	60.1	dB(A)
14:10 - 15:10	61.4	dB(A)
15:10 - 16:10	62.0	dB(A)
16:10 - 17:10	58.4	dB(A)
17:10 - 18:10	55.1	dB(A)
18:10 - 19:10	55.2	dB(A)
19:10 - 20:10	57.6	dB(A)
20:10 - 21:10	58.3	dB(A)
21:10 - 22:10	58.4	dB(A)
22:10 - 23:10	59.1	dB(A)
23:10 - 00:10	58.0	dB(A)
00:10 - 01:10	58.3	dB(A)
01:10 - 02:10	59.3	dB(A)
02:10 - 03:10	58.5	dB(A)
03:10 - 04:10	56.8	dB(A)
04:10 - 05:10	55.7	dB(A)
05:10 - 06:10	55.7	dB(A)
06:10 - 07:10	56.1	dB(A)
07:10 - 08:10	57.9	dB(A)
08:10 - 09:10	59.8	dB(A)
$L_{eq}$ 24 hr.	58.9	dB(A)
$L_{dn}$ #	64.4	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : # Test Report Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010

<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)

<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)

<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

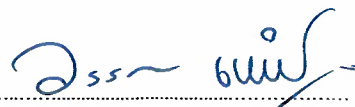
(Measurement By Ms. Savita Kittinoavarat)

\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

  
(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศตะวันออก\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322757 : Class 2

SAMPLE NO. : 32989  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
10:05 - 11:05 <sup>3</sup>	59.0	dB(A)
11:05 - 12:05	57.8	dB(A)
12:05 - 13:05	59.1	dB(A)
13:05 - 14:05	60.8	dB(A)
14:05 - 15:05	59.8	dB(A)
15:05 - 16:05	60.0	dB(A)
16:05 - 17:05	59.6	dB(A)
17:05 - 18:05	60.4	dB(A)
18:05 - 19:05	59.0	dB(A)
19:05 - 20:05	59.9	dB(A)
20:05 - 21:05	60.7	dB(A)
21:05 - 22:05	60.6	dB(A)
22:05 - 23:05	60.7	dB(A)
23:05 - 00:05	60.2	dB(A)
00:05 - 01:05	60.6	dB(A)
01:05 - 02:05	59.4	dB(A)
02:05 - 03:05	57.6	dB(A)
03:05 - 04:05	57.3	dB(A)
04:05 - 05:05	57.0	dB(A)
05:05 - 06:05	58.4	dB(A)
06:05 - 07:05	58.0	dB(A)
07:05 - 08:05	56.9	dB(A)
08:05 - 09:05	62.5	dB(A)
09:05 - 10:05	61.0	dB(A)
$L_{eq}$ 24 hr.	59.7	dB(A)
$L_{dn}$ #	65.6	dB(A)
Standard	$70^{-1}$ , $70^{-2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards. Dated March 12, 1997.  
Notification of The Pollution Control Department on The Calculation of The Noise Level. Dated August 11, 1997.  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

COPY

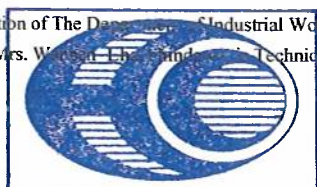
TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศตะวันออก\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322753 : Class 2

SAMPLE NO. : 34780  
MEASURING DATE : 12-13/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	12-13/12/2023 ( $L_{eq}$ )	UNIT
09:50 - 10:50 <sup>3</sup>	59.9	dB(A)
10:50 - 11:50	58.6	dB(A)
11:50 - 12:50	57.0	dB(A)
12:50 - 13:50	58.5	dB(A)
13:50 - 14:50	58.9	dB(A)
14:50 - 15:50	60.0	dB(A)
15:50 - 16:50	57.3	dB(A)
16:50 - 17:50	56.5	dB(A)
17:50 - 18:50	56.6	dB(A)
18:50 - 19:50	57.0	dB(A)
19:50 - 20:50	59.6	dB(A)
20:50 - 21:50	58.0	dB(A)
21:50 - 22:50	57.2	dB(A)
22:50 - 23:50	57.1	dB(A)
23:50 - 00:50	57.7	dB(A)
00:50 - 01:50	57.6	dB(A)
01:50 - 02:50	57.4	dB(A)
02:50 - 03:50	57.3	dB(A)
03:50 - 04:50	57.9	dB(A)
04:50 - 05:50	56.6	dB(A)
05:50 - 06:50	57.5	dB(A)
06:50 - 07:50	58.6	dB(A)
07:50 - 08:50	58.0	dB(A)
08:50 - 09:50	59.9	dB(A)
$L_{eq}$ 24 hr.	58.1	dB(A)
$L_{dn}$ #	64.0	dB(A)
Standard	$70^{/1}$ , $70^{/2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>/1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>/3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

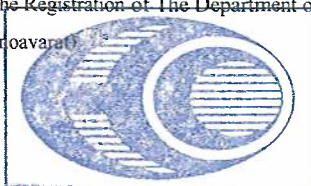
Report No. R6607-2130

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ริมรั้วด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 00322755 : Class 2

SAMPLE NO. : 19311  
MEASURING DATE : 12-13/07/2023  
RECEIVED DATE : 16/07/2023  
REPORTED DATE : 19/07/2023

TIME \ DATE	12-13/07/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	57.5	dB(A)
10:00 - 11:00	57.2	dB(A)
11:00 - 12:00	56.8	dB(A)
12:00 - 13:00	55.7	dB(A)
13:00 - 14:00	58.0	dB(A)
14:00 - 15:00	57.3	dB(A)
15:00 - 16:00	58.2	dB(A)
16:00 - 17:00	57.7	dB(A)
17:00 - 18:00	59.6	dB(A)
18:00 - 19:00	58.7	dB(A)
19:00 - 20:00	61.5	dB(A)
20:00 - 21:00	59.1	dB(A)
21:00 - 22:00	56.6	dB(A)
22:00 - 23:00	55.4	dB(A)
23:00 - 00:00	54.4	dB(A)
00:00 - 01:00	53.6	dB(A)
01:00 - 02:00	53.7	dB(A)
02:00 - 03:00	52.0	dB(A)
03:00 - 04:00	51.8	dB(A)
04:00 - 05:00	53.2	dB(A)
05:00 - 06:00	56.1	dB(A)
06:00 - 07:00	60.3	dB(A)
07:00 - 08:00	62.0	dB(A)
08:00 - 09:00	59.4	dB(A)
$L_{eq}$ 24 hr.	57.7	dB(A)
$L_{dn}$	62.4	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

REMARK : <sup>/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>/3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Savita Kittinoavarat)

บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

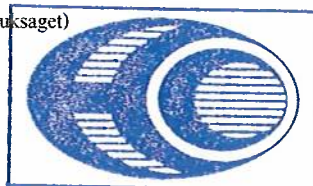
Report No. R6608-4585

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
SAMPLE POINT : ริมรั้วด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 00322755 : Class 2

SAMPLE NO. : 25748  
MEASURING DATE : 15-16/08/2023  
RECEIVED DATE : 18/08/2023  
REPORTED DATE : 22/08/2023


TIME \ DATE	15-16/08/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	58.6	dB(A)
10:10 - 11:10	58.8	dB(A)
11:10 - 12:10	58.6	dB(A)
12:10 - 13:10	58.9	dB(A)
13:10 - 14:10	58.7	dB(A)
14:10 - 15:10	58.9	dB(A)
15:10 - 16:10	59.6	dB(A)
16:10 - 17:10	60.7	dB(A)
17:10 - 18:10	60.0	dB(A)
18:10 - 19:10	73.4	dB(A)
19:10 - 20:10	61.7	dB(A)
20:10 - 21:10	59.8	dB(A)
21:10 - 22:10	58.5	dB(A)
22:10 - 23:10	57.0	dB(A)
23:10 - 00:10	56.0	dB(A)
00:10 - 01:10	55.4	dB(A)
01:10 - 02:10	55.1	dB(A)
02:10 - 03:10	54.6	dB(A)
03:10 - 04:10	54.1	dB(A)
04:10 - 05:10	55.3	dB(A)
05:10 - 06:10	56.9	dB(A)
06:10 - 07:10	61.1	dB(A)
07:10 - 08:10	61.9	dB(A)
08:10 - 09:10	59.0	dB(A)
$L_{eq}$ 24 hr.	62.1	dB(A)
$L_{dn}$	65.1	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Ms. Jutarat Suksaget)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

COPY

Request No. LA66-R0963

Report No. R6609-1838

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.  
 SAMPLE POINT : ริมรั้วด้านทิศตะวันตก  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$   
 DETERMINATION METHOD : ISO 1996-1:2016  
 INSTRUMENT : Integrated Sound Level Meter S/N 00322746 : Class 2

SAMPLE NO. : 28717  
 MEASURING DATE : 13-14/09/2023  
 RECEIVED DATE : 15/09/2023  
 REPORTED DATE : 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
09:20 - 10:20 <sup>3</sup>	58.9	dB(A)
10:20 - 11:20	60.1	dB(A)
11:20 - 12:20	59.1	dB(A)
12:20 - 13:20	59.5	dB(A)
13:20 - 14:20	59.0	dB(A)
14:20 - 15:20	60.1	dB(A)
15:20 - 16:20	60.7	dB(A)
16:20 - 17:20	60.9	dB(A)
17:20 - 18:20	63.7	dB(A)
18:20 - 19:20	62.9	dB(A)
19:20 - 20:20	58.2	dB(A)
20:20 - 21:20	57.6	dB(A)
21:20 - 22:20	56.4	dB(A)
22:20 - 23:20	64.0	dB(A)
23:20 - 00:20	58.8	dB(A)
00:20 - 01:20	58.0	dB(A)
01:20 - 02:20	54.7	dB(A)
02:20 - 03:20	54.4	dB(A)
03:20 - 04:20	56.3	dB(A)
04:20 - 05:20	57.7	dB(A)
05:20 - 06:20	61.6	dB(A)
06:20 - 07:20	63.5	dB(A)
07:20 - 08:20	60.0	dB(A)
08:20 - 09:20	59.3	dB(A)
$L_{eq}$ 24 hr.	60.1	dB(A)
$L_{dn}$	66.5	dB(A)
Standard	$70^{+1}, 70^{-2}$	dB(A)

REMARK : <sup>1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)<sup>3</sup> Start Time

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
 (Measurement By Ms. Thanatporn Klinsoopon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศตะวันตก\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322754 : Class 2

SAMPLE NO. : 29870  
MEASURING DATE : 05-06/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	05-06/10/2023 ( $L_{eq}$ )	UNIT
09:20 - 10:20 <sup>3</sup>	61.8	dB(A)
10:20 - 11:20	64.1	dB(A)
11:20 - 12:20	61.0	dB(A)
12:20 - 13:20	60.9	dB(A)
13:20 - 14:20	61.7	dB(A)
14:20 - 15:20	62.3	dB(A)
15:20 - 16:20	63.3	dB(A)
16:20 - 17:20	62.2	dB(A)
17:20 - 18:20	62.1	dB(A)
18:20 - 19:20	62.6	dB(A)
19:20 - 20:20	63.7	dB(A)
20:20 - 21:20	60.7	dB(A)
21:20 - 22:20	60.5	dB(A)
22:20 - 23:20	60.3	dB(A)
23:20 - 00:20	60.3	dB(A)
00:20 - 01:20	63.4	dB(A)
01:20 - 02:20	60.3	dB(A)
02:20 - 03:20	60.0	dB(A)
03:20 - 04:20	59.9	dB(A)
04:20 - 05:20	60.1	dB(A)
05:20 - 06:20	61.1	dB(A)
06:20 - 07:20	63.5	dB(A)
07:20 - 08:20	64.8	dB(A)
08:20 - 09:20	61.7	dB(A)
$L_{eq}$ 24 hr.	62.0	dB(A)
$L_{dn}$ #	67.8	dB(A)
Standard	$70^{+1}, 70^{+2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoavarat)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38.14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ร่มรื้อบ้านพักตากอากาศ\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr., &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322744 : Class 2


SAMPLE NO. : 32990  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
10:20 - 11:20 <sup>3</sup>	60.6	dB(A)
11:20 - 12:20	60.1	dB(A)
12:20 - 13:20	60.0	dB(A)
13:20 - 14:20	60.3	dB(A)
14:20 - 15:20	60.0	dB(A)
15:20 - 16:20	60.1	dB(A)
16:20 - 17:20	64.5	dB(A)
17:20 - 18:20	65.6	dB(A)
18:20 - 19:20	62.0	dB(A)
19:20 - 20:20	63.0	dB(A)
20:20 - 21:20	60.7	dB(A)
21:20 - 22:20	60.4	dB(A)
22:20 - 23:20	60.3	dB(A)
23:20 - 00:20	60.5	dB(A)
00:20 - 01:20	60.1	dB(A)
01:20 - 02:20	59.8	dB(A)
02:20 - 03:20	59.8	dB(A)
03:20 - 04:20	59.6	dB(A)
04:20 - 05:20	60.3	dB(A)
05:20 - 06:20	61.7	dB(A)
06:20 - 07:20	62.8	dB(A)
07:20 - 08:20	63.2	dB(A)
08:20 - 09:20	60.6	dB(A)
09:20 - 10:20	60.3	dB(A)
$L_{eq}$ 24 hr.	61.4	dB(A)
$L_{dn}$ #	67.3	dB(A)
Standard	70 <sup>1</sup> , 70 <sup>2</sup>	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards. Dated March 12, 1997.  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997.  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level From Factory B.E. 2553, Dated December 20, 2010  
<sup>1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsoon is Section Head. Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*  
SAMPLE POINT : ริมรั้วด้านทิศตะวันตก\*\*  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn}$ #  
DETERMINATION METHOD : ISO 1996-1:2016##  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322751 : Class 2

SAMPLE NO. : 34782  
MEASURING DATE : 13-14/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	13-14/12/2023 ( $L_{eq}$ )	UNIT
10:00 - 11:00 <sup>3</sup>	59.8	dB(A)
11:00 - 12:00	59.1	dB(A)
12:00 - 13:00	58.8	dB(A)
13:00 - 14:00	60.4	dB(A)
14:00 - 15:00	59.8	dB(A)
15:00 - 16:00	59.5	dB(A)
16:00 - 17:00	60.4	dB(A)
17:00 - 18:00	60.7	dB(A)
18:00 - 19:00	60.6	dB(A)
19:00 - 20:00	61.8	dB(A)
20:00 - 21:00	60.1	dB(A)
21:00 - 22:00	59.3	dB(A)
22:00 - 23:00	59.1	dB(A)
23:00 - 00:00	58.9	dB(A)
00:00 - 01:00	58.5	dB(A)
01:00 - 02:00	58.6	dB(A)
02:00 - 03:00	58.6	dB(A)
03:00 - 04:00	58.8	dB(A)
04:00 - 05:00	59.5	dB(A)
05:00 - 06:00	60.6	dB(A)
06:00 - 07:00	61.7	dB(A)
07:00 - 08:00	62.6	dB(A)
08:00 - 09:00	59.9	dB(A)
09:00 - 10:00	60.0	dB(A)
$L_{eq}$ 24 hr.	60.0	dB(A)
$L_{dn}$ #	66.0	dB(A)
Standard	$70^{/1}, 70^{/2}$	dB(A)

**REMARK :** # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory  
## ISO 1996-1:2016, Notification of The National Environmental Board Volume 15 B.E. 2540 (1997) on General Noise Level Standards, Dated March 12, 1997,  
Notification of The Pollution Control Department on The Calculation of The Noise Level, Dated August 11, 1997,  
Notification of The Department of Industrial Works on Methods for Measuring Noise Annoyance, Noise Level 24-Hour Average and Maximum Noise Level  
From Factory B.E. 2553, Dated December 20, 2010  
<sup>/1</sup> Notification of The National Environmental Board Volume 15 B.E. 2540 (1997)  
<sup>/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)  
<sup>/3</sup> Start Time  
\* Parameter Outside The Scope of The Registration of The Department of Industrial Works.  
(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)  
\*\* These Data are Non Laboratory Data



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. LA66-R0754

Report No. R6607-2135

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 19316  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 13-14/07/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 16/07/2023  
S/N 00322748 : Class 2 REPORTED DATE : 19/07/2023

TIME \ DATE	13-14/07/2023 ( $L_{eq}$ )	UNIT
09:05 - 10:05 <sup>3</sup>	78.8	dB(A)
10:05 - 11:05	79.4	dB(A)
11:05 - 12:05	79.0	dB(A)
12:05 - 13:05	78.1	dB(A)
13:05 - 14:05	78.6	dB(A)
14:05 - 15:05	80.4	dB(A)
15:05 - 16:05	78.1	dB(A)
16:05 - 17:05	78.8	dB(A)
17:05 - 18:05	79.2	dB(A)
18:05 - 19:05	80.3	dB(A)
19:05 - 20:05	78.3	dB(A)
20:05 - 21:05	78.1	dB(A)
21:05 - 22:05	79.5	dB(A)
22:05 - 23:05	78.5	dB(A)
23:05 - 00:05	79.6	dB(A)
00:05 - 01:05	79.2	dB(A)
01:05 - 02:05	80.5	dB(A)
02:05 - 03:05	79.7	dB(A)
03:05 - 04:05	78.9	dB(A)
04:05 - 05:05	78.5	dB(A)
05:05 - 06:05	78.0	dB(A)
06:05 - 07:05	78.8	dB(A)
07:05 - 08:05	78.1	dB(A)
08:05 - 09:05	77.8	dB(A)
$L_{eq}$ 24 hr.	79.0	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>1/1</sup>	09:05 - 17:05 น. = 78    17:05 - 01:05 น. = 79    01:05 - 09:05 น. = 78	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>2/2</sup>	09:05 - 17:05 น. = 78    17:05 - 01:05 น. = 79    01:05 - 09:05 น. = 78	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1/1</sup> , 90 <sup>2/2</sup>	dB(A)

## REMARK :

<sup>1/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Measurement By Ms. Savita Kattunovarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4588

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 25751  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 17-18/08/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 18/08/2023  
S/N 00322748 : Class 2 REPORTED DATE : 22/08/2023

TIME \ DATE	17-18/08/2023 ( $L_{eq}$ )	UNIT
08:50 - 09:50 <sup>3</sup>	79.3	dB(A)
09:50 - 10:50	79.7	dB(A)
10:50 - 11:50	80.8	dB(A)
11:50 - 12:50	80.8	dB(A)
12:50 - 13:50	80.8	dB(A)
13:50 - 14:50	80.8	dB(A)
14:50 - 15:50	81.0	dB(A)
15:50 - 16:50	81.5	dB(A)
16:50 - 17:50	79.3	dB(A)
17:50 - 18:50	79.7	dB(A)
18:50 - 19:50	79.3	dB(A)
19:50 - 20:50	78.9	dB(A)
20:50 - 21:50	79.4	dB(A)
21:50 - 22:50	79.7	dB(A)
22:50 - 23:50	79.3	dB(A)
23:50 - 00:50	79.3	dB(A)
00:50 - 01:50	79.5	dB(A)
01:50 - 02:50	79.3	dB(A)
02:50 - 03:50	78.7	dB(A)
03:50 - 04:50	79.5	dB(A)
04:50 - 05:50	78.8	dB(A)
05:50 - 06:50	79.3	dB(A)
06:50 - 07:50	78.8	dB(A)
07:50 - 08:50	79.6	dB(A)
$L_{eq}$ 24 hr.	79.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#,1</sup>	08:50 - 16:50 น. = 80    16:50 - 00:50 น. = 79    00:50 - 08:50 น. = 79	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##,2</sup>	08:50 - 16:50 น. = 80    16:50 - 00:50 น. = 79    00:50 - 08:50 น. = 79	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

## REMARK :

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have to use Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement of Noise from Packaging)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1839

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 28718  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14-15/09/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 15/09/2023  
S/N 00322754 : Class 2 REPORTED DATE : 21/09/2023

TIME \ DATE	14-15/09/2023 ( $L_{eq}$ )	UNIT
09:05 - 10:05 <sup>/3</sup>	80.4	dB(A)
10:05 - 11:05	81.8	dB(A)
11:05 - 12:05	81.7	dB(A)
12:05 - 13:05	80.1	dB(A)
13:05 - 14:05	81.0	dB(A)
14:05 - 15:05	81.1	dB(A)
15:05 - 16:05	81.4	dB(A)
16:05 - 17:05	81.0	dB(A)
17:05 - 18:05	79.4	dB(A)
18:05 - 19:05	79.8	dB(A)
19:05 - 20:05	79.9	dB(A)
20:05 - 21:05	81.1	dB(A)
21:05 - 22:05	81.1	dB(A)
22:05 - 23:05	80.4	dB(A)
23:05 - 00:05	80.4	dB(A)
00:05 - 01:05	81.2	dB(A)
01:05 - 02:05	80.4	dB(A)
02:05 - 03:05	79.9	dB(A)
03:05 - 04:05	82.6	dB(A)
04:05 - 05:05	80.0	dB(A)
05:05 - 06:05	79.4	dB(A)
06:05 - 07:05	82.4	dB(A)
07:05 - 08:05	80.2	dB(A)
08:05 - 09:05	80.7	dB(A)
$L_{eq}$ 24 hr.	80.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*, /1</sup>	09:05 - 17:05 น. = 81    17:05 - 01:05 น. = 80    01:05 - 09:05 น. = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**, /2</sup>	09:05 - 17:05 น. = 81    17:05 - 01:05 น. = 80    01:05 - 09:05 น. = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Chanatpon Klansophon)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Melting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322754 : Class 2

SAMPLE NO. : 29864  
MEASURING DATE : 04-05/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	04-05/10/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	80.6	dB(A)
10:00 - 11:00	80.0	dB(A)
11:00 - 12:00	82.3	dB(A)
12:00 - 13:00	81.5	dB(A)
13:00 - 14:00	80.1	dB(A)
14:00 - 15:00	79.9	dB(A)
15:00 - 16:00	80.9	dB(A)
16:00 - 17:00	82.3	dB(A)
17:00 - 18:00	80.0	dB(A)
18:00 - 19:00	79.4	dB(A)
19:00 - 20:00	78.7	dB(A)
20:00 - 21:00	81.4	dB(A)
21:00 - 22:00	81.0	dB(A)
22:00 - 23:00	82.6	dB(A)
23:00 - 00:00	81.0	dB(A)
00:00 - 01:00	81.9	dB(A)
01:00 - 02:00	81.0	dB(A)
02:00 - 03:00	79.9	dB(A)
03:00 - 04:00	82.2	dB(A)
04:00 - 05:00	81.4	dB(A)
05:00 - 06:00	79.7	dB(A)
06:00 - 07:00	79.8	dB(A)
07:00 - 08:00	80.8	dB(A)
08:00 - 09:00	80.4	dB(A)
$L_{eq}$ 24 hr.	80.9	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	09:00 - 17:00 $L_{eq}$ = 81      17:00 - 01:00 $L_{eq}$ = 80      01:00 - 09:00 $L_{eq}$ = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	09:00 - 17:00 $L_{eq}$ = 81      17:00 - 01:00 $L_{eq}$ = 80      01:00 - 09:00 $L_{eq}$ = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> . 90 <sup>/2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Ms. Thanatporn Klinsoon is Section Head of Noise and Vibration and is Technical Management)

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Melting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322746 : Class 2

SAMPLE NO. : 32986  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>3</sup>	80.9	dB(A)
10:30 - 11:30	80.9	dB(A)
11:30 - 12:30	80.5	dB(A)
12:30 - 13:30	81.0	dB(A)
13:30 - 14:30	81.4	dB(A)
14:30 - 15:30	81.2	dB(A)
15:30 - 16:30	80.8	dB(A)
16:30 - 17:30	80.7	dB(A)
17:30 - 18:30	81.0	dB(A)
18:30 - 19:30	80.3	dB(A)
19:30 - 20:30	79.6	dB(A)
20:30 - 21:30	80.4	dB(A)
21:30 - 22:30	80.8	dB(A)
22:30 - 23:30	80.8	dB(A)
23:30 - 00:30	80.4	dB(A)
00:30 - 01:30	81.1	dB(A)
01:30 - 02:30	80.4	dB(A)
02:30 - 03:30	79.8	dB(A)
03:30 - 04:30	80.1	dB(A)
04:30 - 05:30	80.7	dB(A)
05:30 - 06:30	80.4	dB(A)
06:30 - 07:30	80.0	dB(A)
07:30 - 08:30	80.9	dB(A)
08:30 - 09:30	81.4	dB(A)
$L_{eq}$ 24 hr.	80.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:30 - 17:30 $\mu$ = 80      17:30 - 01:30 $\mu$ = 80      01:30 - 09:30 $\mu$ = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:30 - 17:30 $\mu$ = 80      17:30 - 01:30 $\mu$ = 80      01:30 - 09:30 $\mu$ = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Melting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322751 : Class 2

SAMPLE NO. : 34778  
MEASURING DATE : 12-13/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	12-13/12/2023 ( $L_{eq}$ )	UNIT
10:10 - 11:10 <sup>3</sup>	78.6	dB(A)
11:10 - 12:10	80.5	dB(A)
12:10 - 13:10	79.8	dB(A)
13:10 - 14:10	80.6	dB(A)
14:10 - 15:10	79.2	dB(A)
15:10 - 16:10	81.1	dB(A)
16:10 - 17:10	82.5	dB(A)
17:10 - 18:10	80.6	dB(A)
18:10 - 19:10	78.9	dB(A)
19:10 - 20:10	78.5	dB(A)
20:10 - 21:10	77.4	dB(A)
21:10 - 22:10	77.5	dB(A)
22:10 - 23:10	78.5	dB(A)
23:10 - 00:10	78.2	dB(A)
00:10 - 01:10	80.6	dB(A)
01:10 - 02:10	78.3	dB(A)
02:10 - 03:10	77.8	dB(A)
03:10 - 04:10	78.1	dB(A)
04:10 - 05:10	81.2	dB(A)
05:10 - 06:10	79.6	dB(A)
06:10 - 07:10	80.8	dB(A)
07:10 - 08:10	78.3	dB(A)
08:10 - 09:10	79.0	dB(A)
09:10 - 10:10	78.2	dB(A)
$L_{eq}$ 24 hr.	79.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	10:10 - 18:10 $\mu$ . = 80      18:10 - 02:10 $\mu$ . = 78      02:10 - 10:10 $\mu$ . = 79	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	10:10 - 18:10 $\mu$ . = 80      18:10 - 02:10 $\mu$ . = 78      02:10 - 10:10 $\mu$ . = 79	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

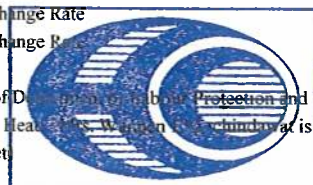
<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head of Noise, Vibration and Shock Management)  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

Report No. R6607-2134

## TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungsukla
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.		A. Sriracha, Chonburi 20230
SAMPLE POINT	: Casting		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 19315
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 13-14/07/2023
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/07/2023
	S/N 00222594 : Class 2	REPORTED DATE	: 19/07/2023

TIME \ DATE	13-14/07/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>/3</sup>	80.1	dB(A)
10:10 - 11:10	81.6	dB(A)
11:10 - 12:10	79.6	dB(A)
12:10 - 13:10	79.2	dB(A)
13:10 - 14:10	79.8	dB(A)
14:10 - 15:10	82.6	dB(A)
15:10 - 16:10	79.3	dB(A)
16:10 - 17:10	79.5	dB(A)
17:10 - 18:10	81.1	dB(A)
18:10 - 19:10	80.4	dB(A)
19:10 - 20:10	79.5	dB(A)
20:10 - 21:10	79.5	dB(A)
21:10 - 22:10	80.8	dB(A)
22:10 - 23:10	78.9	dB(A)
23:10 - 00:10	79.6	dB(A)
00:10 - 01:10	81.8	dB(A)
01:10 - 02:10	80.1	dB(A)
02:10 - 03:10	79.7	dB(A)
03:10 - 04:10	81.4	dB(A)
04:10 - 05:10	79.7	dB(A)
05:10 - 06:10	79.4	dB(A)
06:10 - 07:10	81.5	dB(A)
07:10 - 08:10	80.3	dB(A)
08:10 - 09:10	78.8	dB(A)
$L_{eq}$ 24 hr.	80.3	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:10 - 17:10 น. = 80    17:10 - 01:10 น. = 80    01:10 - 09:10 น. = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:10 - 17:10 น. = 80    17:10 - 01:10 น. = 80    01:10 - 09:10 น. = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time<sup>#</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>##</sup> Based on Criteria 90 dB(A); 5 dB Exchange Rate<sup>\*</sup> Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Measurement By Ms. Savita Kitiyoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0840

Report No. R6608-4586

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 25749  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 16-17/08/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 18/08/2023  
S/N 01209914 : Class 2 REPORTED DATE : 22/08/2023

TIME \ DATE	16-17/08/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	83.6	dB(A)
10:10 - 11:10	82.0	dB(A)
11:10 - 12:10	80.6	dB(A)
12:10 - 13:10	81.6	dB(A)
13:10 - 14:10	83.2	dB(A)
14:10 - 15:10	82.3	dB(A)
15:10 - 16:10	81.5	dB(A)
16:10 - 17:10	81.5	dB(A)
17:10 - 18:10	83.1	dB(A)
18:10 - 19:10	82.6	dB(A)
19:10 - 20:10	81.7	dB(A)
20:10 - 21:10	81.3	dB(A)
21:10 - 22:10	81.9	dB(A)
22:10 - 23:10	81.6	dB(A)
23:10 - 00:10	81.7	dB(A)
00:10 - 01:10	81.0	dB(A)
01:10 - 02:10	81.8	dB(A)
02:10 - 03:10	81.6	dB(A)
03:10 - 04:10	81.7	dB(A)
04:10 - 05:10	81.6	dB(A)
05:10 - 06:10	81.2	dB(A)
06:10 - 07:10	81.9	dB(A)
07:10 - 08:10	82.1	dB(A)
08:10 - 09:10	83.4	dB(A)
$L_{eq}$ 24 hr.	82.0	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:10 - 17:10 น. = 82    17:10 - 01:10 น. = 81    01:10 - 09:10 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#,2</sup>	09:10 - 17:10 น. = 82    17:10 - 01:10 น. = 81    01:10 - 09:10 น. = 81	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

## REMARK :

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 3 dB Exchange Rate

\* Parameter have to use Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement of Noise at Work)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1840

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 28719  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14-15/09/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 15/09/2023  
S/N 00322757 : Class 2 REPORTED DATE : 21/09/2023

TIME \ DATE	14-15/09/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>/3</sup>	81.3	dB(A)
10:10 - 11:10	83.7	dB(A)
11:10 - 12:10	81.7	dB(A)
12:10 - 13:10	80.1	dB(A)
13:10 - 14:10	82.8	dB(A)
14:10 - 15:10	83.6	dB(A)
15:10 - 16:10	83.1	dB(A)
16:10 - 17:10	82.4	dB(A)
17:10 - 18:10	80.7	dB(A)
18:10 - 19:10	81.9	dB(A)
19:10 - 20:10	80.7	dB(A)
20:10 - 21:10	81.1	dB(A)
21:10 - 22:10	81.2	dB(A)
22:10 - 23:10	81.7	dB(A)
23:10 - 00:10	83.1	dB(A)
00:10 - 01:10	80.8	dB(A)
01:10 - 02:10	80.6	dB(A)
02:10 - 03:10	81.5	dB(A)
03:10 - 04:10	83.7	dB(A)
04:10 - 05:10	80.4	dB(A)
05:10 - 06:10	80.2	dB(A)
06:10 - 07:10	83.7	dB(A)
07:10 - 08:10	80.9	dB(A)
08:10 - 09:10	82.1	dB(A)
$L_{eq}$ 24 hr.	82.0	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:10 - 17:10 น. = 82    17:10 - 01:10 น. = 81    01:10 - 09:10 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:10 - 17:10 น. = 82    17:10 - 01:10 น. = 81    01:10 - 09:10 น. = 81	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time<sup>#</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>##</sup> Based on Criteria 90 dB(A); 5 dB Exchange Rate\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Thanatporn Khasepon)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Casting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322757 : Class 2

SAMPLE NO. : 29865  
MEASURING DATE : 04-05/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	04-05/10/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>3</sup>	81.6	dB(A)
10:10 - 11:10	81.7	dB(A)
11:10 - 12:10	83.7	dB(A)
12:10 - 13:10	81.9	dB(A)
13:10 - 14:10	81.4	dB(A)
14:10 - 15:10	81.9	dB(A)
15:10 - 16:10	82.1	dB(A)
16:10 - 17:10	82.4	dB(A)
17:10 - 18:10	81.8	dB(A)
18:10 - 19:10	81.3	dB(A)
19:10 - 20:10	81.1	dB(A)
20:10 - 21:10	83.3	dB(A)
21:10 - 22:10	82.2	dB(A)
22:10 - 23:10	83.0	dB(A)
23:10 - 00:10	82.7	dB(A)
00:10 - 01:10	82.3	dB(A)
01:10 - 02:10	82.2	dB(A)
02:10 - 03:10	81.1	dB(A)
03:10 - 04:10	83.3	dB(A)
04:10 - 05:10	82.5	dB(A)
05:10 - 06:10	81.2	dB(A)
06:10 - 07:10	82.2	dB(A)
07:10 - 08:10	83.1	dB(A)
08:10 - 09:10	83.4	dB(A)
$L_{eq}$ 24 hr.	82.3	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:10 - 17:10 $\mu$ . = 82      17:10 - 01:10 $\mu$ . = 82      01:10 - 09:10 $\mu$ . = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:10 - 17:10 $\mu$ . = 82      17:10 - 01:10 $\mu$ . = 82      01:10 - 09:10 $\mu$ . = 82	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

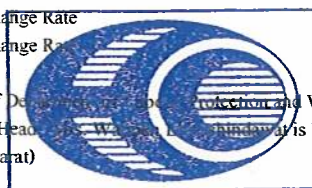
\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Ms. Thanatporn Klinsoopon is Section Head of Department of Labour Protection and Welfare Technical Management)

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Casting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter :  
S/N 00322751 : Class 2

SAMPLE NO. : 32985  
MEASURING DATE : 08-09/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	08-09/11/2023 ( $L_{eq}$ )	UNIT
09:50 - 10:50 <sup>3</sup>	80.9	dB(A)
10:50 - 11:50	81.2	dB(A)
11:50 - 12:50	82.7	dB(A)
12:50 - 13:50	80.3	dB(A)
13:50 - 14:50	80.6	dB(A)
14:50 - 15:50	82.6	dB(A)
15:50 - 16:50	79.8	dB(A)
16:50 - 17:50	79.7	dB(A)
17:50 - 18:50	82.1	dB(A)
18:50 - 19:50	81.4	dB(A)
19:50 - 20:50	79.8	dB(A)
20:50 - 21:50	80.3	dB(A)
21:50 - 22:50	81.2	dB(A)
22:50 - 23:50	82.9	dB(A)
23:50 - 00:50	80.4	dB(A)
00:50 - 01:50	82.5	dB(A)
01:50 - 02:50	81.6	dB(A)
02:50 - 03:50	80.4	dB(A)
03:50 - 04:50	79.9	dB(A)
04:50 - 05:50	83.9	dB(A)
05:50 - 06:50	79.8	dB(A)
06:50 - 07:50	79.2	dB(A)
07:50 - 08:50	80.1	dB(A)
08:50 - 09:50	81.6	dB(A)
$L_{eq}$ 24 hr.	81.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:50 - 17:50 $\mu$ = 81      17:50 - 01:50 $\mu$ = 81      01:50 - 09:50 $\mu$ = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,2</sup>	09:50 - 17:50 $\mu$ = 81      17:50 - 01:50 $\mu$ = 81      01:50 - 09:50 $\mu$ = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010. Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

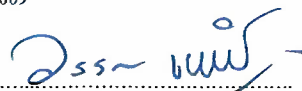
<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A): 3 dB Exchange Rate  
\*\* Based on Criteria 90 dB(A): 5 dB Exchange Rate  
\*\*\* These Data are Non Laboratory Data  
\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanaporn Klinson is Section Head / Mr. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : Casting\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322746 : Class 2

SAMPLE NO. : 34777  
MEASURING DATE : 12-13/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	12-13/12/2023 ( $L_{eq}$ )	UNIT
10:20 - 11:20 <sup>13</sup>	84.9	dB(A)
11:20 - 12:20	82.9	dB(A)
12:20 - 13:20	83.7	dB(A)
13:20 - 14:20	85.0	dB(A)
14:20 - 15:20	87.1	dB(A)
15:20 - 16:20	91.1	dB(A)
16:20 - 17:20	83.9	dB(A)
17:20 - 18:20	83.9	dB(A)
18:20 - 19:20	82.4	dB(A)
19:20 - 20:20	80.4	dB(A)
20:20 - 21:20	83.2	dB(A)
21:20 - 22:20	84.5	dB(A)
22:20 - 23:20	82.8	dB(A)
23:20 - 00:20	83.8	dB(A)
00:20 - 01:20	83.3	dB(A)
01:20 - 02:20	83.0	dB(A)
02:20 - 03:20	81.4	dB(A)
03:20 - 04:20	85.1	dB(A)
04:20 - 05:20	83.8	dB(A)
05:20 - 06:20	83.4	dB(A)
06:20 - 07:20	90.3	dB(A)
07:20 - 08:20	83.0	dB(A)
08:20 - 09:20	81.9	dB(A)
09:20 - 10:20	82.3	dB(A)
$L_{eq}$ 24 hr.	84.9	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	10:20 - 18:20 u. = 86      18:20 - 02:20 u. = 83      02:20 - 10:20 u. = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	10:20 - 18:20 u. = 85      18:20 - 02:20 u. = 83      02:20 - 10:20 u. = 84	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoopon is Section Head / Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. LA66-R0754

Report No. R6607-2137

## TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungsukla
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.		A. Sriracha, Chonburi 20230
SAMPLE POINT	: RM01		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 19318
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 15-16/07/2023
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/07/2023
	S/N 00322747 : Class 2	REPORTED DATE	: 19/07/2023

TIME \ DATE	15-16/07/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	83.3	dB(A)
10:00 - 11:00	82.3	dB(A)
11:00 - 12:00	82.0	dB(A)
12:00 - 13:00	81.4	dB(A)
13:00 - 14:00	81.7	dB(A)
14:00 - 15:00	82.6	dB(A)
15:00 - 16:00	83.4	dB(A)
16:00 - 17:00	83.1	dB(A)
17:00 - 18:00	83.4	dB(A)
18:00 - 19:00	82.4	dB(A)
19:00 - 20:00	83.0	dB(A)
20:00 - 21:00	83.2	dB(A)
21:00 - 22:00	82.2	dB(A)
22:00 - 23:00	81.8	dB(A)
23:00 - 00:00	83.1	dB(A)
00:00 - 01:00	83.9	dB(A)
01:00 - 02:00	83.3	dB(A)
02:00 - 03:00	83.1	dB(A)
03:00 - 04:00	82.6	dB(A)
04:00 - 05:00	82.3	dB(A)
05:00 - 06:00	82.2	dB(A)
06:00 - 07:00	81.1	dB(A)
07:00 - 08:00	81.8	dB(A)
08:00 - 09:00	82.3	dB(A)
$L_{eq}$ 24 hr.	82.6	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:00 - 17:00 น. = 82    17:00 - 01:00 น. = 82    01:00 - 09:00 น. = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:00 - 17:00 น. = 82    17:00 - 01:00 น. = 82    01:00 - 09:00 น. = 82	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

## REMARK :

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0840

Report No. R6608-4587

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : RM01  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 25750  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 17-18/08/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 18/08/2023  
S/N 00322746 : Class 2 REPORTED DATE : 22/08/2023

TIME \ DATE	17-18/08/2023 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>/3</sup>	82.0	dB(A)
10:10 - 11:10	84.2	dB(A)
11:10 - 12:10	83.8	dB(A)
12:10 - 13:10	83.4	dB(A)
13:10 - 14:10	82.9	dB(A)
14:10 - 15:10	83.5	dB(A)
15:10 - 16:10	82.9	dB(A)
16:10 - 17:10	81.2	dB(A)
17:10 - 18:10	82.3	dB(A)
18:10 - 19:10	82.8	dB(A)
19:10 - 20:10	82.4	dB(A)
20:10 - 21:10	83.4	dB(A)
21:10 - 22:10	83.1	dB(A)
22:10 - 23:10	81.6	dB(A)
23:10 - 00:10	82.7	dB(A)
00:10 - 01:10	82.3	dB(A)
01:10 - 02:10	82.5	dB(A)
02:10 - 03:10	82.2	dB(A)
03:10 - 04:10	82.5	dB(A)
04:10 - 05:10	82.7	dB(A)
05:10 - 06:10	82.0	dB(A)
06:10 - 07:10	80.0	dB(A)
07:10 - 08:10	78.4	dB(A)
08:10 - 09:10	78.8	dB(A)
$L_{eq}$ 24 hr.	82.4	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*, /1</sup>	09:10 - 17:10 น. = 83    17:10 - 01:10 น. = 82    01:10 - 09:10 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /2</sup>	09:10 - 17:10 น. = 83    17:10 - 01:10 น. = 82    01:10 - 09:10 น. = 81	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement : Mr. Pichai S. Saget)

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

 บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1832

## TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungskula
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.		A. Sriracha, Chonburi 20230
SAMPLE POINT	: RM01		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 28711
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 13-14/09/2023
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 15/09/2023
	S/N 00322757 : Class 2	REPORTED DATE	: 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
08:50 - 09:50 <sup>/3</sup>	84.1	dB(A)
09:50 - 10:50	82.9	dB(A)
10:50 - 11:50	83.2	dB(A)
11:50 - 12:50	83.8	dB(A)
12:50 - 13:50	83.7	dB(A)
13:50 - 14:50	83.2	dB(A)
14:50 - 15:50	83.4	dB(A)
15:50 - 16:50	83.1	dB(A)
16:50 - 17:50	83.3	dB(A)
17:50 - 18:50	82.9	dB(A)
18:50 - 19:50	83.3	dB(A)
19:50 - 20:50	83.7	dB(A)
20:50 - 21:50	82.9	dB(A)
21:50 - 22:50	82.6	dB(A)
22:50 - 23:50	83.3	dB(A)
23:50 - 00:50	83.3	dB(A)
00:50 - 01:50	84.3	dB(A)
01:50 - 02:50	84.6	dB(A)
02:50 - 03:50	83.9	dB(A)
03:50 - 04:50	83.4	dB(A)
04:50 - 05:50	82.8	dB(A)
05:50 - 06:50	82.6	dB(A)
06:50 - 07:50	82.4	dB(A)
07:50 - 08:50	81.5	dB(A)
$L_{eq}$ 24 hr.	83.3	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*, /1</sup>	08:50 - 16:50 น. = 83    16:50 - 00:50 น. = 83    00:50 - 08:50 น. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	08:50 - 16:50 น. = 83    16:50 - 00:50 น. = 83    00:50 - 08:50 น. = 83	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time<sup>#</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>##</sup> Based on Criteria 90 dB(A); 5 dB Exchange Rate\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Thanatporn Khunopon)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : RM01\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322757 : Class 2

SAMPLE NO. : 29868  
MEASURING DATE : 05-06/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	05-06/10/2023 ( $L_{eq}$ )	UNIT
09:20 - 10:20 <sup>3</sup>	83.6	dB(A)
10:20 - 11:20	83.9	dB(A)
11:20 - 12:20	83.5	dB(A)
12:20 - 13:20	83.9	dB(A)
13:20 - 14:20	83.7	dB(A)
14:20 - 15:20	83.4	dB(A)
15:20 - 16:20	83.7	dB(A)
16:20 - 17:20	83.7	dB(A)
17:20 - 18:20	83.3	dB(A)
18:20 - 19:20	83.5	dB(A)
19:20 - 20:20	83.2	dB(A)
20:20 - 21:20	83.7	dB(A)
21:20 - 22:20	84.0	dB(A)
22:20 - 23:20	83.4	dB(A)
23:20 - 00:20	82.4	dB(A)
00:20 - 01:20	83.5	dB(A)
01:20 - 02:20	83.7	dB(A)
02:20 - 03:20	84.1	dB(A)
03:20 - 04:20	83.9	dB(A)
04:20 - 05:20	83.4	dB(A)
05:20 - 06:20	83.6	dB(A)
06:20 - 07:20	83.7	dB(A)
07:20 - 08:20	83.8	dB(A)
08:20 - 09:20	83.6	dB(A)
$L_{eq}$ 24 hr.	83.6	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:20 - 17:20 u. = 83      17:20 - 01:20 u. = 83      01:20 - 09:20 u. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:20 - 17:20 u. = 83      17:20 - 01:20 u. = 83      01:20 - 09:20 u. = 83	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

REMARK : ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of The Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head of the Department of Labour Protection and Welfare Technical Management)  
(Measurement By Ms. Savita Kittinoavanit)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : RM01\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter :  
S/N 00322746 : Class 2

SAMPLE NO. : 32987  
MEASURING DATE : 09-10/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	09-10/11/2023 ( $L_{eq}$ )	UNIT
09:40 - 10:40 <sup>3</sup>	82.6	dB(A)
10:40 - 11:40	83.2	dB(A)
11:40 - 12:40	83.8	dB(A)
12:40 - 13:40	84.5	dB(A)
13:40 - 14:40	84.5	dB(A)
14:40 - 15:40	83.7	dB(A)
15:40 - 16:40	84.3	dB(A)
16:40 - 17:40	83.9	dB(A)
17:40 - 18:40	84.2	dB(A)
18:40 - 19:40	83.9	dB(A)
19:40 - 20:40	83.2	dB(A)
20:40 - 21:40	84.4	dB(A)
21:40 - 22:40	84.0	dB(A)
22:40 - 23:40	83.9	dB(A)
23:40 - 00:40	83.5	dB(A)
00:40 - 01:40	84.0	dB(A)
01:40 - 02:40	82.6	dB(A)
02:40 - 03:40	82.4	dB(A)
03:40 - 04:40	81.9	dB(A)
04:40 - 05:40	82.7	dB(A)
05:40 - 06:40	84.5	dB(A)
06:40 - 07:40	83.6	dB(A)
07:40 - 08:40	81.6	dB(A)
08:40 - 09:40	81.3	dB(A)
$L_{eq}$ 24 hr.	83.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:40 - 17:40 $L_{eq}$ = 83      17:40 - 01:40 $L_{eq}$ = 83      01:40 - 09:40 $L_{eq}$ = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,2</sup>	09:40 - 17:40 $L_{eq}$ = 83      17:40 - 01:40 $L_{eq}$ = 83      01:40 - 09:40 $L_{eq}$ = 82	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanaporn Klinsoon is Section Head of Noise Assessment Unit is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : RM01\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322746 : Class 2

SAMPLE NO. : 34784  
MEASURING DATE : 15-16/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	15-16/12/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	84.4	dB(A)
10:00 - 11:00	83.8	dB(A)
11:00 - 12:00	83.4	dB(A)
12:00 - 13:00	83.6	dB(A)
13:00 - 14:00	82.0	dB(A)
14:00 - 15:00	82.4	dB(A)
15:00 - 16:00	83.0	dB(A)
16:00 - 17:00	83.2	dB(A)
17:00 - 18:00	83.6	dB(A)
18:00 - 19:00	83.5	dB(A)
19:00 - 20:00	82.9	dB(A)
20:00 - 21:00	84.1	dB(A)
21:00 - 22:00	84.6	dB(A)
22:00 - 23:00	84.3	dB(A)
23:00 - 00:00	84.1	dB(A)
00:00 - 01:00	85.0	dB(A)
01:00 - 02:00	85.1	dB(A)
02:00 - 03:00	83.7	dB(A)
03:00 - 04:00	82.4	dB(A)
04:00 - 05:00	83.3	dB(A)
05:00 - 06:00	84.5	dB(A)
06:00 - 07:00	84.4	dB(A)
07:00 - 08:00	84.3	dB(A)
08:00 - 09:00	84.5	dB(A)
$L_{eq}$ 24 hr.	83.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	09:00 - 17:00 $\mu$ . = 83      17:00 - 01:00 $\mu$ . = 84      01:00 - 09:00 $\mu$ . = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	09:00 - 17:00 $\mu$ . = 83      17:00 - 01:00 $\mu$ . = 84      01:00 - 09:00 $\mu$ . = 84	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate  
\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate  
\*\*\* These Data are Non Laboratory Data  
\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. LA66-R0840

Report No. R6608-4589

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungskula  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : BK11  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 25752  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 17-18/08/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 18/08/2023  
S/N 00322755 : Class 2 REPORTED DATE : 22/08/2023

TIME \ DATE	17-18/08/2023 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>3</sup>	82.3	dB(A)
10:30 - 11:30	80.3	dB(A)
11:30 - 12:30	81.8	dB(A)
12:30 - 13:30	84.5	dB(A)
13:30 - 14:30	83.4	dB(A)
14:30 - 15:30	83.3	dB(A)
15:30 - 16:30	76.5	dB(A)
16:30 - 17:30	76.4	dB(A)
17:30 - 18:30	71.5	dB(A)
18:30 - 19:30	65.9	dB(A)
19:30 - 20:30	80.4	dB(A)
20:30 - 21:30	84.8	dB(A)
21:30 - 22:30	82.3	dB(A)
22:30 - 23:30	85.0	dB(A)
23:30 - 00:30	83.7	dB(A)
00:30 - 01:30	85.0	dB(A)
01:30 - 02:30	83.5	dB(A)
02:30 - 03:30	81.5	dB(A)
03:30 - 04:30	76.4	dB(A)
04:30 - 05:30	75.9	dB(A)
05:30 - 06:30	80.8	dB(A)
06:30 - 07:30	76.6	dB(A)
07:30 - 08:30	75.5	dB(A)
08:30 - 09:30	75.4	dB(A)
$L_{eq}$ 24 hr.	81.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#,1</sup>	09:30 - 17:30 น. = 81    17:30 - 01:30 น. = 82    01:30 - 09:30 น. = 79	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##,2</sup>	09:30 - 17:30 น. = 81    17:30 - 01:30 น. = 81    01:30 - 09:30 น. = 78	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

## REMARK :

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement : ยานยนต์ - ยานยนต์)

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

COPY

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA66-R0876

Report No. R6608-5673

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : BK11  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 26843  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 28-29/08/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 29/08/2023  
S/N 00322747 : Class 2 REPORTED DATE : 30/08/2023

TIME \ DATE	28-29/08/2023 ( $L_{eq}$ )	UNIT
09:50 - 10:50 <sup>3</sup>	83.3	dB(A)
10:50 - 11:50	83.2	dB(A)
11:50 - 12:50	82.1	dB(A)
12:50 - 13:50	84.1	dB(A)
13:50 - 14:50	84.1	dB(A)
14:50 - 15:50	83.5	dB(A)
15:50 - 16:50	83.4	dB(A)
16:50 - 17:50	77.6	dB(A)
17:50 - 18:50	76.5	dB(A)
18:50 - 19:50	76.3	dB(A)
19:50 - 20:50	76.5	dB(A)
20:50 - 21:50	77.1	dB(A)
21:50 - 22:50	77.6	dB(A)
22:50 - 23:50	84.8	dB(A)
23:50 - 00:50	83.6	dB(A)
00:50 - 01:50	85.3	dB(A)
01:50 - 02:50	85.0	dB(A)
02:50 - 03:50	82.9	dB(A)
03:50 - 04:50	75.3	dB(A)
04:50 - 05:50	79.5	dB(A)
05:50 - 06:50	82.2	dB(A)
06:50 - 07:50	75.8	dB(A)
07:50 - 08:50	82.9	dB(A)
08:50 - 09:50	84.2	dB(A)
$L_{eq}$ 24 hr.	82.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:50 - 17:50 น. = 83    17:50 - 01:50 น. = 81    01:50 - 09:50 น. = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:50 - 17:50 น. = 82    17:50 - 01:50 น. = 80    01:50 - 09:50 น. = 81	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time<sup>#</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>##</sup> Based on Criteria 90 dB(A); 3 dB Exchange Rate\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Pornnapa Phongpila)

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

30/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. LA66-R0963

Report No. R6609-1834

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
 SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
 SAMPLE POINT : BK11  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 28713  
 DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 13-14/09/2023  
 INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 15/09/2023  
 S/N 00322747 : Class 2 REPORTED DATE : 21/09/2023

TIME \ DATE	13-14/09/2023 ( $L_{eq}$ )	UNIT
09:50 - 10:50 <sup>1/3</sup>	82.3	dB(A)
10:50 - 11:50	81.3	dB(A)
11:50 - 12:50	78.0	dB(A)
12:50 - 13:50	83.7	dB(A)
13:50 - 14:50	83.2	dB(A)
14:50 - 15:50	83.0	dB(A)
15:50 - 16:50	82.4	dB(A)
16:50 - 17:50	80.9	dB(A)
17:50 - 18:50	82.3	dB(A)
18:50 - 19:50	80.0	dB(A)
19:50 - 20:50	77.7	dB(A)
20:50 - 21:50	83.7	dB(A)
21:50 - 22:50	83.3	dB(A)
22:50 - 23:50	81.8	dB(A)
23:50 - 00:50	83.2	dB(A)
00:50 - 01:50	82.3	dB(A)
01:50 - 02:50	77.3	dB(A)
02:50 - 03:50	82.7	dB(A)
03:50 - 04:50	73.8	dB(A)
04:50 - 05:50	79.2	dB(A)
05:50 - 06:50	81.2	dB(A)
06:50 - 07:50	80.7	dB(A)
07:50 - 08:50	80.1	dB(A)
08:50 - 09:50	85.0	dB(A)
$L_{eq}$ 24 hr.	81.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1/</sup>	09:50 - 17:50 น. = 82    17:50 - 01:50 น. = 82    01:50 - 09:50 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2/</sup>	09:50 - 17:50 น. = 82    17:50 - 01:50 น. = 82    01:50 - 09:50 น. = 80	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1/</sup> , 90 <sup>2/</sup>	dB(A)

## REMARK :

<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2/</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3/</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
 (Measurement By: Ms. Thanaporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
 (MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungskula A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : PK11\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter :  
S/N 00322751 : Class 2

SAMPLE NO. : 29867  
MEASURING DATE : 04-05/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	04-05/10/2023 ( $L_{eq}$ )	UNIT
09:35 - 10:35 <sup>3</sup>	87.3	dB(A)
10:35 - 11:35	87.3	dB(A)
11:35 - 12:35	77.3	dB(A)
12:35 - 13:35	86.1	dB(A)
13:35 - 14:35	86.5	dB(A)
14:35 - 15:35	87.9	dB(A)
15:35 - 16:35	86.9	dB(A)
16:35 - 17:35	83.5	dB(A)
17:35 - 18:35	85.3	dB(A)
18:35 - 19:35	79.3	dB(A)
19:35 - 20:35	85.1	dB(A)
20:35 - 21:35	88.5	dB(A)
21:35 - 22:35	88.4	dB(A)
22:35 - 23:35	88.9	dB(A)
23:35 - 00:35	87.3	dB(A)
00:35 - 01:35	88.7	dB(A)
01:35 - 02:35	87.1	dB(A)
02:35 - 03:35	78.3	dB(A)
03:35 - 04:35	75.8	dB(A)
04:35 - 05:35	75.8	dB(A)
05:35 - 06:35	80.2	dB(A)
06:35 - 07:35	78.8	dB(A)
07:35 - 08:35	85.6	dB(A)
08:35 - 09:35	87.4	dB(A)
$L_{eq}$ 24 hr.	85.9	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:35 - 17:35 น. = 86      17:35 - 01:35 น. = 87      01:35 - 09:35 น. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:35 - 17:35 น. = 85      17:35 - 01:35 น. = 86      01:35 - 09:35 น. = 82	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010. Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003. Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

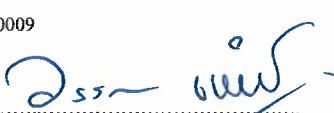
<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate  
\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate  
\*\*\* These Data are Non Laboratory Data  
\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoopon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : BK06\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter :  
S/N 00322753 : Class 2

SAMPLE NO. : 32992  
MEASURING DATE : 13-14/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	13-14/11/2023 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	84.3	dB(A)
10:00 - 11:00	84.6	dB(A)
11:00 - 12:00	79.7	dB(A)
12:00 - 13:00	83.2	dB(A)
13:00 - 14:00	84.2	dB(A)
14:00 - 15:00	83.3	dB(A)
15:00 - 16:00	82.9	dB(A)
16:00 - 17:00	76.6	dB(A)
17:00 - 18:00	76.4	dB(A)
18:00 - 19:00	77.1	dB(A)
19:00 - 20:00	75.3	dB(A)
20:00 - 21:00	85.2	dB(A)
21:00 - 22:00	86.1	dB(A)
22:00 - 23:00	86.5	dB(A)
23:00 - 00:00	86.6	dB(A)
00:00 - 01:00	86.5	dB(A)
01:00 - 02:00	86.1	dB(A)
02:00 - 03:00	84.4	dB(A)
03:00 - 04:00	81.2	dB(A)
04:00 - 05:00	77.7	dB(A)
05:00 - 06:00	83.2	dB(A)
06:00 - 07:00	83.2	dB(A)
07:00 - 08:00	78.3	dB(A)
08:00 - 09:00	82.5	dB(A)
$L_{eq}$ 24 hr.	83.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:00 - 17:00 $\mu$ = 82      17:00 - 01:00 $\mu$ = 84      01:00 - 09:00 $\mu$ = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,2</sup>	09:00 - 17:00 $\mu$ = 82      17:00 - 01:00 $\mu$ = 83      01:00 - 09:00 $\mu$ = 82	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> . 90 <sup>2</sup>	dB(A)

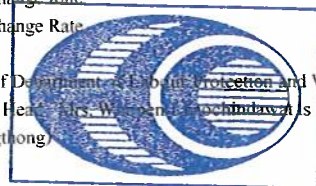
**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment. Dated November 6, 2003. Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day. Dated December 13, 2017. Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate  
\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate  
\*\*\* These Data are Non Laboratory Data  
\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : BK11\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322746 : Class 2

SAMPLE NO. : 34783  
MEASURING DATE : 13-14/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	13-14/12/2023 ( $L_{eq}$ )	UNIT
10:10 - 11:10 <sup>3</sup>	80.5	dB(A)
11:10 - 12:10	75.0	dB(A)
12:10 - 13:10	76.7	dB(A)
13:10 - 14:10	83.1	dB(A)
14:10 - 15:10	83.9	dB(A)
15:10 - 16:10	83.9	dB(A)
16:10 - 17:10	83.5	dB(A)
17:10 - 18:10	83.4	dB(A)
18:10 - 19:10	82.3	dB(A)
19:10 - 20:10	78.8	dB(A)
20:10 - 21:10	84.7	dB(A)
21:10 - 22:10	84.7	dB(A)
22:10 - 23:10	84.2	dB(A)
23:10 - 00:10	84.7	dB(A)
00:10 - 01:10	84.8	dB(A)
01:10 - 02:10	83.0	dB(A)
02:10 - 03:10	81.1	dB(A)
03:10 - 04:10	74.3	dB(A)
04:10 - 05:10	71.2	dB(A)
05:10 - 06:10	79.1	dB(A)
06:10 - 07:10	75.3	dB(A)
07:10 - 08:10	74.2	dB(A)
08:10 - 09:10	84.1	dB(A)
09:10 - 10:10	83.8	dB(A)
$L_{eq}$ 24 hr.	82.3	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	10:10 - 18:10 $\mu$ . = 82      18:10 - 02:10 $\mu$ . = 83      02:10 - 10:10 $\mu$ . = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	10:10 - 18:10 $\mu$ . = 81      18:10 - 02:10 $\mu$ . = 83      02:10 - 10:10 $\mu$ . = 79	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018  
/1 Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
(Published in the Government Gazette on January 26, 2018)  
/2 Notification of The Ministry of Industry B.E. 2546 (2003)  
\* Based on Criteria 85 dB(A); 3 dB Exchange Rate  
\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate  
\*\*\* These Data are Non Laboratory Data  
\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head of Noise, Vibration, and Shock Technical Management)  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(MRS. WANPEN LHAOCHINDAWAT)  
20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

Report No. R6607-2133

## TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungsukla
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.		A. Sriracha, Chonburi 20230
SAMPLE POINT	: PK06		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 19314
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 12-13/07/2023
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/07/2023
	S/N 00322747 : Class 2	REPORTED DATE	: 19/07/2023

TIME \ DATE	12-13/07/2023 ( $L_{eq}$ )	UNIT
08:40 - 09:40 <sup>/3</sup>	80.8	dB(A)
09:40 - 10:40	81.1	dB(A)
10:40 - 11:40	77.5	dB(A)
11:40 - 12:40	80.4	dB(A)
12:40 - 13:40	80.7	dB(A)
13:40 - 14:40	80.9	dB(A)
14:40 - 15:40	81.1	dB(A)
15:40 - 16:40	76.8	dB(A)
16:40 - 17:40	77.6	dB(A)
17:40 - 18:40	80.5	dB(A)
18:40 - 19:40	81.6	dB(A)
19:40 - 20:40	78.7	dB(A)
20:40 - 21:40	80.9	dB(A)
21:40 - 22:40	81.7	dB(A)
22:40 - 23:40	80.7	dB(A)
23:40 - 00:40	81.4	dB(A)
00:40 - 01:40	78.5	dB(A)
01:40 - 02:40	75.8	dB(A)
02:40 - 03:40	75.9	dB(A)
03:40 - 04:40	76.3	dB(A)
04:40 - 05:40	76.7	dB(A)
05:40 - 06:40	79.5	dB(A)
06:40 - 07:40	79.7	dB(A)
07:40 - 08:40	77.3	dB(A)
$L_{eq}$ 24 hr.	79.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	08:40 - 16:40 น. = 80    16:40 - 00:40 น. = 80    00:40 - 08:40 น. = 77	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	08:40 - 16:40 น. = 80    16:40 - 00:40 น. = 80    00:40 - 08:40 น. = 77	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time

# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## Based on Criteria 90 dB(A); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Savita Kittinonvarat)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0876

Report No. R6608-5672

## TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungsukla
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.		A. Sriracha, Chonburi 20230
SAMPLE POINT	: PK07		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 26842
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 28-29/08/2023
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 29/08/2023
	S/N 00222592 : Class 2	REPORTED DATE	: 30/08/2023

TIME \ DATE	28-29/08/2023 ( $L_{eq}$ )	UNIT
10:00 - 11:00 <sup>3</sup>	86.5	dB(A)
11:00 - 12:00	88.0	dB(A)
12:00 - 13:00	89.6	dB(A)
13:00 - 14:00	85.4	dB(A)
14:00 - 15:00	89.0	dB(A)
15:00 - 16:00	89.2	dB(A)
16:00 - 17:00	85.2	dB(A)
17:00 - 18:00	89.6	dB(A)
18:00 - 19:00	87.9	dB(A)
19:00 - 20:00	87.0	dB(A)
20:00 - 21:00	89.8	dB(A)
21:00 - 22:00	87.8	dB(A)
22:00 - 23:00	87.4	dB(A)
23:00 - 00:00	89.9	dB(A)
00:00 - 01:00	88.3	dB(A)
01:00 - 02:00	87.0	dB(A)
02:00 - 03:00	89.8	dB(A)
03:00 - 04:00	83.8	dB(A)
04:00 - 05:00	80.0	dB(A)
05:00 - 06:00	78.6	dB(A)
06:00 - 07:00	82.6	dB(A)
07:00 - 08:00	82.4	dB(A)
08:00 - 09:00	83.6	dB(A)
09:00 - 10:00	81.5	dB(A)
$L_{eq}$ 24 hr.	87.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, 1</sup>	10:00 - 18:00 น. = 88    18:00 - 02:00 น. = 88    02:00 - 10:00 น. = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, 2</sup>	10:00 - 18:00 น. = 88    18:00 - 02:00 น. = 83    02:00 - 10:00 น. = 83	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

## REMARK :

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>3</sup> Start Time<sup>#</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>##</sup> Based on Criteria 90 dB(A); 2 dB Exchange Rate\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By: Ms. Panhapa Phongsphen)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA66-R0963

Report No. R6609-1833

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : PK05  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr. SAMPLE NO. : 28712  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14-15/09/2023  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 15/09/2023  
S/N 00322751 : Class 2 REPORTED DATE : 21/09/2023

TIME \ DATE	14-15/09/2023 ( $L_{eq}$ )	UNIT
08:40 - 09:40 <sup>/3</sup>	88.5	dB(A)
09:40 - 10:40	83.4	dB(A)
10:40 - 11:40	85.3	dB(A)
11:40 - 12:40	87.8	dB(A)
12:40 - 13:40	84.2	dB(A)
13:40 - 14:40	87.8	dB(A)
14:40 - 15:40	86.2	dB(A)
15:40 - 16:40	83.9	dB(A)
16:40 - 17:40	88.4	dB(A)
17:40 - 18:40	83.5	dB(A)
18:40 - 19:40	83.7	dB(A)
19:40 - 20:40	88.1	dB(A)
20:40 - 21:40	84.3	dB(A)
21:40 - 22:40	83.9	dB(A)
22:40 - 23:40	88.5	dB(A)
23:40 - 00:40	84.0	dB(A)
00:40 - 01:40	83.8	dB(A)
01:40 - 02:40	88.3	dB(A)
02:40 - 03:40	83.3	dB(A)
03:40 - 04:40	83.2	dB(A)
04:40 - 05:40	84.1	dB(A)
05:40 - 06:40	88.3	dB(A)
06:40 - 07:40	83.6	dB(A)
07:40 - 08:40	84.2	dB(A)
$L_{eq}$ 24 hr.	85.9	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	08:40 - 16:40 น. = 86    16:40 - 00:40 น. = 86    00:40 - 08:40 น. = 85	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	08:40 - 16:40 น. = 86    16:40 - 00:40 น. = 85    00:40 - 08:40 น. = 85	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

## REMARK :

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>/3</sup> Start Time<sup>\*</sup> Based on Criteria 85 dB(A); 3 dB Exchange Rate<sup>\*\*</sup> Based on Criteria 90 dB(A); 5 dB Exchange Rate<sup>\*</sup> Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Thanaporn Khamsoont)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : PK07\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00322749 : Class 2

SAMPLE NO. : 29866  
MEASURING DATE : 04-05/10/2023  
RECEIVED DATE : 06/10/2023  
REPORTED DATE : 10/10/2023

TIME \ DATE	04-05/10/2023 ( $L_{eq}$ )	UNIT
09:40 - 10:40 <sup>3</sup>	81.7	dB(A)
10:40 - 11:40	83.3	dB(A)
11:40 - 12:40	81.2	dB(A)
12:40 - 13:40	81.5	dB(A)
13:40 - 14:40	83.2	dB(A)
14:40 - 15:40	81.7	dB(A)
15:40 - 16:40	81.8	dB(A)
16:40 - 17:40	83.0	dB(A)
17:40 - 18:40	77.4	dB(A)
18:40 - 19:40	78.4	dB(A)
19:40 - 20:40	79.4	dB(A)
20:40 - 21:40	83.5	dB(A)
21:40 - 22:40	84.9	dB(A)
22:40 - 23:40	82.9	dB(A)
23:40 - 00:40	78.6	dB(A)
00:40 - 01:40	77.7	dB(A)
01:40 - 02:40	75.6	dB(A)
02:40 - 03:40	74.5	dB(A)
03:40 - 04:40	73.7	dB(A)
04:40 - 05:40	73.4	dB(A)
05:40 - 06:40	76.1	dB(A)
06:40 - 07:40	75.3	dB(A)
07:40 - 08:40	76.8	dB(A)
08:40 - 09:40	77.3	dB(A)
$L_{eq}$ 24 hr.	80.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:40 - 17:40 u. = 82      17:40 - 01:40 u. = 81      01:40 - 09:40 u. = 75	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,2</sup>	09:40 - 17:40 u. = 82      17:40 - 01:40 u. = 80      01:40 - 09:40 u. = 75	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> , 90 <sup>2</sup>	dB(A)

REMARK : ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

(Ms. Thanatporn Klinsoopon is Section Head of Noise, Light, and Vibration Technical Management)

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : PK05\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter :  
S/N 00322746 : Class 2

SAMPLE NO. : 32993  
MEASURING DATE : 13-14/11/2023  
RECEIVED DATE : 14/11/2023  
REPORTED DATE : 20/11/2023

TIME \ DATE	13-14/11/2023 ( $L_{eq}$ )	UNIT
09:05 - 10:05 <sup>3</sup>	83.4	dB(A)
10:05 - 11:05	87.6	dB(A)
11:05 - 12:05	87.1	dB(A)
12:05 - 13:05	83.2	dB(A)
13:05 - 14:05	83.4	dB(A)
14:05 - 15:05	87.1	dB(A)
15:05 - 16:05	85.9	dB(A)
16:05 - 17:05	75.9	dB(A)
17:05 - 18:05	75.5	dB(A)
18:05 - 19:05	75.7	dB(A)
19:05 - 20:05	76.9	dB(A)
20:05 - 21:05	81.1	dB(A)
21:05 - 22:05	82.3	dB(A)
22:05 - 23:05	87.1	dB(A)
23:05 - 00:05	86.6	dB(A)
00:05 - 01:05	87.2	dB(A)
01:05 - 02:05	86.0	dB(A)
02:05 - 03:05	85.4	dB(A)
03:05 - 04:05	85.7	dB(A)
04:05 - 05:05	86.4	dB(A)
05:05 - 06:05	86.6	dB(A)
06:05 - 07:05	86.5	dB(A)
07:05 - 08:05	85.9	dB(A)
08:05 - 09:05	86.9	dB(A)
$L_{eq}$ 24 hr.	85.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,1</sup>	09:05 - 17:05 u. = 85      17:05 - 01:05 u. = 83      01:05 - 09:05 u. = 86	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,2</sup>	09:05 - 17:05 u. = 84      17:05 - 01:05 u. = 83      01:05 - 09:05 u. = 86	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>1</sup> . 90 <sup>2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment. Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

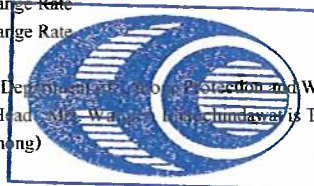
<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head of Measurement and Chindawar is Technical Management)  
(Measurement By Ms. Priyaporn Sunthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd.\*\*\*  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha. Chonburi 20230\*\*\*  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd.\*\*\*  
SAMPLE POINT : PK07\*\*\*  
PARAMETER\*\*\*\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{eq}$  24 hr.  
DETERMINATION METHOD : ISO 11202:2010##  
INSTRUMENT : Integrated Sound Level Meter ;  
S/N 00222592 : Class 2

SAMPLE NO. : 34785  
MEASURING DATE : 15-16/12/2023  
RECEIVED DATE : 16/12/2023  
REPORTED DATE : 20/12/2023

TIME \ DATE	15-16/12/2023 ( $L_{eq}$ )	UNIT
08:40 - 09:40 <sup>3</sup>	87.2	dB(A)
09:40 - 10:40	89.2	dB(A)
10:40 - 11:40	89.6	dB(A)
11:40 - 12:40	89.5	dB(A)
12:40 - 13:40	87.7	dB(A)
13:40 - 14:40	89.2	dB(A)
14:40 - 15:40	89.3	dB(A)
15:40 - 16:40	89.4	dB(A)
16:40 - 17:40	89.3	dB(A)
17:40 - 18:40	84.4	dB(A)
18:40 - 19:40	87.5	dB(A)
19:40 - 20:40	89.6	dB(A)
20:40 - 21:40	89.8	dB(A)
21:40 - 22:40	90.3	dB(A)
22:40 - 23:40	89.8	dB(A)
23:40 - 00:40	89.5	dB(A)
00:40 - 01:40	89.1	dB(A)
01:40 - 02:40	89.1	dB(A)
02:40 - 03:40	87.1	dB(A)
03:40 - 04:40	82.0	dB(A)
04:40 - 05:40	82.0	dB(A)
05:40 - 06:40	83.5	dB(A)
06:40 - 07:40	89.6	dB(A)
07:40 - 08:40	89.9	dB(A)
$L_{eq}$ 24 hr.	88.6	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>*,/1</sup>	08:40 - 16:40 $\mu$ . = 88      16:40 - 00:40 $\mu$ . = 89      00:40 - 08:40 $\mu$ . = 87	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>**,/2</sup>	08:40 - 16:40 $\mu$ . = 88      16:40 - 00:40 $\mu$ . = 88      00:40 - 08:40 $\mu$ . = 87	dB(A)
Standard $L_{eq}$ 8 hr.	85 <sup>/1</sup> , 90 <sup>/2</sup>	dB(A)

**REMARK :** ## ISO 11202:2010, Notification of The Ministry of Industry B.E. 2546 (2003) on The Safety Protection Measures in Factory Regarding Working Area Environment, Dated November 6, 2003, Notification of The Department of Labour Protection and Welfare on The Standard of Noise Level That Employee are Allowed to Receive in Average Period of Work Each Day, Dated December 13, 2017, Notification of The Department of Labour Protection and Welfare on Criteria, Measurement Methods, and Analysis of Working Conditions Regarding Heat, Light, or Noise Levels, Including Duration and Types of Businesses to Be Performed, Dated February 8, 2018

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

<sup>/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003)

<sup>/3</sup> Start Time

\* Based on Criteria 85 dB(A); 3 dB Exchange Rate

\*\* Based on Criteria 90 dB(A); 5 dB Exchange Rate

\*\*\* These Data are Non Laboratory Data

\*\*\*\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Klinsoon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607044

Report No. 6607-0519

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK01  
 SAMPLING DATE : 14/07/2023 SAMPLE NO. : A66070519  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 08:45-09:45  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 18/07/2023-20/07/2023  
 Serial No. 218444 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By

(Miss Thanatporn Klinsopon)

21/07/2023



Approved By

(Mr. Kawee Suthasub)

21/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6608024

Report No. 6608-0289

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tung Sukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK01  
SAMPLING DATE : 15/08/2023 SAMPLE NO. : A66080289  
RECEIVED DATE : 22/08/2023 SAMPLING TIME : 09:25-10:25  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 22/08/2023-24/08/2023  
Serial No. 218406 REPORTED DATE : 25/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.085	1.00	mg/m <sup>3</sup>
		0.021	0.25	ppm

## REMARK:

<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

25/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

25/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609047

Report No. 6609-0974

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK01  
SAMPLING DATE : 13/09/2023 SAMPLE NO. : A66090974  
RECEIVED DATE : 20/09/2023 SAMPLING TIME : 09:29-10:29  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
Serial No. 218444 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoyon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6610015

Report No. 6610-0273

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK01  
 SAMPLING DATE : 04/10/2023  
 RECEIVED DATE : 09/10/2023  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218385

SAMPLE NO. : A66100273  
 SAMPLING TIME : 09:16-10:16  
 TESTED DATE : 09/10/2023-11/10/2023  
 REPORTED DATE : 24/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611031

Report No. 6611-0506

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK01  
 SAMPLING DATE : 09/11/2023 SAMPLE NO. : A66110506  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 09:25-10:25  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 16/11/2023-17/11/2023  
 Serial No. 218411 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanaporn Klinsopon)

24/11/2023



Approved By

(Mr. Kawee Suthasub)

24/11/2023

REPORTED TEST REFERS TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0658

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK01  
 SAMPLING DATE : 13/12/2023 SAMPLE NO. : A66120658  
 RECEIVED DATE : 19/12/2023 SAMPLING TIME : 09:00-10:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
 Serial No. 20211103003 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By

(Mr. Kawee Suthasub)

27/12/2023

COPY

Request No. ATR6607072

Report No. 6607-0872

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 25/07/2023 SAMPLE NO. : A66070872  
 RECEIVED DATE : 31/07/2023 SAMPLING TIME : 09:30-10:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 31/07/2023-03/08/2023  
 Serial No. 218385 REPORTED DATE : 05/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By

(Miss Thanatporn Klinsoyon)

05/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

05/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609003

Report No. 6609-0007

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 31/08/2023 SAMPLE NO. : A66090007  
RECEIVED DATE : 01/09/2023 SAMPLING TIME : 09:30-10:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 01/09/2023-06/09/2023  
Serial No. 20200403061 REPORTED DATE : 08/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

08/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

08/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609047

Report No. 6609-0980

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 18/09/2023 SAMPLE NO. : A66090980  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 14:00-15:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
 Serial No. 20180903085 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6610037

Report No. 6610-0577

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 19/10/2023  
RECEIVED DATE : 20/10/2023  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
Serial No. 218412

SAMPLE NO. : A66100577  
SAMPLING TIME : 08:30-09:30  
TESTED DATE : 20/10/2023-26/10/2023  
REPORTED DATE : 27/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

27/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611040

Report No. 6611-0580

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 17/11/2023 SAMPLE NO. : A66110580  
 RECEIVED DATE : 20/11/2023 SAMPLING TIME : 08:50-09:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/11/2023-28/11/2023  
 Serial No. 218383 REPORTED DATE : 29/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0654

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 16/12/2023 SAMPLE NO. : A66120654  
RECEIVED DATE : 19/12/2023 SAMPLING TIME : 08:30-09:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
Serial No. 218432 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.047	1.00	mg/m <sup>3</sup>
		0.012	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and

No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607072

Report No. 6607-0873

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 25/07/2023  
RECEIVED DATE : 31/07/2023  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
Serial No. 218413

SAMPLE NO. : A66070873  
SAMPLING TIME : 09:30-10:30  
TESTED DATE : 31/07/2023-03/08/2023  
REPORTED DATE : 05/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	0.320	5	mg/m <sup>3</sup>
		0.124	2	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By

(Miss Thanatporn Klinsoon)

05/08/2023



Approved By

(Mr. Kawee Suthasub)

05/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609003

Report No. 6609-0008

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 31/08/2023 SAMPLE NO. : A66090008  
 RECEIVED DATE : 01/09/2023 SAMPLING TIME : 09:30-10:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 01/09/2023-06/09/2023  
 Serial No. 20200403061 REPORTED DATE : 08/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.026	5	mg/m <sup>3</sup>
		< 0.010	2	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

08/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

08/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6609047

Report No. 6609-0981

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 18/09/2023 SAMPLE NO. : A66090981  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 14:00-15:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
 Serial No. 20180903085 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	0.183	5	mg/m <sup>3</sup>
		0.071	2	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2550 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection. and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Sor gthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. ATR6610037

Report No. 6610-0576

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK03  
 SAMPLING DATE : 19/10/2023 SAMPLE NO. : A66100576  
 RECEIVED DATE : 20/10/2023 SAMPLING TIME : 08:30-09:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/10/2023-26/10/2023  
 Serial No. 218412 REPORTED DATE : 27/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1)</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	0.121	5	mg/m <sup>3</sup>
		0.047	2	ppm

## REMARK:

<sup>1)</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanaporn Klinsopon)

27/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611040

Report No. 6611-0581

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 17/11/2023 SAMPLE NO. : A66110581  
RECEIVED DATE : 20/11/2023 SAMPLING TIME : 08:50-09:50  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/11/2023-28/11/2023  
Serial No. 218391 REPORTED DATE : 29/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	0.214	5	mg/m <sup>3</sup>
		0.083	2	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsohon)

29/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0655

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK03  
SAMPLING DATE : 16/12/2023 SAMPLE NO. : A66120655  
RECEIVED DATE : 19/12/2023 SAMPLING TIME : 08:30-09:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
Serial No. 218413 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Nitric acid	Ion Chromatography Method (OSHA ID 165sg)	0.066	5	mg/m <sup>3</sup>
		0.026	2	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**



Request No. ATR6607044

Report No. 6607-0514

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK06  
 SAMPLING DATE : 12/07/2023 SAMPLE NO. : A66070514  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 09:05-10:05  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 18/07/2023-20/07/2023  
 Serial No. 218383 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By .....

(Miss Thanatporn Klinsoon)

21/07/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

21/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. ATR6608024

Report No. 6608-0293

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK05  
SAMPLING DATE : 16/08/2023 SAMPLE NO. : A66080293  
RECEIVED DATE : 22/08/2023 SAMPLING TIME : 09:25-10:25  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 22/08/2023-24/08/2023  
Serial No. 218402 REPORTED DATE : 25/08/2023


PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:


<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By   
(Miss Thanatporn Klinsohon)

25/08/2023

Approved By   
(Mr. Kawee Suthasub)

25/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6609047

Report No. 6609-0978

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK05  
 SAMPLING DATE : 14/09/2023 SAMPLE NO. : A66090978  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 08:42-09:42  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
 Serial No. 218444 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

Request No. ATR6610015

Report No. 6610-0275

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : PK07  
SAMPLING DATE : 04/10/2023  
RECEIVED DATE : 09/10/2023  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
Serial No. 218412

SAMPLE NO. : A66100275  
SAMPLING TIME : 09:15-10:15  
TESTED DATE : 09/10/2023-11/10/2023  
REPORTED DATE : 24/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/10/2023



Approved By

(Mr. Kawee Suthasub)

24/10/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611031

Report No. 6611-0508

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK05  
 SAMPLING DATE : 13/11/2023 SAMPLE NO. : A66110508  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 09:00-10:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 16/11/2023-17/11/2023  
 Serial No. 218444 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017). Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0653

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : PK07  
 SAMPLING DATE : 15/12/2023 SAMPLE NO. : A66120653  
 RECEIVED DATE : 19/12/2023 SAMPLING TIME : 11:00-12:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
 Serial No. 218445 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsohon)

27/12/2023



Approved By

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607044

Report No. 6607-0520

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : AP02  
 SAMPLING DATE : 14/07/2023 SAMPLE NO. : A66070520  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 08:45-09:45  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 18/07/2023-20/07/2023  
 Serial No. 218432 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By

(Miss Thanatporn Klinsoon)

21/07/2023



Approved By

(Mr. Kawee Suthasub)

21/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6608024

Report No. 6608-0290

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : AP02  
 SAMPLING DATE : 15/08/2023  
 RECEIVED DATE : 22/08/2023  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218432

SAMPLE NO. : A66080290  
 SAMPLING TIME : 09:27-10:27  
 TESTED DATE : 22/08/2023-24/08/2023  
 REPORTED DATE : 25/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

25/08/2023



Approved By

(Mr. Kawee Suthasub)

25/08/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609047

Report No. 6609-0975

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : AP02  
 SAMPLING DATE : 13/09/2023 SAMPLE NO. : A66090975  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 09:31-10:31  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
 Serial No. 218445 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6610015

Report No. 6610-0274

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : AP02  
 SAMPLING DATE : 04/10/2023  
 RECEIVED DATE : 09/10/2023  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218413

SAMPLE NO. : A66100274  
 SAMPLING TIME : 09:19-10:19  
 TESTED DATE : 09/10/2023-11/10/2023  
 REPORTED DATE : 24/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/10/2023



Approved By

(Mr. Kawee Suthasub)

24/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611031

Report No. 6611-0507

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : AP02  
 SAMPLING DATE : 09/11/2023 SAMPLE NO. : A66110507  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 09:30-10:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 16/11/2023-17/11/2023  
 Serial No. 218385 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0659

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : AP02  
SAMPLING DATE : 13/12/2023 SAMPLE NO. : A66120659  
RECEIVED DATE : 19/12/2023 SAMPLING TIME : 09:10-10:10  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
Serial No. 218411 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607044

Report No. 6607-0521

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 14/07/2023 SAMPLE NO. : A66070521  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 08:50-09:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 18/07/2023-20/07/2023  
 Serial No. 218388 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By .....

(Miss Thanaporn Klinsopon)

21/07/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

21/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6608024

Report No. 6608-0288

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 15/08/2023 SAMPLE NO. : A66080288  
 RECEIVED DATE : 22/08/2023 SAMPLING TIME : 09:15-10:15  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 22/08/2023-24/08/2023  
 Serial No. 218412 REPORTED DATE : 25/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.046	1.00	mg/m <sup>3</sup>
		0.011	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanaporn Klinsoon)

25/08/2023



Approved By

(Mr. Kawee Suthasub)

25/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6609047

Report No. 6609-0979

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 15/09/2023 SAMPLE NO. : A66090979  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 09:40-10:40  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/09/2023-21/09/2023  
 Serial No. 218388 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoyon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612036

Report No. 6612-0881

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 19/12/2023 SAMPLE NO. : A66120881  
 RECEIVED DATE : 21/12/2023 SAMPLING TIME : 08:20-09:20  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/12/2023-25/12/2023  
 Serial No. 218402 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Tummarat Photankhum)

Examined By

(Miss Thanaporn Klinsoon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611031

Report No. 6611-0505

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 08/11/2023 SAMPLE NO. : A66110505  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 10:20-11:20  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 16/11/2023-17/11/2023  
 Serial No. 218444 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0656

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : WWT Storage  
 SAMPLING DATE : 12/12/2023 SAMPLE NO. : A66120656  
 RECEIVED DATE : 19/12/2023 SAMPLING TIME : 09:30-10:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 19/12/2023-25/12/2023  
 Serial No. 218391 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1)</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	< 0.040	1.00	mg/m <sup>3</sup>
		< 0.010	0.25	ppm

**REMARK:**<sup>1)</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

27/12/2023



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6607044

Report No. 6607-0518

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungskula A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Casting Area  
 SAMPLING DATE : 13/07/2023 SAMPLE NO. : A66070518  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 09:10-10:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 18/07/2023-19/07/2023  
 Serial No. 20211103029 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.01	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.  
 (Sampling By Mr. Wattana Khotla)

Examined By .....

(Miss Thanatporn Klinsopon)

21/07/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Mr. Kawee Suthasub)

21/07/2023

COPY

Request No. ATR6608024

Report No. 6608-0291

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Casting Area  
 SAMPLING DATE : 16/08/2023 SAMPLE NO. : A66080291  
 RECEIVED DATE : 22/08/2023 SAMPLING TIME : 09:10-10:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 22/08/2023-23/08/2023  
 Serial No. 20200403072 REPORTED DATE : 25/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.06	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

25/08/2023



Approved By

(Mr. Kawee Suthasub)

25/08/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6609047

Report No. 6609-0976

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Casting Area  
 SAMPLING DATE : 14/09/2023 SAMPLE NO. : A66090976  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 09:04-10:04  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 20/09/2023-29/09/2023  
 Serial No. 20200403078 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.10	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.  
 (Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

30/09/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Mr. Kawee Suthasub)

30/09/2023

**COPY**

Request No. ATR6610015

Report No. 6610-0277

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Casting Area  
 SAMPLING DATE : 04/10/2023 SAMPLE NO. : A66100277  
 RECEIVED DATE : 09/10/2023 SAMPLING TIME : 08:50-09:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 09/10/2023-11/10/2023  
 Serial No. 20211102105 REPORTED DATE : 24/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.06	5	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/10/2023



Approved By

(Mr. Kawee Suthasub)

24/10/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6611031

Report No. 6611-0504

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Casting Area  
 SAMPLING DATE : 08/11/2023 SAMPLE NO. : A66110504  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 09:50-10:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 16/11/2023-22/11/2023  
 Serial No. 20160502011 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.32	5	mg/m <sup>3</sup>

## REMARK:

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/11/2023



Approved By

(Mr. Kawee Suthasub)

24/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 W THOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0660

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : Casting Area  
SAMPLING DATE : 13/12/2023  
RECEIVED DATE : 19/12/2023  
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
Serial No. 20200403077

SAMPLE NO. : A66120660  
SAMPLING TIME : 09:30-10:30  
TESTED DATE : 19/12/2023-21/12/2023  
REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.05	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
(Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Mr. Kawee Suthasub)

27/12/2023

**COPY**



Request No. ATR6607044

Report No. 6607-0517

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Melting Area  
 SAMPLING DATE : 13/07/2023 SAMPLE NO. : A66070517  
 RECEIVED DATE : 18/07/2023 SAMPLING TIME : 09:05-10:05  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 18/07/2023-19/07/2023  
 Serial No. 20211103024 REPORTED DATE : 21/07/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.01	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fum)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Wattana Khotla)

Examined By .....

(Miss Thanatporn Klinsopon)

21/07/2023



Approved By .....

(Mr. Kawee Suthasub)

21/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY



Request No. ATR6608024

Report No. 6608-0292

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Melting Area  
 SAMPLING DATE : 17/08/2023 SAMPLE NO. : A66080292  
 RECEIVED DATE : 22/08/2023 SAMPLING TIME : 08:50-09:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 22/08/2023-23/08/2023  
 Serial No. 20200403071 REPORTED DATE : 25/08/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.19	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsoyon)

25/08/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

25/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6609047

Report No. 6609-0977

**TEST REPORT**

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Melting Area  
 SAMPLING DATE : 14/09/2023 SAMPLE NO. : A66090977  
 RECEIVED DATE : 20/09/2023 SAMPLING TIME : 09:07-10:07  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 20/09/2023-29/09/2023  
 Serial No. 20211102125 REPORTED DATE : 30/09/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.03	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.  
 (Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

30/09/2023



Approved By

(Mr. Kawee Suthasub)

30/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6610015

Report No. 6610-0276

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
ADDRESS : 38/14 Moo 5 T.Tungasukla A.Sriracha,Chonburi 20230  
SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
SAMPLE NAME : Melting Area  
SAMPLING DATE : 04/10/2023  
RECEIVED DATE : 09/10/2023  
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
Serial No. 20211102099

SAMPLE NO. : A66100276  
SAMPLING TIME : 08:40-09:40  
TESTED DATE : 09/10/2023-11/10/2023  
REPORTED DATE : 24/10/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.12	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
(Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By .....

(Miss Thanatporn Klinsopon)

24/10/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By .....

(Mr. Kawee Suthasub)

24/10/2023

**COPY**



Request No. ATR6611031

Report No. 6611-0503

## TEST REPORT

CUSTOMER : Siam Poongsan metal CO.,LTD.  
 ADDRESS : 38/14 Moo 5 T.Tungsukla A.Sriracha,Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Melting Area  
 SAMPLING DATE : 08/11/2023 SAMPLE NO. : A66110503  
 RECEIVED DATE : 16/11/2023 SAMPLING TIME : 09:30-10:30  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 16/11/2023-22/11/2023  
 Serial No. 20200403072 REPORTED DATE : 24/11/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.27	5	mg/m <sup>3</sup>

## REMARK:

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

24/11/2023



Approved By

(Mr. Kawee Suthasub)

24/11/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6612031

Report No. 6612-0657

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungasukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : Melting Area  
 SAMPLING DATE : 12/12/2023 SAMPLE NO. : A66120657  
 RECEIVED DATE : 19/12/2023 SAMPLING TIME : 10:10-11:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 19/12/2023-21/12/2023  
 Serial No. 20160502014 REPORTED DATE : 27/12/2023

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.10	5	mg/m <sup>3</sup>

**REMARK:**

<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.  
 (Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoapon)

27/12/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

27/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

Report No. R6607-2121 - R6607-2123

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 19302-19304  
MEASURING DATE : 13/07/2023 RECEIVED DATE : 16/07/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/07/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080015, TPL060039, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.2	29.8	30.4	30.1	29.9
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.3	28.9	29.2	29.3	28.9
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	22.5	22.6	23.1	23.3	22.9
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.2
STANDARD		-	-	-	-	32.0 <sup>1/2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4576 - R6608-4578

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 25739-25741  
MEASURING DATE : 17/08/2023 RECEIVED DATE : 18/08/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080011, TEU080015

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.5	29.6	29.4	29.0	29.3
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	30.1	30.3	30.4	30.3	30.3
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	24.6	24.2	24.0	24.1	24.2
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.9
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1826 - R6609-1828

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungskula  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 28705-28707  
MEASURING DATE : 14/09/2023 RECEIVED DATE : 15/09/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 21/09/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080011, TEU080014

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.2	29.2	29.5	29.4	29.3
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	29.7	29.6	30.0	29.9	29.8
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	22.2	22.2	21.9	21.7	22.0
WBGT AVERAGE	09:00-11:00	-	-	-	-	25.7
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Thanatporn Klinsopon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1015

Report No. R6610-0461 - R6610-0463

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 29858-29860  
MEASURING DATE : 04/10/2023 RECEIVED DATE : 06/10/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 10/10/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080011, TEU080013, TEU080015

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	28.9	29.2	29.3	29.4	29.2
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.3	28.2	28.5	28.7	28.4
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	22.4	21.1	21.1	20.8	21.4
WBGT AVERAGE	09:00-11:00	-	-	-	-	25.1
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1139

Report No. R6611-0753 - R6611-0755

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 32976-32978  
MEASURING DATE : 08/11/2023 RECEIVED DATE : 18/11/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/11/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080015, TEU080011, 22004319

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:30-11:30	29.1	30.1	29.3	29.7	29.6
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	29.4	29.2	30.0	29.4	29.5
Heat Stress (Melting) (ห้องพักพนักงาน)	09:30-11:30	23.0	22.3	21.9	22.0	22.3
WBGT AVERAGE	09:30-11:30	-	-	-	-	25.9
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1236

Report No. R6612-0916 - R6612-0918

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungskula  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Melting SAMPLE NO. : 34771-34773  
MEASURING DATE : 12/12/2023 RECEIVED DATE : 16/12/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/12/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080014, TEU080011, TPQ030024

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:30-11:30	29.4	30.0	30.3	30.4	30.0
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	29.4	29.2	30.1	30.1	29.7
Heat Stress (Melting) (ห้องพักพนักงาน)	09:30-11:30	25.0	24.3	23.9	23.8	24.3
WBGT AVERAGE	09:30-11:30	-	-	-	-	27.1
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 209.61 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

Report No. R6607-2118 - R6607-2120

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 19299-19301  
MEASURING DATE : 13/07/2023 RECEIVED DATE : 16/07/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/07/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080014, TEU080011

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.2	29.2	29.5	29.3	29.3
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	29.9	30.0	30.1	30.3	30.1
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	22.6	22.9	23.1	23.1	22.9
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.2
STANDARD		-	-	-	-	32.0 <sup>1/2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4573 - R6608-4575

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 25736-25738  
MEASURING DATE : 16/08/2023 RECEIVED DATE : 18/08/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPI050070, TPQ030024, TPH060001

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.5	29.9	29.6	29.8	29.7
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.3	28.7	28.5	28.7	28.6
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	25.5	25.1	24.9	24.9	25.1
WBGT AVERAGE	09:00-11:00	-	-	-	-	27.2
STANDARD		-	-	-	-	32.0 <sup>1/2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1829 - R6609-1831

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 28708-28710  
MEASURING DATE : 14/09/2023 RECEIVED DATE : 15/09/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 21/09/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPL090016, TEU080015, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.9	29.9	29.9	30.3	30.0
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	29.1	28.4	28.9	28.9	28.8
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	23.1	23.2	23.0	23.0	23.1
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.3
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Thanatporn Klinsoapon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1015

Report No. R6610-0458 - R6610-0460

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 29855-29857  
MEASURING DATE : 04/10/2023 RECEIVED DATE : 06/10/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 10/10/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. 22004320, TEU080014, TEU080012

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.1	28.5	28.9	28.9	28.8
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.5	28.1	28.4	28.5	28.4
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	21.5	21.2	21.6	21.5	21.4
WBGT AVERAGE	09:00-11:00	-	-	-	-	25.0
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1139

Report No. R6611-0756 - R6611-0758

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 32979-32981  
MEASURING DATE : 08/11/2023 RECEIVED DATE : 14/11/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/11/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. 22004316, 22004318, 22004320

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.6	29.2	30.0	30.6	29.8
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	29.0	29.1	29.3	29.6	29.3
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	20.6	21.0	20.6	21.1	20.8
WBGT AVERAGE	09:00-11:00	-	-	-	-	25.2
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1236

Report No. R6612-0913 - R6612-0915

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 34768-34770  
MEASURING DATE : 12/12/2023 RECEIVED DATE : 16/12/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/12/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080015, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:35-11:35	29.3	29.5	29.9	30.5	29.8
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:35-11:35	27.9	29.2	29.3	29.1	28.9
Heat Stress (Casting) (ห้องพักพนักงาน)	09:35-11:35	24.2	23.9	24.1	24.2	24.1
WBGT AVERAGE	09:35-11:35	-	-	-	-	26.8
STANDARD		-	-	-	-	32.0 <sup>1,2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Moderate)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/12/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0754

Report No. R6607-2127 - R6607-2129

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เตารีดขนาด (Hot Rolling) SAMPLE NO. : 19308-19310  
MEASURING DATE : 14/07/2023 RECEIVED DATE : 16/07/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/07/2023  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080011, TEU080012, TEU080014

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	13:00-15:00	21.6	21.8	22.0	22.0	21.9
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	13:00-15:00	31.2	31.7	31.1	31.3	31.3
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	13:00-15:00	32.0	31.5	32.0	31.5	31.7
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	13:00-15:00	-	-	-	-	27.1
STANDARD		-	-	-	-	34.0 <sup>1,2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/07/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0840

Report No. R6608-4579 - R6608-4581

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เตารีดขนาด (Hot Rolling) SAMPLE NO. : 25742-25744  
MEASURING DATE : 17/08/2023 RECEIVED DATE : 18/08/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080013, TPI050069, TEU080014

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:30-11:30	21.3	20.7	20.9	20.8	20.9
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:30-11:30	28.8	29.1	29.5	29.2	29.1
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:30-11:30	29.7	29.4	30.0	30.1	29.8
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:30-11:30	-	-	-	-	25.6
STANDARD		-	-	-	-	34.0 <sup>1,2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R0963

Report No. R6609-1823 - R6609-1825

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เตารีดขนาด (Hot Rolling) SAMPLE NO. : 28702-28704  
MEASURING DATE : 13/09/2023 RECEIVED DATE : 15/09/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 21/09/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080011, TEU080014, TEU080012

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:30-11:30	21.2	20.7	21.9	21.9	21.4
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:30-11:30	31.8	31.4	31.6	31.5	31.6
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:30-11:30	29.9	30.2	30.8	31.5	30.6
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:30-11:30	-	-	-	-	26.7
STANDARD		-	-	-	-	34.0 <sup>1,2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Thanatporn Klinsoapon)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/09/2023

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1015

Report No. R6610-0464 - R6610-0466

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เตารีดขนาด (Hot Rolling) SAMPLE NO. : 29861-29863  
MEASURING DATE : 05/10/2023 RECEIVED DATE : 06/10/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 10/10/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080013, TEU080014, TEU080015

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:00-11:00	21.4	21.2	21.2	21.0	21.2
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:00-11:00	29.7	30.2	30.4	30.8	30.3
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:00-11:00	30.6	31.0	31.9	31.7	31.3
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.4
STANDARD		-	-	-	-	34.0 <sup>1/2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

10/10/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA66-R1139

Report No. R6611-0759 - R6611-0761

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เตารีดขนาด (Hot Rolling) SAMPLE NO. : 32982-32984  
MEASURING DATE : 09/11/2023 RECEIVED DATE : 14/11/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/11/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080014, TEU080013, TEU080012

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:00-11:00	20.9	20.5	20.5	21.0	20.7
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:00-11:00	31.3	31.8	31.5	31.5	31.5
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:00-11:00	29.8	29.8	29.9	30.2	30.0
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.3
STANDARD		-	-	-	-	34.0 <sup>1,2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/11/2023

COPY

Request No. LA66-R1236

Report No. R6612-0919 - R6612-0921

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 33/14 Moo 5 T. Tungsukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : เติร์ดขนาด (Hot Rolling) SAMPLE NO. : 34774-34776  
MEASURING DATE : 15/12/2023 RECEIVED DATE : 16/12/2023  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 20/12/2023

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080013, TEU080014, TEU080015

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:00-11:00	24.4	22.2	22.6	21.9	22.8
เติร์ดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:00-11:00	28.5	28.8	29.5	29.6	29.1
เติร์ดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:00-11:00	30.6	29.7	31.6	31.9	30.9
เติร์ดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.7
STANDARD		-	-	-	-	34.0 <sup>1,2</sup>

## REMARK :

Work Load = 132.60 Kcal/hr.

<sup>1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Light)<sup>2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

20/12/2023

COPY