

Request No. LA65-0925

Report No. 6509-0536

## 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. : 04845  
SAMPLING DATE : 13/09/2022  
SAMPLING TIME : 09:00-09:30  
RECEIVED DATE : 15/09/2022  
REPORTED DATE : 29/09/2022  
TESTED DATE : 15-21/09/2022

## STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	
Temperature :	44.00	°C	Oxygen Content :	20.90 %
Air Velocity :	17.83	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	10.94	m <sup>3</sup> /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	3.44	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:00-09:30	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> DRY BASIS (25°C, 760 mm.Hg)

\* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ก-7283)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ก-4377)

29/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/09/2022

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-0925

Report No. 6509-0537

## 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 : Outlet Dust Collector of Melting Casting Stack

SAMPLE NO. : 04846

SAMPLING DATE : 13/09/2022

SAMPLING TIME : 09:00-09:30

RECEIVED DATE : 15/09/2022

REPORTED DATE : 29/09/2022

TESTED DATE : 15-28/09/2022

## STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	44.00	°C	Oxygen Content :	20.90 %
Air Velocity :	17.83	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>1)</sup> :	10.94	m <sup>3</sup> /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	3.44	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1)</sup>	UNIT
Zinc as Zinc Oxide	Isokinetic, ICP-AES	09:00-09:30	0.25	mg/m <sup>3</sup>

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

\* PARAMETER OUTSIDE THE SCOPE OF THE REGISTRATION  
OF THE DEPARTMENT OF INDUSTRIAL WORKS  
(SAMPLING BY MR. WARAKORN VITAYASEWEE)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MR. THONGCHAI BOONSAK)

29/09/2022

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Request No. LA65-0955

Report No. 6510-0165

## 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. : 05242-05244

SAMPLING DATE : 21/09/2022

SAMPLING TIME : 09:20-09:55

RECEIVED DATE : 23/09/2022

REPORTED DATE : 07/10/2022

TESTED DATE : 23/09/2022-05/10/2022

## STACK DESCRIPTION

Height : 30.00 m  
Diameter : 2.00 m  
Temperature : 221.00 °C  
Air Velocity : 6.70 m/s  
Flow rate<sup>1</sup> : 11.98 m<sup>3</sup>/s  
Moisture Content : 5.22 %

Type of Process : Combustion  
Type of Fuel : Natural Gas  
Operation Capacity : 6 piece /hr.  
Oxygen Content : 1.89 %  
Barometric Pressure : 757.00 mm.Hg  
Atmospheric Temperature : 32.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			1.89 % O <sub>2</sub>	7 % O <sub>2</sub>		
Particulate (TSP)	Isokinetic, Gravimetric	09:20-09:55	1.6	1.2	320	mg/m <sup>3</sup>
Sulfur Dioxide (SO <sub>2</sub> )	Absorption Barium Thorin Titrimetric	09:20-09:50	<3.4	<3.4 <sup>3</sup>	157	mg/m <sup>3</sup>
			<1.3	<1.3 <sup>3</sup>	60	ppm
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Chemical Absorption, Colorimetric	09:30-09:35	46.8	34.2	376	mg/m <sup>3</sup>
			24.9	18.2	200	ppm

## REMARK:

<sup>1</sup> NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)<sup>2</sup> DRY BASIS (25°C, 760 mm.Hg)<sup>3</sup> RESULTS OF ACTUAL %O<sub>2</sub>

\* SAMPLING BY MR. AUDOUMSUB JENJOBING (๖-003-๖-8894)

Examined By



(MISS APIRADEE CHUEN-AROM)

(๖-003-๖-4377)

07/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By



(MR. THONGCHAI BOONSAK)

(๖-003-๖-5618)

07/10/2022

COPY

Request No. LA65-0925

Report No. 6509-0528

## 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. : 04832-04834  
 SAMPLING DATE : 13/09/2022 SAMPLING TIME : 10:40-11:30  
 RECEIVED DATE : 15/09/2022 REPORTED DATE : 29/09/2022  
 TESTED DATE : 15-21/09/2022  
 STACK DESCRIPTION

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 :	9.08	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	4.33	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.02	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Isokinetic, Titrimetric	10:50-11:30	<0.05 <0.01	100 25	mg/m <sup>3</sup> ppm
Sulfur Dioxide (SO <sub>2</sub> )	Absorption Barium Thorin Titrimetric	11:00-11:30	<3.4 <1.3	1,310 500	mg/m <sup>3</sup> ppm
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Chemical Absorption, Colorimetric	11:00-11:05	9.2 4.9	- -	mg/m <sup>3</sup> ppm

## 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. WARAKORN VITAYASEWEE (ว-003-ก-7283)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ก-4377)

29/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ก-5618)

29/09/2022

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Request No. LA65-0925

Report No. 6509-0531

## 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. : 04836-04838  
 SAMPLING DATE : 13/09/2022 SAMPLING TIME : 09:50-10:25  
 RECEIVED DATE : 15/09/2022 REPORTED DATE : 29/09/2022  
 TESTED DATE : 15-21/09/2022

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.46	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	6.96	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	1.10	m <sup>3</sup> /s	Atmospheric Temperature :	30.40 °C
Moisture Content :	2.78	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide (SO <sub>2</sub> )	Absorption Barium Thorin Titrimetric	09:50-10:20	<3.4	1,310	mg/m <sup>3</sup>
			<1.3	500	ppm
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Isokinetic, Titrimetric	09:50-10:25	<0.05	100	mg/m <sup>3</sup>
			<0.01	25	ppm
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Chemical Absorption, Colorimetric	10:00-10:05	8.7	-	mg/m <sup>3</sup>
			4.6	-	ppm

## 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. WARAKORN VITAYASEWEE (ว-003-ก-7283)

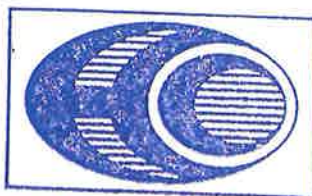
Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

29/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/09/2022

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Request No. LA65-0925

Report No. 6509-0533

## 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-03) SAMPLE NO. : 04840 , 04842-04843  
SAMPLING DATE : 13/09/2022 SAMPLING TIME : 13:00-13:30  
RECEIVED DATE : 15/09/2022 REPORTED DATE : 29/09/2022  
TESTED DATE : 15-21/09/2022

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Wet Scrubber
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	11.18	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	4.09	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	2.91	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Sulfur Dioxide (SO <sub>2</sub> )	Barium Thorin Titrimetric	13:00-13:30	<3.4	1,310	mg/m <sup>3</sup>
			<1.3	500	ppm
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Isokinetic, Titrimetric	13:00-13:30	1.08	100	mg/m <sup>3</sup>
			0.27	25	ppm
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Chemical Absorption, Colorimetric	13:10-13:15	3.8	-	mg/m <sup>3</sup>
			2.0	-	ppm

## 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. WARAKORN VITAYASEWEE (ว-003-ค-7283)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

29/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/09/2022

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Request No. LA65-0925

Report No. 6509-0534

## 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-03)

SAMPLING DATE : 13/09/2022

RECEIVED DATE : 15/09/2022

TESTED DATE : 15/09/2022-17/10/2022

SAMPLE NO. : 04841

SAMPLING TIME : 13:00-13:30

REPORTED DATE : 18/10/2022

## STACK DESCRIPTION

Height :	10.00	m	Type of Process :	Wet Scrubber
Diameter :	0.70	m	Type of Fuel :	-
Temperature :	30.00	°C	Oxygen Content :	20.90 %
Air Velocity :	11.18	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>1</sup> :	4.09	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	2.91	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Nitric acid <sup>2</sup>	Ion Chromatography	13:00-13:30	<0.026	mg/m <sup>3</sup>
(HNO <sub>3</sub> )			<0.010	ppm

**REMARK:**<sup>1</sup> DRY BASIS ( 25°C, 760 mm.Hg)<sup>2</sup> SAMPLING BY EASTERN THAI CONSULTING 1992 CO.,LTD.

(SAMPLING BY MR. WARAKORN VITAYASEWEE)

ANALYSED BY THE ENVIRONMENTAL CENTER RAJABHAT SUAN DUSIT UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

18/10/2022

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Request No. LA65-0928

Report No. 6509-0252

## 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. : 05259, 04869-04870  
 SAMPLING DATE : 13/09/2022 SAMPLING TIME : 09:40-10:20  
 RECEIVED DATE : 20/09/2022 REPORTED DATE : 26/09/2022  
 TESTED DATE : 20-22/09/2022  
 STACK DESCRIPTION :

Height :	10.00	m	Type of Process :	Exhaust
Diameter :	0.67	m	Type of Fuel :	-
Temperature :	29.00	°C	Oxygen Content :	20.90 %
Air Velocity :	6.22	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>1/2</sup> :	2.08	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.47	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1/2</sup>	STD <sup>1/1</sup>	UNIT
Sulfur Dioxide (SO <sub>2</sub> )	Absorption Barium Thorin Titrimetric	09:40-10:10	<3.4 <1.3	1,310 500	mg/m <sup>3</sup> ppm
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Isokinetic, Titrimetric	09:40-10:20	1.4 0.4	100 25	mg/m <sup>3</sup> ppm
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Chemical Absorption, Colorimetric	09:50-09:55	3.8 2.0	- -	mg/m <sup>3</sup> ppm

## REMARK:

<sup>1/1</sup> NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)<sup>1/2</sup> DRY BASIS ( 25°C, 760 mm.Hg)

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

Examined By



(MISS APIRADEE CHUEN-AROM)

(จ-003-ค-4377)

26/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By



(MR. THONGCHAI BOONSAK)

(จ-003-ค-5618)

26/09/2022

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Request No. ATR6507039

Report No. 6507-0533 - 6507-0535

## 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 : 15/07/2022 SAMPLE NO. : A65070533 - A65070535  
 TESTED DATE : 15/07/2022-20/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2022	0.083	0.33	mg/m <sup>3</sup>
		12-13/07/2022	0.055	0.33	mg/m <sup>3</sup>
		13-14/07/2022	0.067	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 Klinsohon)

26/07/2022

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Request No. ATR6507039

Report No. 6507-0536 - 6507-0538

## 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 : 15/07/2022 SAMPLE NO. : A65070536 - A65070538  
TESTED DATE : 15/07/2022-23/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	11-12/07/2022	0.01	mg/m <sup>3</sup>
		12-13/07/2022	0.01	mg/m <sup>3</sup>
		13-14/07/2022	< 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)

26/07/2022

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Request No. ATR6509039

Report No. 6509-0673 - 6509-0675

## 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 : 21/09/2022 SAMPLE NO. : A65090673 - A65090675  
 TESTED DATE : 21/09/2022-22/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2022	0.226	0.33	mg/m <sup>3</sup>
		13-14/09/2022	0.295	0.33	mg/m <sup>3</sup>
		14-15/09/2022	0.295	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

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Approved By

(Miss Thanatporn Klinsonon)

29/09/2022

COPY

Request No. ATR6509039

Report No. 6509-0676 - 6509-0678

## 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 : 21/09/2022 SAMPLE NO. : A65090676 - A65090678  
 TESTED DATE : 21/09/2022-27/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2022	< 0.01	mg/m <sup>3</sup>
		13-14/09/2022	< 0.01	mg/m <sup>3</sup>
		14-15/09/2022	< 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  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By

(Miss Thanatporn Klinsopon)

29/09/2022

COPY

Request No. ATR6511052

Report No. 6511-0998 - 6511-1000

## 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 : 25/11/2022 SAMPLE NO. : A65110998 - A65111000  
 TESTED DATE : 25/11/2022-26/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	14-15/11/2022	0.069	0.33	mg/m <sup>3</sup>
		15-16/11/2022	0.128	0.33	mg/m <sup>3</sup>
		16-17/11/2022	0.108	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  
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Approved By

(Miss Thanatporn Klinsopon)

01/12/2022

COPY

Request No. ATR6511052

Report No. 6511-1001 - 6511-1003

## 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 : 25/11/2022 SAMPLE NO. : A65111001 - A65111003  
 TESTED DATE : 25/11/2022-29/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	14-15/11/2022	< 0.01	mg/m <sup>3</sup>
		15-16/11/2022	< 0.01	mg/m <sup>3</sup>
		16-17/11/2022	< 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 อีสเทิร์น ไทย คอนซัลต์ติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
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Approved By .....

(Miss Thanatporn Klinsoyon)

01/12/2022

COPY



Request No. ATR6507039

Report No. 6507-0539 - 6507-0541

## TEST REPORT

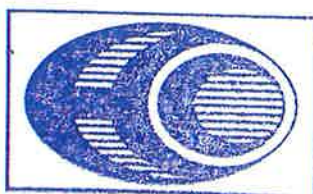
CUSTOMER : Siam Poongsan Metal Co.,LTD.  
 ADDRESS : 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230  
 SAMPLE SOURCE : Siam Poongsan Metal Co.,LTD.  
 SAMPLE NAME : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง  
 RECEIVED DATE : 15/07/2022 SAMPLE NO. : A65070539 - A65070541  
 TESTED DATE : 15/07/2022-20/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2022	0.035	0.33	mg/m <sup>3</sup>
		12-13/07/2022	0.040	0.33	mg/m <sup>3</sup>
		13-14/07/2022	0.056	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 Klinsohon)

26/07/2022

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Request No. ATR6507039

Report No. 6507-0542 - 6507-0544

## 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 : 15/07/2022 SAMPLE NO. : A65070542 - A65070544  
 TESTED DATE : 15/07/2022-23/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	11-12/07/2022	< 0.01	mg/m <sup>3</sup>
		12-13/07/2022	< 0.01	mg/m <sup>3</sup>
		13-14/07/2022	< 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)

26/07/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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COPY

Request No. ATR6509039

Report No. 6509-0667 - 6509-0669

## 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 : 21/09/2022 SAMPLE NO. : A65090667 - A65090669  
 TESTED DATE : 21/09/2022-22/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2022	0.066	0.33	mg/m <sup>3</sup>
		13-14/09/2022	0.057	0.33	mg/m <sup>3</sup>
		14-15/09/2022	0.067	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 อีสเทิร์นไทย คอนซัลติ้ง 1992 จำกัด

Approved By

(Miss Thanatporn Klinsoon)

29/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6509039

Report No. 6509-0670 - 6509-0672

## 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 : 21/09/2022 SAMPLE NO. : A65090670 - A65090672  
 TESTED DATE : 21/09/2022-27/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2022	< 0.01	mg/m <sup>3</sup>
		13-14/09/2022	< 0.01	mg/m <sup>3</sup>
		14-15/09/2022	< 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)



Approved By

(Miss Thanatporn Klinsonpon)

29/09/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
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Request No. ATR6511052

Report No. 6511-1004 - 6511-1006

## 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 : 25/11/2022 SAMPLE NO. : A65111004 - A65111006  
 TESTED DATE : 25/11/2022-26/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	14-15/11/2022	0.054	0.33	mg/m <sup>3</sup>
		15-16/11/2022	0.127	0.33	mg/m <sup>3</sup>
		16-17/11/2022	0.086	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 Thanaporn Klinsohon)

01/12/2022

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Request No. ATR6511052

Report No. 6511-1007 - 6511-1009

## 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 : 25/11/2022 SAMPLE NO. : A65111007 - A65111009  
 TESTED DATE : 25/11/2022-29/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	14-15/11/2022	< 0.01	mg/m <sup>3</sup>
		15-16/11/2022	< 0.01	mg/m <sup>3</sup>
		16-17/11/2022	< 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 Klinsoon)

01/12/2022

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Request No. ATR6507039

Report No. 6507-0545 - 6507-0547

## 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 : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 RECEIVED DATE : 15/07/2022 SAMPLE NO. : A65070545 - A65070547  
 TESTED DATE : 15/07/2022-20/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>/1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	11-12/07/2022	0.047	0.33	mg/m <sup>3</sup>
		12-13/07/2022	0.053	0.33	mg/m <sup>3</sup>
		13-14/07/2022	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)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Miss Thanatporn Klinsohon)

26/07/2022

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Request No. ATR6507039

Report No. 6507-0548 - 6507-0550

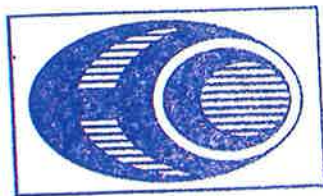
## TEST REPORT

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 : 15/07/2022 SAMPLE NO. : A65070548 - A65070550  
 TESTED DATE : 15/07/2022-23/07/2022 REPORTED DATE : 26/07/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	11-12/07/2022	0.01	mg/m <sup>3</sup>
		12-13/07/2022	< 0.01	mg/m <sup>3</sup>
		13-14/07/2022	< 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 Klinsoon)

26/07/2022

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Request No. ATR6509039

Report No. 6509-0679 - 6509-0681

## 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 : 21/09/2022 SAMPLE NO. : A65090679 - A65090681  
 TESTED DATE : 21/09/2022-22/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>/1</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/09/2022	0.042	0.33	mg/m <sup>3</sup>
		13-14/09/2022	0.053	0.33	mg/m <sup>3</sup>
		14-15/09/2022	0.065	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  
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Approved By

(Miss Thanatporn Klinsoon)

29/09/2022

COPY

Request No. ATR6509039

Report No. 6509-0682 - 6509-0684

## 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 : 21/09/2022 SAMPLE NO. : A65090682 - A65090684  
 TESTED DATE : 21/09/2022-27/09/2022 REPORTED DATE : 29/09/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	12-13/09/2022	< 0.01	mg/m <sup>3</sup>
		13-14/09/2022	< 0.01	mg/m <sup>3</sup>
		14-15/09/2022	< 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)



Approved By

(Miss Thanatporn Klinsoon)

29/09/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6511052

Report No. 6511-1010 - 6511-1012

## 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 : 25/11/2022 SAMPLE NO. : A65111010 - A65111012  
 TESTED DATE : 25/11/2022-26/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	14-15/11/2022	0.051	0.33	mg/m <sup>3</sup>
		15-16/11/2022	0.100	0.33	mg/m <sup>3</sup>
		16-17/11/2022	0.063	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  
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Approved By

(Miss Thanatporn Klinsopon)

01/12/2022

COPY

Request No. ATR6511052

Report No. 6511-1013 - 6511-1015

## 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 : 25/11/2022 SAMPLE NO. : A65111013 - A65111015  
 TESTED DATE : 25/11/2022-29/11/2022 REPORTED DATE : 01/12/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc Oxide	Filtration,ICP-OES Method	14-15/11/2022	< 0.01	mg/m <sup>3</sup>
		15-16/11/2022	< 0.01	mg/m <sup>3</sup>
		16-17/11/2022	< 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)

01/12/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-R0762

Report No. R6507-1746 – R6507-1748

## 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  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 17012-17014  
 SAMPLING DATE : 11-14/07/2022  
 RECEIVED DATE : 14/07/2022  
 REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
10:00 - 11:00 <sup>2</sup>	0.010	0.016	0.017	ppm
11:00 - 12:00	0.011	0.017	0.019	ppm
12:00 - 13:00	0.010	0.017	0.018	ppm
13:00 - 14:00	0.012	0.018	0.022	ppm
14:00 - 15:00	0.018	0.022	0.027	ppm
15:00 - 16:00	0.019	0.025	0.029	ppm
16:00 - 17:00	0.021	0.025	0.020	ppm
17:00 - 18:00	0.018	0.021	0.021	ppm
18:00 - 19:00	0.019	0.020	0.018	ppm
19:00 - 20:00	0.018	0.022	0.017	ppm
20:00 - 21:00	0.016	0.022	0.017	ppm
21:00 - 22:00	0.028	0.020	0.013	ppm
22:00 - 23:00	0.014	0.019	0.013	ppm
23:00 - 00:00	0.012	0.020	0.013	ppm
00:00 - 01:00	0.012	0.020	0.012	ppm
01:00 - 02:00	0.013	0.019	0.011	ppm
02:00 - 03:00	0.013	0.017	0.011	ppm
03:00 - 04:00	0.013	0.017	0.010	ppm
04:00 - 05:00	0.014	0.019	0.010	ppm
05:00 - 06:00	0.014	0.018	0.010	ppm
06:00 - 07:00	0.015	0.017	0.011	ppm
07:00 - 08:00	0.016	0.017	0.012	ppm
08:00 - 09:00	0.016	0.018	0.014	ppm
09:00 - 10:00	0.016	0.017	0.018	ppm
Maximum 1 hr.	0.028	0.025	0.029	ppm
Average 24 hr.	0.015	0.019	0.016	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 Boonachum)



Approved By



(MR. THONGCHAI BOONSAK)

14/07/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-R0960

Report No. R6509-4138 - R6509-4140

## 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  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 28227-28229  
SAMPLING DATE : 12-15/09/2022  
RECEIVED DATE : 15/09/2022  
REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
10:00 - 11:00 <sup>/2</sup>	0.009	0.009	0.011	ppm
11:00 - 12:00	0.009	0.012	0.016	ppm
12:00 - 13:00	0.008	0.015	0.018	ppm
13:00 - 14:00	0.007	0.014	0.018	ppm
14:00 - 15:00	0.007	0.014	0.017	ppm
15:00 - 16:00	0.010	0.014	0.017	ppm
16:00 - 17:00	0.017	0.011	0.017	ppm
17:00 - 18:00	0.037	0.009	0.015	ppm
18:00 - 19:00	0.026	0.009	0.005	ppm
19:00 - 20:00	0.005	0.008	0.006	ppm
20:00 - 21:00	0.017	0.023	0.019	ppm
21:00 - 22:00	0.010	0.012	0.018	ppm
22:00 - 23:00	0.008	0.011	0.011	ppm
23:00 - 00:00	0.006	0.012	0.008	ppm
00:00 - 01:00	0.005	0.011	0.012	ppm
01:00 - 02:00	0.004	0.011	0.018	ppm
02:00 - 03:00	0.004	0.009	0.016	ppm
03:00 - 04:00	0.004	0.009	0.024	ppm
04:00 - 05:00	0.004	0.006	0.017	ppm
05:00 - 06:00	0.012	0.015	0.014	ppm
06:00 - 07:00	0.017	0.016	0.011	ppm
07:00 - 08:00	0.013	0.016	0.015	ppm
08:00 - 09:00	0.010	0.013	0.015	ppm
09:00 - 10:00	0.008	0.008	0.009	ppm
Maximum 1 hr.	0.037	0.023	0.024	ppm
Average 24 hr.	0.011	0.012	0.014	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 Phairatjan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By *Thongchai Boonsak*

(MR. THONGCHAI BOONSAK)

22/09/2022

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COPY

Request No. LA65-R1187

Report No. R6511-3324 - R6511-3326

## 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  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model 200E S/N ENOAI200E01526

SAMPLE NO. : 34546-34548  
 SAMPLING DATE : 14-17/11/2022  
 RECEIVED DATE : 17/11/2022  
 REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
09:00 - 10:00 <sup>/2</sup>	0.025	0.025	0.011	ppm
10:00 - 11:00	0.013	0.002	0.005	ppm
11:00 - 12:00	0.011	0.005	0.004	ppm
12:00 - 13:00	0.010	0.005	0.014	ppm
13:00 - 14:00	0.006	0.014	0.002	ppm
14:00 - 15:00	0.013	0.012	0.019	ppm
15:00 - 16:00	0.004	0.034	0.046	ppm
16:00 - 17:00	0.036	0.033	0.076	ppm
17:00 - 18:00	0.019	0.062	0.077	ppm
18:00 - 19:00	0.080	0.094	0.070	ppm
19:00 - 20:00	0.053	0.091	0.070	ppm
20:00 - 21:00	0.048	0.098	0.067	ppm
21:00 - 22:00	0.042	0.054	0.060	ppm
22:00 - 23:00	0.030	0.040	0.056	ppm
23:00 - 00:00	0.050	0.041	0.045	ppm
00:00 - 01:00	0.040	0.047	0.041	ppm
01:00 - 02:00	0.035	0.050	0.039	ppm
02:00 - 03:00	0.033	0.053	0.046	ppm
03:00 - 04:00	0.030	0.043	0.039	ppm
04:00 - 05:00	0.043	0.028	0.036	ppm
05:00 - 06:00	0.030	0.025	0.045	ppm
06:00 - 07:00	0.037	0.058	0.045	ppm
07:00 - 08:00	0.047	0.074	0.050	ppm
08:00 - 09:00	0.019	0.049	0.053	ppm
Maximum 1 hr.	0.080	0.098	0.077	ppm
Average 24 hr.	0.031	0.043	0.042	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. Tummanee Pritonkham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MS. THANATPORN KLINSOPON)

30/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-R0762

Report No. R6507-1740 – R6507-1742

## 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 : Ecotech Model ML9841A S/N 03-0029

SAMPLE NO. : 17006-17008  
SAMPLING DATE : 11-14/07/2022  
RECEIVED DATE : 14/07/2022  
REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
10:00 - 11:00 <sup>2</sup>	0.002	0.004	0.004	ppm
11:00 - 12:00	0.002	0.005	0.005	ppm
12:00 - 13:00	0.003	0.004	0.007	ppm
13:00 - 14:00	0.003	0.003	0.011	ppm
14:00 - 15:00	0.004	0.004	0.015	ppm
15:00 - 16:00	0.005	0.004	0.005	ppm
16:00 - 17:00	0.006	0.006	0.006	ppm
17:00 - 18:00	0.006	0.006	0.006	ppm
18:00 - 19:00	0.005	0.006	0.008	ppm
19:00 - 20:00	0.007	0.004	0.006	ppm
20:00 - 21:00	0.009	0.006	0.007	ppm
21:00 - 22:00	0.007	0.007	0.007	ppm
22:00 - 23:00	0.005	0.007	0.006	ppm
23:00 - 00:00	0.005	0.005	0.006	ppm
00:00 - 01:00	0.005	0.009	0.007	ppm
01:00 - 02:00	0.003	0.007	0.007	ppm
02:00 - 03:00	0.003	0.007	0.006	ppm
03:00 - 04:00	0.003	0.004	0.005	ppm
04:00 - 05:00	0.003	0.006	0.005	ppm
05:00 - 06:00	0.004	0.007	0.005	ppm
06:00 - 07:00	0.004	0.004	0.005	ppm
07:00 - 08:00	0.005	0.004	0.005	ppm
08:00 - 09:00	0.006	0.006	0.005	ppm
09:00 - 10:00	0.005	0.006	0.005	ppm
Maximum 1 hr.	0.009	0.009	0.015	ppm
Average 24 hr.	0.005	0.005	0.006	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. Tummanut Phongkham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

14/07/2022

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Request No. LA65-R0960

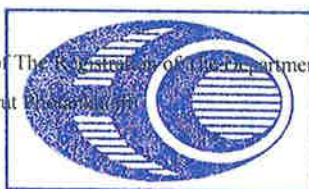
Report No. R6509-4132 - R6509-4134

## 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. : 28221-28223  
SAMPLING DATE : 12-15/09/2022  
RECEIVED DATE : 15/09/2022  
REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
09:00 - 10:00 <sup>2</sup>	0.011	0.006	0.005	ppm
10:00 - 11:00	0.011	0.007	0.003	ppm
11:00 - 12:00	0.011	0.008	0.006	ppm
12:00 - 13:00	0.007	0.009	0.009	ppm
13:00 - 14:00	0.005	0.007	0.008	ppm
14:00 - 15:00	0.003	0.008	0.006	ppm
15:00 - 16:00	<0.001	0.010	0.004	ppm
16:00 - 17:00	0.001	0.008	0.013	ppm
17:00 - 18:00	0.002	0.003	0.013	ppm
18:00 - 19:00	0.012	0.005	0.011	ppm
19:00 - 20:00	0.011	0.010	0.013	ppm
20:00 - 21:00	0.011	0.008	0.011	ppm
21:00 - 22:00	0.010	0.005	0.010	ppm
22:00 - 23:00	0.012	0.014	0.011	ppm
23:00 - 00:00	0.015	0.019	0.012	ppm
00:00 - 01:00	0.016	0.017	0.007	ppm
01:00 - 02:00	0.014	0.020	0.005	ppm
02:00 - 03:00	0.014	0.015	0.005	ppm
03:00 - 04:00	0.012	0.011	0.005	ppm
04:00 - 05:00	0.012	0.012	0.005	ppm
05:00 - 06:00	0.012	0.011	0.007	ppm
06:00 - 07:00	0.010	0.009	0.005	ppm
07:00 - 08:00	0.002	0.009	0.004	ppm
08:00 - 09:00	0.004	0.011	0.004	ppm
Maximum 1 hr.	0.016	0.020	0.013	ppm
Average 24 hr.	0.009	0.010	0.008	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 Boonsak)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

22/09/2022

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Request No. LA65-R1187

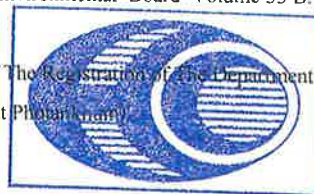
Report No. R6511-3330 - R6511-3332

## 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 200A S/N ENOAI200E03217

SAMPLE NO. : 34552-34554  
SAMPLING DATE : 14-17/11/2022  
RECEIVED DATE : 17/11/2022  
REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
09:00 - 10:00 <sup>/2</sup>	0.010	0.007	0.012	ppm
10:00 - 11:00	0.009	0.014	0.008	ppm
11:00 - 12:00	0.007	0.015	0.008	ppm
12:00 - 13:00	0.002	0.008	0.010	ppm
13:00 - 14:00	0.001	0.021	0.010	ppm
14:00 - 15:00	0.012	0.021	0.006	ppm
15:00 - 16:00	0.002	0.010	0.007	ppm
16:00 - 17:00	0.001	0.008	0.007	ppm
17:00 - 18:00	0.001	0.007	0.009	ppm
18:00 - 19:00	0.002	0.011	0.008	ppm
19:00 - 20:00	0.007	0.015	0.008	ppm
20:00 - 21:00	0.008	0.015	0.006	ppm
21:00 - 22:00	0.008	0.016	0.007	ppm
22:00 - 23:00	0.007	0.012	0.006	ppm
23:00 - 00:00	0.009	0.014	0.006	ppm
00:00 - 01:00	0.007	0.011	0.005	ppm
01:00 - 02:00	0.006	0.011	0.004	ppm
02:00 - 03:00	0.005	0.017	0.006	ppm
03:00 - 04:00	0.007	0.008	0.004	ppm
04:00 - 05:00	0.006	0.009	0.005	ppm
05:00 - 06:00	0.003	0.009	0.007	ppm
06:00 - 07:00	0.010	0.007	0.005	ppm
07:00 - 08:00	0.005	0.013	0.006	ppm
08:00 - 09:00	0.004	0.010	0.006	ppm
Maximum 1 hr.	0.012	0.021	0.012	ppm
Average 24 hr.	0.006	0.012	0.007	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 Phibansam)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MS. THANATPORN KLINSOPON)

30/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. LA65-R0762

Report No. R6507-I734 - R6507-I736

## 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. : 17000-17002  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 11-14/07/2022  
 INSTRUMENT : API Model T200 S/N 2004 RECEIVED DATE : 14/07/2022  
 REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
11:00 - 12:00 <sup>/2</sup>	0.002	0.006	0.008	ppm
12:00 - 13:00	0.002	0.006	0.007	ppm
13:00 - 14:00	0.005	0.007	0.006	ppm
14:00 - 15:00	0.004	0.008	0.006	ppm
15:00 - 16:00	0.005	0.007	0.005	ppm
16:00 - 17:00	0.005	0.008	0.006	ppm
17:00 - 18:00	0.005	0.008	0.009	ppm
18:00 - 19:00	0.007	0.008	0.007	ppm
19:00 - 20:00	0.008	0.005	0.008	ppm
20:00 - 21:00	0.008	0.008	0.010	ppm
21:00 - 22:00	0.005	0.004	0.010	ppm
22:00 - 23:00	0.007	0.005	0.010	ppm
23:00 - 00:00	0.006	0.005	0.009	ppm
00:00 - 01:00	0.006	0.009	0.008	ppm
01:00 - 02:00	0.006	0.006	0.008	ppm
02:00 - 03:00	0.005	0.004	0.009	ppm
03:00 - 04:00	0.004	0.003	0.008	ppm
04:00 - 05:00	0.004	0.003	0.007	ppm
05:00 - 06:00	0.003	0.005	0.009	ppm
06:00 - 07:00	0.003	0.003	0.009	ppm
07:00 - 08:00	0.002	0.003	0.009	ppm
08:00 - 09:00	0.002	0.003	0.006	ppm
09:00 - 10:00	0.003	0.006	0.005	ppm
10:00 - 11:00	0.004	0.007	0.006	ppm
Maximum 1 hr.	0.008	0.009	0.010	ppm
Average 24 hr.	0.005	0.006	0.008	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 Phrakhamthong)



Approved By

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

14/07/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
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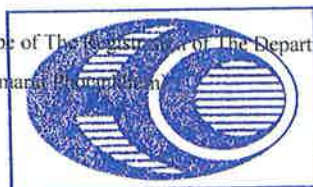
Request No. LA65-R0960

Report No. R6509-4126 - R6509-4128

## 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. : 28215-28217  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 12-15/09/2022  
 INSTRUMENT : Environnement SA. Model AC32e S/N 693 RECEIVED DATE : 15/09/2022  
 REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
10:00 - 11:00 <sup>2</sup>	0.017	0.024	0.021	ppm
11:00 - 12:00	0.015	0.022	0.022	ppm
12:00 - 13:00	0.013	0.017	0.020	ppm
13:00 - 14:00	0.013	0.023	0.017	ppm
14:00 - 15:00	0.018	0.015	0.023	ppm
15:00 - 16:00	0.018	0.018	0.017	ppm
16:00 - 17:00	0.018	0.025	0.016	ppm
17:00 - 18:00	0.019	0.027	0.015	ppm
18:00 - 19:00	0.020	0.027	0.016	ppm
19:00 - 20:00	0.019	0.025	0.017	ppm
20:00 - 21:00	0.017	0.026	0.015	ppm
21:00 - 22:00	0.015	0.023	0.012	ppm
22:00 - 23:00	0.015	0.023	0.011	ppm
23:00 - 00:00	0.016	0.020	0.011	ppm
00:00 - 01:00	0.015	0.019	0.010	ppm
01:00 - 02:00	0.014	0.018	0.013	ppm
02:00 - 03:00	0.014	0.017	0.025	ppm
03:00 - 04:00	0.014	0.017	0.025	ppm
04:00 - 05:00	0.012	0.016	0.031	ppm
05:00 - 06:00	0.011	0.016	0.026	ppm
06:00 - 07:00	0.014	0.016	0.030	ppm
07:00 - 08:00	0.017	0.013	0.030	ppm
08:00 - 09:00	0.014	0.010	0.031	ppm
09:00 - 10:00	0.017	0.012	0.024	ppm
Maximum 1 hr.	0.020	0.027	0.031	ppm
Average 24 hr.	0.016	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. Tummarat Promthanan)Approved By: *Thongchai Boonsak*  
(MR. THONGCHAI BOONSAK)

22/09/2022

 บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. LA65-R1187

Report No. R6511-3336 - R6511-3338

## 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  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : Environnement SA. Model AC32e S/N 693

SAMPLE NO. : 34558-34560  
 SAMPLING DATE : 14-17/11/2022  
 RECEIVED DATE : 17/11/2022  
 REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
10:00 - 11:00 <sup>12</sup>	0.018	0.016	0.014	ppm
11:00 - 12:00	0.016	0.013	0.010	ppm
12:00 - 13:00	0.014	0.014	0.010	ppm
13:00 - 14:00	0.011	0.012	0.009	ppm
14:00 - 15:00	0.012	0.010	0.008	ppm
15:00 - 16:00	0.013	0.007	0.009	ppm
16:00 - 17:00	0.013	0.007	0.007	ppm
17:00 - 18:00	0.012	0.006	0.008	ppm
18:00 - 19:00	0.011	0.007	0.009	ppm
19:00 - 20:00	0.010	0.008	0.009	ppm
20:00 - 21:00	0.011	0.007	0.010	ppm
21:00 - 22:00	0.009	0.006	0.009	ppm
22:00 - 23:00	0.007	0.010	0.012	ppm
23:00 - 00:00	0.012	0.012	0.012	ppm
00:00 - 01:00	0.011	0.013	0.014	ppm
01:00 - 02:00	0.010	0.012	0.010	ppm
02:00 - 03:00	0.012	0.010	0.008	ppm
03:00 - 04:00	0.009	0.015	0.011	ppm
04:00 - 05:00	0.006	0.017	0.011	ppm
05:00 - 06:00	0.003	0.012	0.012	ppm
06:00 - 07:00	0.003	0.020	0.020	ppm
07:00 - 08:00	0.004	0.019	0.018	ppm
08:00 - 09:00	0.005	0.018	0.021	ppm
09:00 - 10:00	0.014	0.018	0.019	ppm
Maximum 1 hr.	0.018	0.020	0.021	ppm
Average 24 hr.	0.010	0.012	0.012	ppm
Standard (1 hr.) <sup>11</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>11</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>12</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarat P. Pataak (um))

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MS. THANATPORN KLINSOPON)

30/11/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-R0762

Report No. R6507-1743 – R6507-1745

## 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  
 DETERMINATION METHOD : UV-Fluorescence  
 INSTRUMENT : API Model M100E S/N 3220

SAMPLE NO. : 17009-17011  
 SAMPLING DATE : 11-14/07/2022  
 RECEIVED DATE : 14/07/2022  
 REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
10:00 - 11:00 <sup>3</sup>	0.007	0.005	0.005	ppm
11:00 - 12:00	0.007	0.005	0.005	ppm
12:00 - 13:00	0.008	0.004	0.004	ppm
13:00 - 14:00	0.008	0.004	0.004	ppm
14:00 - 15:00	0.008	0.004	0.005	ppm
15:00 - 16:00	0.007	0.004	0.005	ppm
16:00 - 17:00	0.007	0.004	0.004	ppm
17:00 - 18:00	0.007	0.005	0.005	ppm
18:00 - 19:00	0.007	0.005	0.007	ppm
19:00 - 20:00	0.007	0.005	0.005	ppm
20:00 - 21:00	0.008	0.006	0.005	ppm
21:00 - 22:00	0.008	0.006	0.006	ppm
22:00 - 23:00	0.007	0.006	0.005	ppm
23:00 - 00:00	0.007	0.006	0.006	ppm
00:00 - 01:00	0.006	0.006	0.007	ppm
01:00 - 02:00	0.006	0.007	0.007	ppm
02:00 - 03:00	0.006	0.006	0.006	ppm
03:00 - 04:00	0.006	0.005	0.006	ppm
04:00 - 05:00	0.006	0.006	0.007	ppm
05:00 - 06:00	0.005	0.006	0.007	ppm
06:00 - 07:00	0.005	0.006	0.007	ppm
07:00 - 08:00	0.005	0.005	0.007	ppm
08:00 - 09:00	0.006	0.006	0.007	ppm
09:00 - 10:00	0.005	0.005	0.007	ppm
Maximum 1 hr.	0.008	0.007	0.007	ppm
Average 24 hr.	0.007	0.005	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. Tummarat Pholadkum)Approved By: Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

19/07/2022

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Request No. LA65-R0960

Report No. R6509-4135 - R6509-4137

## 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  
DETERMINATION METHOD : UV-Fluorescence  
INSTRUMENT : API Model T100 S/N 1607

SAMPLE NO. : 28224-28226  
SAMPLING DATE : 12-15/09/2022  
RECEIVED DATE : 15/09/2022  
REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
10:00 - 11:00 <sup>/3</sup>	0.004	0.002	0.002	ppm
11:00 - 12:00	0.003	0.002	0.002	ppm
12:00 - 13:00	0.002	0.002	0.002	ppm
13:00 - 14:00	0.002	0.002	0.002	ppm
14:00 - 15:00	0.001	0.002	0.002	ppm
15:00 - 16:00	0.002	0.003	0.002	ppm
16:00 - 17:00	0.002	0.003	0.002	ppm
17:00 - 18:00	0.003	0.003	0.002	ppm
18:00 - 19:00	0.004	0.003	0.002	ppm
19:00 - 20:00	0.003	0.003	0.002	ppm
20:00 - 21:00	0.004	0.003	0.002	ppm
21:00 - 22:00	0.001	0.004	0.002	ppm
22:00 - 23:00	0.003	0.003	0.002	ppm
23:00 - 00:00	0.004	0.003	0.002	ppm
00:00 - 01:00	0.004	0.003	0.002	ppm
01:00 - 02:00	0.003	0.003	0.002	ppm
02:00 - 03:00	0.003	0.003	0.002	ppm
03:00 - 04:00	0.004	0.003	0.002	ppm
04:00 - 05:00	0.003	0.003	0.002	ppm
05:00 - 06:00	0.003	0.003	0.001	ppm
06:00 - 07:00	0.004	0.003	0.001	ppm
07:00 - 08:00	0.003	0.003	0.002	ppm
08:00 - 09:00	0.004	0.002	0.002	ppm
09:00 - 10:00	0.002	0.002	0.002	ppm
Maximum 1 hr.	0.004	0.004	0.002	ppm
Average 24 hr.	0.003	0.003	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. Tummaru Boonsak)Approved By *Thongchai Boonsak*

(MR. THONGCHAI BOONSAK)

22/09/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Request No. LA65-R1187

Report No. R6511-3321 - R6511-3323

## 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\* : Sulfur Dioxide  
 DETERMINATION METHOD : UV-Fluorescence  
 INSTRUMENT : API Model 100A S/N ESOAIT10003031

SAMPLE NO. : 34543-34545  
 SAMPLING DATE : 14-17/11/2022  
 RECEIVED DATE : 17/11/2022  
 REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
09:00 - 10:00 <sup>/3</sup>	0.004	0.003	0.003	ppm
10:00 - 11:00	0.004	0.003	0.003	ppm
11:00 - 12:00	0.004	0.003	0.003	ppm
12:00 - 13:00	0.004	0.003	0.003	ppm
13:00 - 14:00	0.004	0.003	0.003	ppm
14:00 - 15:00	0.003	0.003	0.003	ppm
15:00 - 16:00	0.003	0.003	0.004	ppm
16:00 - 17:00	0.004	0.003	0.004	ppm
17:00 - 18:00	0.004	0.003	0.004	ppm
18:00 - 19:00	0.005	0.003	0.004	ppm
19:00 - 20:00	0.004	0.003	0.005	ppm
20:00 - 21:00	0.004	0.004	0.004	ppm
21:00 - 22:00	0.004	0.003	0.005	ppm
22:00 - 23:00	0.004	0.003	0.005	ppm
23:00 - 00:00	0.004	0.004	0.005	ppm
00:00 - 01:00	0.004	0.004	0.005	ppm
01:00 - 02:00	0.004	0.004	0.005	ppm
02:00 - 03:00	0.004	0.004	0.004	ppm
03:00 - 04:00	0.004	0.003	0.004	ppm
04:00 - 05:00	0.004	0.004	0.004	ppm
05:00 - 06:00	0.004	0.003	0.004	ppm
06:00 - 07:00	0.004	0.004	0.004	ppm
07:00 - 08:00	0.004	0.004	0.005	ppm
08:00 - 09:00	0.004	0.004	0.005	ppm
Maximum 1 hr.	0.005	0.004	0.005	ppm
Average 24 hr.	0.004	0.003	0.004	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 Phadumwan)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

30/11/2022

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Request No. LA65-R0762

Report No. R6507-1737 - R6507-1739

## 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 M100E S/N 603

SAMPLE NO. : 17003-17005  
SAMPLING DATE : 11-14/07/2022  
RECEIVED DATE : 14/07/2022  
REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
10:00 - 11:00 <sup>3</sup>	0.013	0.012	0.019	ppm
11:00 - 12:00	0.014	0.012	0.019	ppm
12:00 - 13:00	0.012	0.012	0.020	ppm
13:00 - 14:00	0.011	0.013	0.020	ppm
14:00 - 15:00	0.011	0.013	0.019	ppm
15:00 - 16:00	0.010	0.012	0.019	ppm
16:00 - 17:00	0.011	0.012	0.021	ppm
17:00 - 18:00	0.011	0.012	0.019	ppm
18:00 - 19:00	0.010	0.015	0.019	ppm
19:00 - 20:00	0.010	0.018	0.019	ppm
20:00 - 21:00	0.010	0.018	0.019	ppm
21:00 - 22:00	0.011	0.018	0.019	ppm
22:00 - 23:00	0.010	0.018	0.020	ppm
23:00 - 00:00	0.011	0.018	0.021	ppm
00:00 - 01:00	0.011	0.018	0.020	ppm
01:00 - 02:00	0.010	0.019	0.020	ppm
02:00 - 03:00	0.011	0.019	0.020	ppm
03:00 - 04:00	0.011	0.019	0.020	ppm
04:00 - 05:00	0.011	0.019	0.020	ppm
05:00 - 06:00	0.011	0.019	0.021	ppm
06:00 - 07:00	0.011	0.019	0.021	ppm
07:00 - 08:00	0.012	0.019	0.021	ppm
08:00 - 09:00	0.012	0.019	0.021	ppm
09:00 - 10:00	0.012	0.019	0.021	ppm
Maximum 1 hr.	0.014	0.019	0.021	ppm
Average 24 hr.	0.011	0.016	0.020	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 Photankham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: *Thongchai Boonsak*

(MR. THONGCHAI BOONSAK)

19/07/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-R0960

Report No. R6509-4129 - R6509-4131

## 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 M100E S/N 3139

SAMPLE NO. : 28218-28220  
SAMPLING DATE : 12-15/09/2022  
RECEIVED DATE : 15/09/2022  
REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
09:00 - 10:00 <sup>13</sup>	<0.001	<0.001	0.001	ppm
10:00 - 11:00	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	0.001	<0.001	ppm
08:00 - 09:00	<0.001	0.001	0.001	ppm
Maximum 1 hr.	0.001	0.001	0.001	ppm
Average 24 hr.	<0.001	0.001	<0.001	ppm
Standard (1 hr.) <sup>11</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>12</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>11</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E.2544 (2001)<sup>12</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>13</sup> Start Time\* Parameter Outside The Scope of The Registration of the Department of Industrial Works  
(Measurement By Mr. Tummarat Phrasakulthong)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MR. THONGCHAI BOONSAK)

22/09/2022

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

COPY

Request No. LA65-R1187

Report No. R6511-3327 - R6511-3329

## 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 MI00E S/N 603

SAMPLE NO. : 34549-34551  
SAMPLING DATE : 14-17/11/2022  
RECEIVED DATE : 17/11/2022  
REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
09:00 - 10:00 <sup>/3</sup>	0.024	0.025	0.025	ppm
10:00 - 11:00	0.024	0.025	0.025	ppm
11:00 - 12:00	0.024	0.025	0.025	ppm
12:00 - 13:00	0.023	0.025	0.025	ppm
13:00 - 14:00	0.023	0.025	0.025	ppm
14:00 - 15:00	0.025	0.025	0.025	ppm
15:00 - 16:00	0.025	0.025	0.026	ppm
16:00 - 17:00	0.025	0.025	0.026	ppm
17:00 - 18:00	0.025	0.025	0.026	ppm
18:00 - 19:00	0.025	0.025	0.026	ppm
19:00 - 20:00	0.025	0.025	0.026	ppm
20:00 - 21:00	0.025	0.025	0.026	ppm
21:00 - 22:00	0.025	0.025	0.026	ppm
22:00 - 23:00	0.025	0.025	0.027	ppm
23:00 - 00:00	0.025	0.025	0.027	ppm
00:00 - 01:00	0.025	0.025	0.027	ppm
01:00 - 02:00	0.025	0.026	0.027	ppm
02:00 - 03:00	0.025	0.026	0.027	ppm
03:00 - 04:00	0.026	0.026	0.027	ppm
04:00 - 05:00	0.026	0.025	0.026	ppm
05:00 - 06:00	0.025	0.026	0.026	ppm
06:00 - 07:00	0.025	0.026	0.026	ppm
07:00 - 08:00	0.026	0.026	0.026	ppm
08:00 - 09:00	0.025	0.026	0.026	ppm
Maximum 1 hr.	0.026	0.026	0.027	ppm
Average 24 hr.	0.025	0.025	0.026	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 Pongpanon)Approved By: 

(MS. THANATPORN KLINSOPON)

30/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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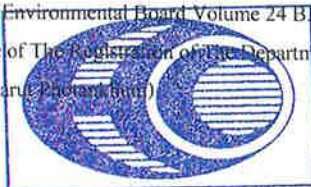
Request No. LA65-R0762

Report No. R6507-1731 - R6507-1733

## 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 : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังห่างประมาณ 0.5 กม.  
 PARAMETER\* : Sulfur Dioxide SAMPLE NO. : 16997-16999  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 11-14/07/2022  
 INSTRUMENT : API Model T100 S/N 5700 RECEIVED DATE : 14/07/2022  
 REPORTED DATE : 19/07/2022

TIME / DATE	11-12/07/2022	12-13/07/2022	13-14/07/2022	UNIT
11:00 - 12:00 <sup>/3</sup>	0.007	0.007	0.006	ppm
12:00 - 13:00	0.007	0.007	0.006	ppm
13:00 - 14:00	0.007	0.006	0.006	ppm
14:00 - 15:00	0.007	0.007	0.006	ppm
15:00 - 16:00	0.007	0.007	0.006	ppm
16:00 - 17:00	0.006	0.006	0.006	ppm
17:00 - 18:00	0.007	0.006	0.006	ppm
18:00 - 19:00	0.006	0.006	0.006	ppm
19:00 - 20:00	0.006	0.006	0.006	ppm
20:00 - 21:00	0.006	0.006	0.006	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	0.007	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	0.007	0.006	0.006	ppm
08:00 - 09:00	0.006	0.006	0.006	ppm
09:00 - 10:00	0.007	0.007	0.006	ppm
10:00 - 11:00	0.007	0.007	0.007	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 Phatthanakorn)Approved By: *Thongchai Boonsak*  
(MR. THONGCHAI BOONSAK)

19/07/2022

 บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
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Request No. LA65-R0960

Report No. R6509-4123 - R6509-4125

## 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 : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบังท่าประมาณ 0.5 กม.  
 PARAMETER\* : Sulfur Dioxide  
 DETERMINATION METHOD : UV-Fluorescence  
 INSTRUMENT : Environnement SA. Model AF22e S/N 913

SAMPLE NO. : 28212-28214  
 SAMPLING DATE : 12-15/09/2022  
 RECEIVED DATE : 15/09/2022  
 REPORTED DATE : 22/09/2022

TIME / DATE	12-13/09/2022	13-14/09/2022	14-15/09/2022	UNIT
10:00 - 11:00 <sup>13</sup>	0.001	0.001	0.001	ppm
11:00 - 12:00	0.001	0.002	0.001	ppm
12:00 - 13:00	0.001	0.002	0.001	ppm
13:00 - 14:00	0.002	0.002	0.001	ppm
14:00 - 15:00	0.002	0.002	0.002	ppm
15:00 - 16:00	0.001	0.002	0.002	ppm
16:00 - 17:00	0.002	0.002	0.001	ppm
17:00 - 18:00	0.001	0.002	0.001	ppm
18:00 - 19:00	0.001	0.002	0.002	ppm
19:00 - 20:00	0.002	0.002	0.002	ppm
20:00 - 21:00	0.002	0.002	0.002	ppm
21:00 - 22:00	0.001	0.002	0.002	ppm
22:00 - 23:00	0.001	0.002	0.002	ppm
23:00 - 00:00	0.001	0.001	0.001	ppm
00:00 - 01:00	0.001	0.001	0.002	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	0.002	0.001	0.002	ppm
04:00 - 05:00	0.001	0.002	0.001	ppm
05:00 - 06:00	0.001	0.002	0.001	ppm
06:00 - 07:00	0.001	0.001	0.001	ppm
07:00 - 08:00	0.001	0.001	0.002	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.	0.002	0.002	0.002	ppm
Average 24 hr.	0.001	0.002	0.001	ppm
Standard (1 hr.) <sup>11</sup>	0.30	0.30	0.30	ppm
Standard (Average 24 hr.) <sup>12</sup>	0.12	0.12	0.12	ppm

REMARK : <sup>11</sup> Notification of The National Environmental Board Volume 12 B.E. 2538 (1995) and Volume 21 B.E.2544 (2001)<sup>12</sup> Notification of The National Environmental Board Volume 24 B.E. 2547 (2004)<sup>13</sup> Start Time

\* Parameter Outside The Scope of The Regulation of the Department of Industrial Works  
 (Measurement By Mr. Tummarat Sornkarn)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By *Thongchai Boonsak*

(MR. THONGCHAI BOONSAK)

22/09/2022

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Request No. LA65-R1187

Report No. R6511-3333 - R6511-3335

## 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. : 34555-34557  
 DETERMINATION METHOD : UV-Fluorescence SAMPLING DATE : 14-17/11/2022  
 INSTRUMENT : Environnement SA. Model AF22e S/N 913 RECEIVED DATE : 17/11/2022  
 REPORTED DATE : 30/11/2022

TIME / DATE	14-15/11/2022	15-16/11/2022	16-17/11/2022	UNIT
10:00 - 11:00 <sup>/3</sup>	0.002	0.003	0.003	ppm
11:00 - 12:00	0.002	0.003	0.003	ppm
12:00 - 13:00	0.002	0.003	0.003	ppm
13:00 - 14:00	0.003	0.003	0.003	ppm
14:00 - 15:00	0.003	0.003	0.003	ppm
15:00 - 16:00	0.003	0.003	0.003	ppm
16:00 - 17:00	0.003	0.004	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	0.004	0.003	0.003	ppm
21:00 - 22:00	0.005	0.003	0.003	ppm
22:00 - 23:00	0.003	0.002	0.003	ppm
23:00 - 00:00	0.003	0.002	0.003	ppm
00:00 - 01:00	0.003	0.002	0.003	ppm
01:00 - 02:00	0.003	0.002	0.004	ppm
02:00 - 03:00	0.003	0.003	0.004	ppm
03:00 - 04:00	0.003	0.002	0.004	ppm
04:00 - 05:00	0.004	0.002	0.004	ppm
05:00 - 06:00	0.003	0.002	0.004	ppm
06:00 - 07:00	0.003	0.003	0.004	ppm
07:00 - 08:00	0.003	0.003	0.004	ppm
08:00 - 09:00	0.003	0.003	0.004	ppm
09:00 - 10:00	0.003	0.003	0.004	ppm
Maximum 1 hr.	0.005	0.004	0.004	ppm
Average 24 hr.	0.003	0.003	0.003	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 Photankulam)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

30/11/2022

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## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

Siam Poongsan Metal Co., Ltd.

Sample No. 17016

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : July 11-14, 2022

Time	July 11-12, 2022		July 12-13, 2022		July 13-14, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	0.0	-	0.4	WSW
11:00-12:00	0.4	W	0.0	-	0.9	W
12:00-13:00	0.4	W	0.0	-	0.9	WNW
13:00-14:00	0.0	-	0.0	-	0.4	W
14:00-15:00	0.0	-	0.0	-	0.4	N
15:00-16:00	0.0	-	0.0	-	0.0	-
16:00-17:00	0.0	-	0.0	-	0.0	-
17:00-18:00	0.0	-	0.4	WSW	0.0	-
18:00-19:00	0.4	WSW	1.3	W	0.0	-
19:00-20:00	0.0	-	1.8	W	0.4	W
20:00-21:00	0.0	-	0.9	W	0.0	-
21:00-22:00	0.0	-	0.0	-	0.4	WNW
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	0.4	WSW	0.0	-	0.0	-
02:00-03:00	0.4	WSW	0.0	-	0.0	-
03:00-04:00	0.4	WSW	0.0	-	0.0	-
04:00-05:00	0.4	WSW	0.0	-	0.0	-
05:00-06:00	0.4	W	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	0.0	-	0.0	-	0.0	-

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R096

Siam Poongsan Metal Co., Ltd.

Sample No. 2823

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : September 12-15, 2022

Time	September 12-13, 2022		September 13-14, 2022		September 14-15, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	0.0	-	0.0	-
11:00-12:00	0.0	-	0.0	-	0.0	-
12:00-13:00	0.0	-	0.0	-	0.0	-
13:00-14:00	0.0	-	0.0	-	0.0	-
14:00-15:00	0.0	-	0.0	-	0.0	-
15:00-16:00	0.0	-	0.0	-	0.0	-
16:00-17:00	0.0	-	0.0	-	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	-	0.0	-
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	0.4	SW	0.4	SW	0.0	-

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

Siam Poongsan Metal Co., Ltd.

Sample No. 34563

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : November 14-17, 2022

Time	November 14-15, 2022		November 15-16, 2022		November 16-17, 2022	
	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	ESE	0.4	SW
10:00-11:00	0.4	W	0.9	WSW	0.4	S
11:00-12:00	0.4	NE	0.4	N	0.4	N
12:00-13:00	0.4	SSW	0.9	ENE	0.4	NNE
13:00-14:00	0.4	WNW	1.3	W	0.4	ESE
14:00-15:00	0.4	E	1.3	WSW	0.0	-
15:00-16:00	0.4	ENE	1.3	WSW	0.0	-
16:00-17:00	0.0	-	0.4	WSW	0.0	-
17:00-18:00	0.0	-	0.4	SE	0.4	ESE
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	0.4	S	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	SE
08:00-09:00	0.0	-	0.4	E	0.4	SSW

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

Siam Poongsan Metal Co., Ltd.

Sample No. 17015

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : July 11-14, 2022

Time	July 11-12, 2022		July 12-13, 2022		July 13-14, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.4	N	2.7	N	3.1	NNE
11:00-12:00	3.1	N	1.8	N	2.7	NNE
12:00-13:00	2.7	N	1.8	N	2.2	NE
13:00-14:00	2.7	N	1.8	N	2.2	ENE
14:00-15:00	1.8	N	2.2	N	1.8	ENE
15:00-16:00	0.9	WNW	1.8	N	1.3	ENE
16:00-17:00	0.9	NW	1.3	N	0.9	NNE
17:00-18:00	1.3	NW	1.8	N	1.3	NNE
18:00-19:00	1.3	WNW	4.0	N	0.0	-
19:00-20:00	0.9	WNW	3.6	NE	1.3	NNE
20:00-21:00	0.4	W	1.3	ENE	0.4	ENE
21:00-22:00	0.9	N	0.9	NNE	0.4	ENE
22:00-23:00	1.3	N	0.9	NNE	0.4	ENE
23:00-00:00	0.9	N	0.4	NNE	0.0	-
00:00-01:00	1.8	N	0.0	-	0.0	-
01:00-02:00	2.2	N	0.0	-	0.0	-
02:00-03:00	0.4	NW	0.0	-	0.0	-
03:00-04:00	0.9	N	0.4	NNE	0.4	SSW
04:00-05:00	2.2	N	0.0	-	0.4	SSW
05:00-06:00	3.1	N	0.0	-	0.4	SSW
06:00-07:00	2.7	N	0.4	NW	0.0	-
07:00-08:00	1.8	N	1.3	NNE	0.4	SSW
08:00-09:00	1.3	N	2.2	NNE	0.0	-
09:00-10:00	0.9	N	1.3	NNE	0.0	-

COPY



## Wind Speed &amp; Wind Direction

Request No. LA65-R09

Siam Poongsan Metal Co., Ltd.

Sample No. 282

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : September 12-15, 2022

Time	September 12-13, 2022		September 13-14, 2022		September 14-15, 2022	
	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	0.9	W	0.0	-	0.0	-
13:00-14:00	0.4	W	0.0	-	0.0	-
14:00-15:00	0.4	W	0.0	-	0.0	-
15:00-16:00	0.4	W	0.0	-	0.0	-
16:00-17:00	0.0	-	0.0	-	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	-	0.0	-
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	-

COPY



## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

Siam Poongsan Metal Co., Ltd.

Sample No. 34562

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : November 14-17, 2022

Time	November 14-15, 2022		November 15-16, 2022		November 16-17, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
09:00-10:00	1.8	WNW	1.8	WNW	1.8	WNW
10:00-11:00	2.2	WNW	1.8	WNW	2.2	NW
11:00-12:00	2.2	WNW	0.9	S	2.7	WNW
12:00-13:00	1.8	SSW	1.8	WNW	2.7	WNW
13:00-14:00	1.8	SSW	1.8	WNW	1.3	S
14:00-15:00	1.3	SSW	0.9	SSW	1.3	WNW
15:00-16:00	1.3	SSW	0.9	S	1.8	WNW
16:00-17:00	0.9	S	1.3	S	0.4	W
17:00-18:00	1.8	NW	0.9	SSW	0.4	SSW
18:00-19:00	0.9	WNW	0.4	SSW	0.4	SSW
19:00-20:00	0.0	-	0.9	S	0.0	-
20:00-21:00	0.0	-	0.9	S	0.0	-
21:00-22:00	0.4	S	0.9	S	0.0	-
22:00-23:00	0.4	SSE	0.4	S	0.0	-
23:00-00:00	1.3	WNW	0.4	SSW	0.0	-
00:00-01:00	1.3	WNW	0.4	WNW	0.4	ENE
01:00-02:00	0.4	SSW	0.4	WNW	0.0	-
02:00-03:00	0.0	-	0.4	WNW	0.4	ENE
03:00-04:00	0.0	-	0.9	WNW	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-
05:00-06:00	0.0	-	0.4	NW	0.0	-
06:00-07:00	0.9	S	0.9	WNW	0.4	SSE
07:00-08:00	0.9	SSW	1.8	WNW	1.3	WNW
08:00-09:00	1.3	WNW	1.8	NW	1.3	NW

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

Siam Poongsan Metal Co., Ltd.

Sample No. I7017

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : July 11-14, 2022

Time	July 11-12, 2022		July 12-13, 2022		July 13-14, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
11:00-12:00	1.8	NW	4.0	SW	5.4	SW
12:00-13:00	4.5	WNW	3.1	SW	3.6	WSW
13:00-14:00	4.5	WSW	3.6	SW	4.0	WSW
14:00-15:00	3.1	WSW	4.0	SW	2.7	WSW
15:00-16:00	2.2	SW	3.1	SW	1.8	SW
16:00-17:00	1.8	S	3.1	SW	1.8	SW
17:00-18:00	2.2	SSW	3.6	SW	2.7	SW
18:00-19:00	2.7	WSW	6.3	SW	0.4	SSW
19:00-20:00	1.8	SW	5.8	SW	2.2	SW
20:00-21:00	0.9	SE	4.0	SW	1.8	WSW
21:00-22:00	2.7	WSW	1.8	SW	2.7	SW
22:00-23:00	2.7	WSW	1.3	SW	1.3	SW
23:00-00:00	2.7	WSW	1.8	SW	0.9	N
00:00-01:00	3.6	WSW	0.4	SSW	0.4	NNW
01:00-02:00	3.6	WSW	0.9	NNW	0.4	NNW
02:00-03:00	2.7	WSW	0.9	SSW	0.4	N
03:00-04:00	2.7	WSW	1.3	SW	0.9	NNW
04:00-05:00	4.0	SW	0.4	S	0.9	NNW
05:00-06:00	4.0	SW	0.0	-	0.9	NNW
06:00-07:00	4.0	SW	1.3	SSW	0.4	NNW
07:00-08:00	3.1	SW	2.2	SW	0.9	N
08:00-09:00	2.7	SW	3.6	SW	0.4	NNW
09:00-10:00	2.7	SW	3.6	SW	0.4	N
10:00-11:00	4.5	SW	4.5	SW	0.0	-

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R096

Siam Poongsan Metal Co., Ltd.

Sample No. 2823

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : September 12-15, 2022

Time	September 12-13, 2022		September 13-14, 2022		September 14-15, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	2.7	N	1.3	SE
11:00-12:00	1.3	N	2.2	N	0.4	NNE
12:00-13:00	2.2	N	2.2	N	0.4	SSE
13:00-14:00	2.2	N	1.8	N	0.9	NNE
14:00-15:00	2.7	N	1.3	SE	1.3	NW
15:00-16:00	2.2	N	1.8	SE	0.9	SSE
16:00-17:00	1.3	N	1.8	SE	1.8	SE
17:00-18:00	0.9	NW	1.8	SE	1.8	SE
18:00-19:00	0.9	NW	1.3	SE	1.8	SE
19:00-20:00	0.9	SSE	1.3	SE	1.8	SSE
20:00-21:00	1.3	SE	1.3	SE	0.9	SSE
21:00-22:00	1.3	SE	0.9	SE	1.3	SE
22:00-23:00	0.9	SE	0.9	SE	1.8	SE
23:00-00:00	0.4	SE	0.9	SE	0.9	SE
00:00-01:00	0.9	SE	0.9	SE	0.4	SE
01:00-02:00	0.9	SE	0.9	SE	0.9	SE
02:00-03:00	0.4	SE	1.3	SE	0.4	SE
03:00-04:00	0.4	SE	0.4	SE	0.4	SE
04:00-05:00	0.4	NNE	0.4	SE	1.3	SE
05:00-06:00	0.0	-	0.4	SE	1.3	SE
06:00-07:00	0.4	SE	0.4	SSE	0.9	SSE
07:00-08:00	0.4	SSE	0.9	SE	1.3	SSE
08:00-09:00	0.4	SSE	0.9	SE	0.9	SSE
09:00-10:00	3.1	N	2.2	SSE	2.7	N

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

Siam Poongsan Metal Co., Ltd.

Sample No. 34561

Sampling Source : บริเวณเขตธุรกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : November 14-17, 2022

Time	November 14-15, 2022		November 15-16, 2022		November 16-17, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.4	ESE	0.4	N	0.4	NNE
11:00-12:00	0.9	SE	0.4	NNE	2.7	NNE
12:00-13:00	2.2	SE	0.4	NNE	1.8	NNE
13:00-14:00	2.2	SE	1.3	NNE	1.3	NNE
14:00-15:00	1.8	NNW	2.7	NNE	2.2	NNE
15:00-16:00	3.1	NNE	2.2	NNE	0.4	SE
16:00-17:00	1.8	NNE	1.8	N	0.4	W
17:00-18:00	1.3	SSE	0.9	NW	0.4	SE
18:00-19:00	0.4	SSE	0.4	WSW	0.0	-
19:00-20:00	0.4	SSE	0.4	WSW	0.4	SE
20:00-21:00	0.9	SE	0.0	-	0.0	-
21:00-22:00	0.9	SE	0.4	SSE	0.0	-
22:00-23:00	0.0	-	0.4	SE	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	-	0.4	SE	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	0.0	-	0.0	-	0.0	-



## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

Siam Poongsan Metal Co., Ltd.

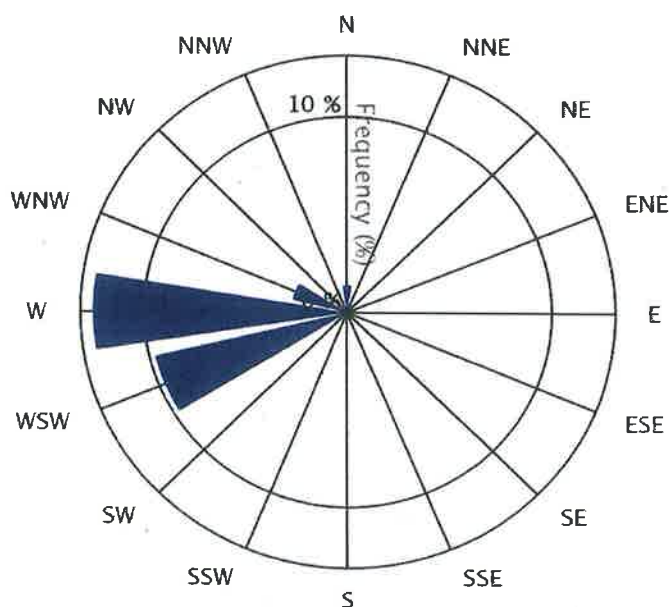
Sample No. 17016

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : July 11-14, 2022

Calm 73.6 %



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	1.4	0.0	0.0	0.0	0.0	0.0	1.4
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	9.7	0.0	0.0	0.0	0.0	0.0	9.7
W	12.5	0.0	0.0	0.0	0.0	0.0	12.5
WNW	2.8	0.0	0.0	0.0	0.0	0.0	2.8
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	73.6						



## Wind Speed &amp; Wind Direction

Request No. LA65-R096

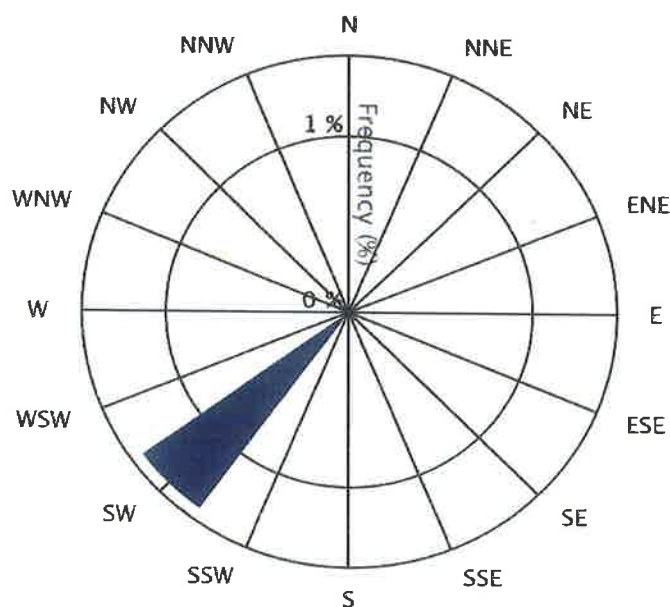
Siam Poongsan Metal Co., Ltd.

Sample No. 2823

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก  
ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : September 12-15, 2022

Calm 98.6 %



■ 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	1.4	0.0	0.0	0.0	0.0	0.0	1.4
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	98.6						98.6

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

Siam Poongsan Metal Co., Ltd.

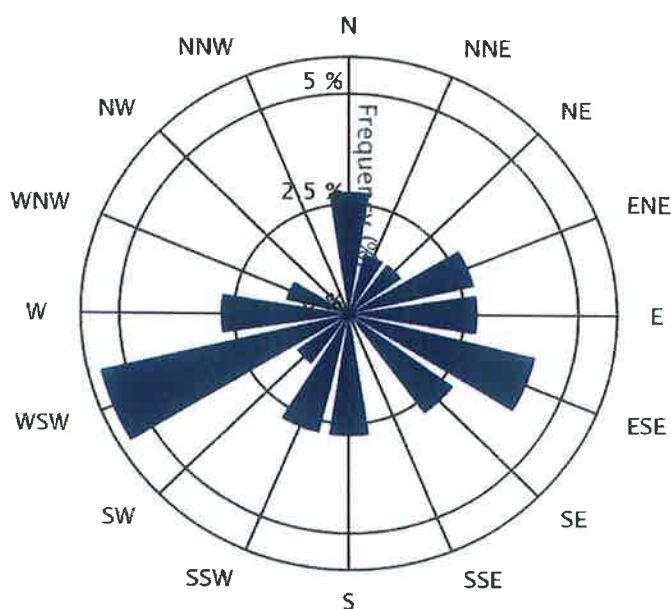
Sample No. 34563

Sampling Source : บริเวณที่ทำการย่อยเขตอุตสาหกรรมส่งออก

ของนิคมอุตสาหกรรมแหลมฉบัง ประมาณ 1 กม.

Sampling Date : November 14-17, 2022

Calm 65.3 %



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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
NNE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
NE	1.4	0.0	0.0	0.0	0.0	0.0	1.4
ENE	2.8	0.0	0.0	0.0	0.0	0.0	2.8
E	2.8	0.0	0.0	0.0	0.0	0.0	2.8
ESE	4.2	0.0	0.0	0.0	0.0	0.0	4.2
SE	2.8	0.0	0.0	0.0	0.0	0.0	2.8
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	2.8	0.0	0.0	0.0	0.0	0.0	2.8
SSW	2.8	0.0	0.0	0.0	0.0	0.0	2.8
SW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
WSW	5.6	0.0	0.0	0.0	0.0	0.0	5.6
W	2.8	0.0	0.0	0.0	0.0	0.0	2.8
WNW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	65.3						

COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

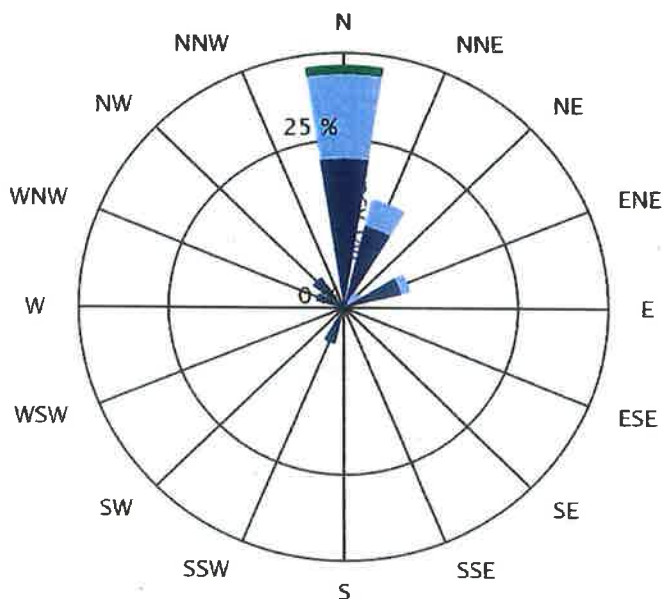
Siam Poongsan Metal Co., Ltd.

Sample No. 17015

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : July 11-14, 2022

Calm 18.1 %



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	22.2	12.5	1.4	0.0	0.0	0.0	36.1
NNE	12.5	4.2	0.0	0.0	0.0	0.0	16.7
NE	0.0	2.8	0.0	0.0	0.0	0.0	2.8
ENE	8.3	1.4	0.0	0.0	0.0	0.0	9.7
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	5.6	0.0	0.0	0.0	0.0	0.0	5.6
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	4.2	0.0	0.0	0.0	0.0	0.0	4.2
NW	5.6	0.0	0.0	0.0	0.0	0.0	5.6
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	18.1						

COPY



## Wind Speed &amp; Wind Direction

Request No. LA65-R096

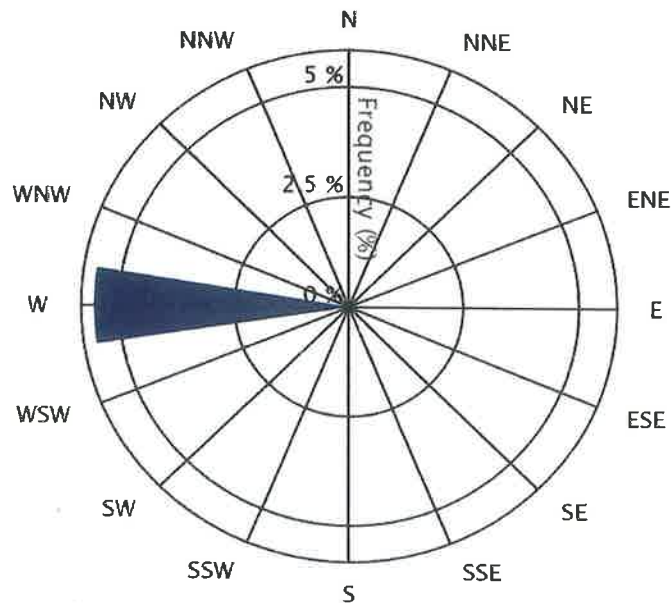
Siam Poongsan Metal Co., Ltd.

Sample No. 2823

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : September 12-15, 2022

Calm 94.4 %



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	5.6	0.0	0.0	0.0	0.0	0.0	5.6
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	94.4						

COPY



## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

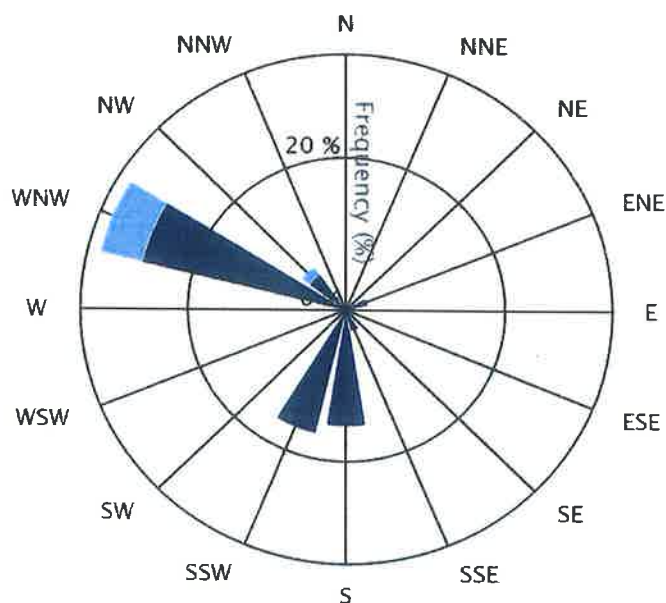
Siam Poongsan Metal Co., Ltd.

Sample No. 34562

Sampling Source : บริเวณใกล้ทางเข้าออกภายในโรงงานหลอมทองเหลือง

Sampling Date : November 14-17, 2022

Calm 22.2 %



0.4-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	> 9.9 (m/s)
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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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
S	15.3	0.0	0.0	0.0	0.0	0.0	15.3
SSW	16.7	0.0	0.0	0.0	0.0	0.0	16.7
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	26.4	5.6	0.0	0.0	0.0	0.0	32.0
NW	5.6	1.4	0.0	0.0	0.0	0.0	7.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm	22.2						



## Wind Speed &amp; Wind Direction

Request No. LA65-R0762

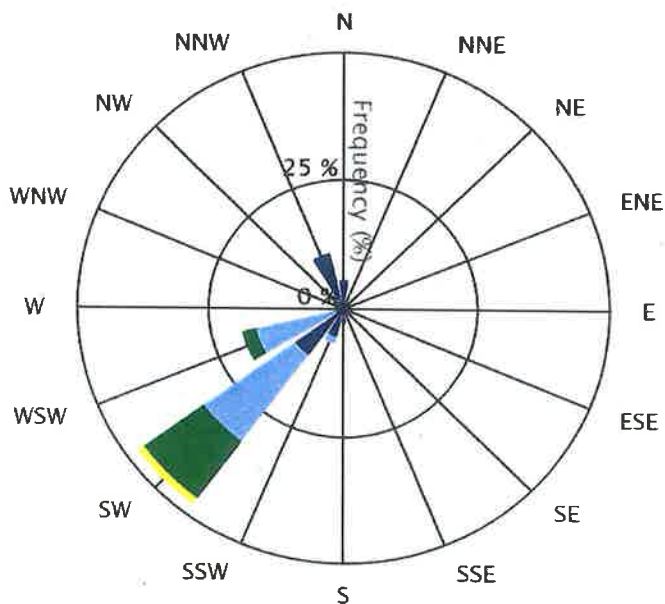
Siam Poongsan Metal Co., Ltd.

Sample No. 17017

Sampling Source : บริเวณเขตรุกิจการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : July 11-14, 2022

Calm 2.8 %



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	5.6	0.0	0.0	0.0	0.0	0.0	5.6
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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
SSW	5.6	1.4	0.0	0.0	0.0	0.0	7.0
SW	11.1	20.8	13.9	1.4	0.0	0.0	47.2
WSW	1.4	15.3	2.8	0.0	0.0	0.0	19.5
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	1.4	0.0	0.0	0.0	1.4
NW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
NNW	11.1	0.0	0.0	0.0	0.0	0.0	11.1
Calm	2.8						

COPY

## Wind Speed &amp; Wind Direction

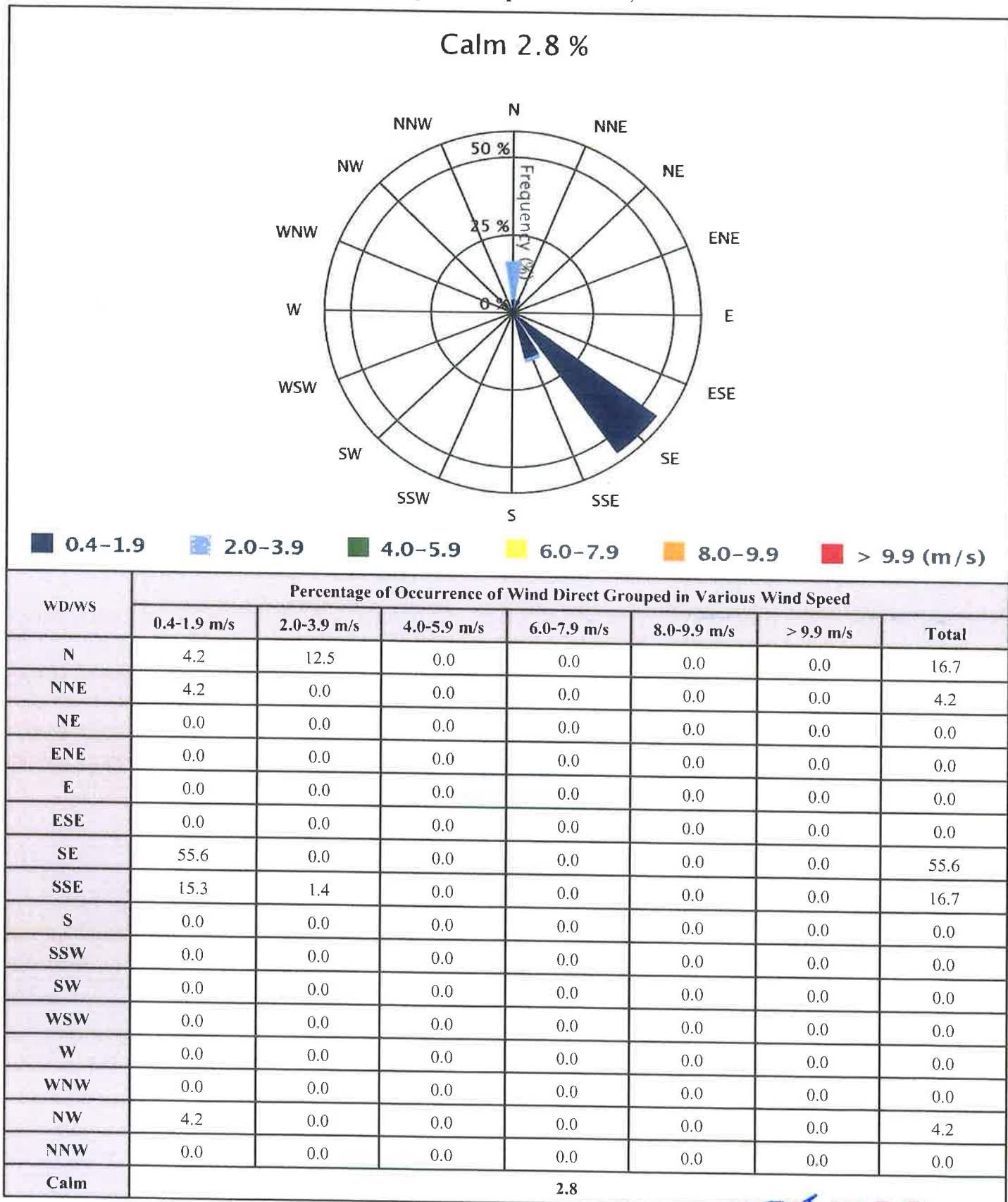
Request No. LA65-R09

Siam Poongsan Metal Co., Ltd.

Sample No. 282

Sampling Source : บริเวณเขตรูถักการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : September 12-15, 2022



COPY

## Wind Speed &amp; Wind Direction

Request No. LA65-R1187

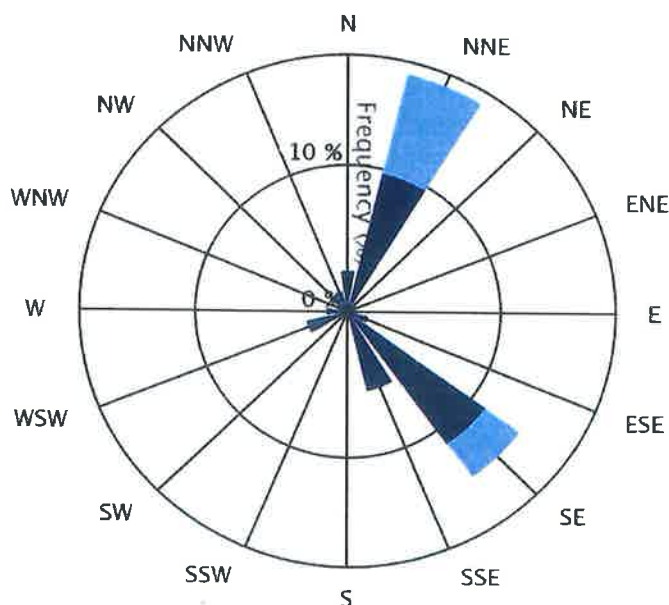
Siam Poongsan Metal Co., Ltd.

Sample No. 34561

Sampling Source : บริเวณเขตรูถักการค้าของนิคมอุตสาหกรรมแหลมฉบัง ห่างประมาณ 0.5 กม.

Sampling Date : November 14-17, 2022

Calm 52.8 %



0.4-1.9    2.0-3.9    4.0-5.9    6.0-7.9    8.0-9.9    &gt; 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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
NNE	9.7	6.9	0.0	0.0	0.0	0.0	16.6
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	1.4	0.0	0.0	0.0	0.0	0.0	1.4
SE	11.1	2.8	0.0	0.0	0.0	0.0	13.9
SSE	5.6	0.0	0.0	0.0	0.0	0.0	5.6
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	2.8	0.0	0.0	0.0	0.0	0.0	2.8
W	1.4	0.0	0.0	0.0	0.0	0.0	1.4
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
NNW	1.4	0.0	0.0	0.0	0.0	0.0	1.4
Calm	52.8						

COPY



Request No. LA65-0713

Report No. 6507-0234

## 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  
 SAMPLING DATE : 11/07/2022  
 RECEIVED DATE : 12/07/2022  
 TESTED DATE : 12-15/07/2022  
 SAMPLE NO. : 03972  
 SAMPLING TIME : 10:50-11:20  
 REPORTED DATE : 20/07/2022

## STACK DESCRIPTION

Height :	-	m	Type of Process :	Exhaust
Diameter :	0.84	m	Type of Fuel :	-
Temperature :	51.00	°C	Oxygen Content :	20.76 %
Air Velocity :	20.67	m/s	Barometric Pressure :	757.75 mm.Hg
Flow rate <sup>1</sup> :	9.88	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.82	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	10:50-11:20	20.2	mg/m <sup>3</sup>

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

\* SAMPLING BY MR. TEERAPONG NAULIN (ว-003-ค-5620)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

20/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

20/07/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA65-0928

Report No. 6509-0251

## 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  
 SAMPLING DATE : 13/09/2022  
 RECEIVED DATE : 20/09/2022  
 TESTED DATE : 20-22/09/2022  
 SAMPLE NO. : 05258  
 SAMPLING TIME : 09:00-09:30  
 REPORTED DATE : 26/09/2022

## STACK DESCRIPTION

Height :	-	m	Type of Process :	Exhaust
Diameter :	0.84	m	Type of Fuel :	-
Temperature :	42.00	°C	Oxygen Content :	20.90 %
Air Velocity :	20.29	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>1</sup> :	10.05	m <sup>3</sup> /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	3.20	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:00-09:30	21.1	mg/m <sup>3</sup>

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

\* SAMPLING BY MR. AUDOUMSUB JENJOBING (๖-003-๖-8894)

Examined By

  
 (MISS APIRADEE CHUEN-AROM)

(๖-003-๖-4377)

26/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

  
 (MR. THONGCHAI BOONSAK)

(๖-003-๖-5618)

26/09/2022

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1141

Report No. 6511-0363

## 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  
SAMPLING DATE : 16/11/2022  
RECEIVED DATE : 21/11/2022  
TESTED DATE : 21-24/11/2022  
STACK DESCRIPTION

Height : - m  
Diameter : 0.84 m  
Temperature : 50.00 °C  
Air Velocity : 20.48 m/s  
Flow rate<sup>1</sup> : 9.95 m<sup>3</sup>/s  
Moisture Content : 3.27 %

Type of Process : Exhaust  
Type of Fuel : -  
Oxygen Content : 20.90 %  
Barometric Pressure : 757.00 mm.Hg  
Atmospheric Temperature : 32.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:10-09:40	93.7	mg/m <sup>3</sup>


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

\* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ค-7283)

Examined By   
(MISS APIRADEE CHUEN-AROM)  
(ว-003-ค-4377)  
24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MR. THONGCHAI BOONSAK)  
(ว-003-ค-5618)  
24/11/2022

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Request No. LA65-0713

Report No. 6507-0233

## 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 : 11/07/2022  
 RECEIVED DATE : 12/07/2022  
 TESTED DATE : 12-15/07/2022  
 STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	59.00	°C	Oxygen Content :	20.77 %
Air Velocity :	20.47	m/s	Barometric Pressure :	757.75 mm.Hg
Flow rate <sup>2</sup> :	11.99	m <sup>3</sup> /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	3.64	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	10:50-11:20	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> DRY BASIS (25°C, 760 mm.Hg)

\* SAMPLING BY MR. TEERAPONG NAULIN (ว-003-ค-5620)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

20/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

20/07/2022

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Request No. LA65-0925

Report No. 6509-0536

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 : 13/09/2022  
RECEIVED DATE : 15/09/2022  
TESTED DATE : 15-21/09/2022  
SAMPLE NO. : 04845  
SAMPLING TIME : 09:00-09:30  
REPORTED DATE : 29/09/2022

STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	44.00	°C	Oxygen Content :	20.90 %
Air Velocity :	17.83	m/s	Barometric Pressure :	756.25 mm.Hg
Flow rate <sup>2</sup> :	10.94	m <sup>3</sup> /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	3.44	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:00-09:30	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> DRY BASIS (25°C, 760 mm.Hg)

\* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ค-7283)

Examined By



(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

29/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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**COPY**

Request No. LA65-1137

Report No. 6511-0364

## 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 : 16/11/2022 SAMPLE NO. : 07051

RECEIVED DATE : 21/11/2022 SAMPLING TIME : 09:10-09:40

TESTED DATE : 21-24/11/2022 REPORTED DATE : 24/11/2022

STACK DESCRIPTION

Height :	13.00	m	Type of Process :	Exhaust
Diameter :	0.93	m	Type of Fuel :	-
Temperature :	45.00	°C	Oxygen Content :	20.90 %
Air Velocity :	18.86	m/s	Barometric Pressure :	757.00 mm.Hg
Flow rate <sup>2</sup> :	11.66	m <sup>3</sup> /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	2.40	%		

PARAMETER*	TEST METHOD	TIME	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:10-09:40	0.6	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. METEE SUKPRASERT (จ-003-จ-8333)

Examined By



(MISS APIRADEE CHUEN-AROM)

(จ-003-ค-4377)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MR. THONGCHAI BOONSAK)

(จ-003-ค-5618)

24/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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## Test Report

Request No : W6507386

Report No : 6508-0072

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 65071450

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/07/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:10 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/07/2022

Tested Date : 16/07/2022 - 27/07/2022

Reported Date : 01/08/2022

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)	< 40
Copper *	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	162
Nickel @	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	0.22
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
pH (on site) *		Electrometric Method	4.1
Temperature *	°C	Laboratory and Field Method	33
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	< 5

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 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 / Mr. Kawee Suthasub is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ก-8334) \*

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

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ก-4377)

01/08/2022



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Approved By : .....

(Mr. Kawee Suthasub)  
(จ-003-ก-2205)

01/08/2022

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## Test Report

Request No : W6507386

Report No : 6508-0072

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 65071450

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 15/07/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:10 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/07/2022

Tested Date : 16/07/2022 - 27/07/2022

Reported Date : 01/08/2022

Parameter	Unit	Method	Result
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	63.6

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 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 / Mr. Kawee Suthasub is Technical Management.

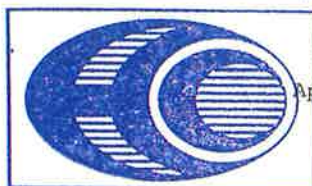
3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pompinan Viriyakusolkul (จ-003-จ-8334) \*

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

Examined By :   
(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

01/08/2022



Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

01/08/2022

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## Test Report

Request No : W6508220

Report No : 6508-1789

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 65080866

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 08/08/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:10 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/08/2022

Tested Date : 09/08/2022 - 23/08/2022

Reported Date : 25/08/2022

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)	< 40
Copper *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	225
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.19
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	32
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	< 5

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 TISI, # = ISO/IEC 17025:2017 Accredited by DSS,  
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2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ก-8334) \*

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

Examined By :   
(Miss Apiradee Chuen-arom)  
(จ-003-ก-4377)  
25/08/2022



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Approved By : 

(Mr. Kawee Suthasub)  
(จ-003-ก-2205)  
25/08/2022

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## Test Report

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

Request No : W6508220

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

Report No : 6508-1789

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

Sample No : W 65080866

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 08/08/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:10 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/08/2022

Tested Date : 09/08/2022 - 23/08/2022

Reported Date : 25/08/2022

Parameter	Unit	Method	Result
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	117

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

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3. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ท-8334) \*

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

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

25/08/2022



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Approved By : .....

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

25/08/2022

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## Test Report

Request No : W6508220

Report No : 6508-1789

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 65080866

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 08/08/2022

Sampling By : ETC

Sampling Time : 9:10 AM

Sampling Method : Grab

Received Date : 09/08/2022

Tested Date : 09/08/2022 - 23/08/2022

Reported Date : 25/08/2022

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.0

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

2. Sampling By Miss Pornpinan Viriyakusolkul (๖-๐๐3-๖-8334)



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Examined By : .....

(Miss Apiradee Chuen-arom)

25/08/2022

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## Test Report

Request No : W6509244

Report No : 6510-0364

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 65091049

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 08/09/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/09/2022

Tested Date : 09/09/2022 - 22/09/2022

Reported Date : 07/10/2022

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)	93
Copper *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	194
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.62
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
pH (on site) *		Electrometric Method	3.0
Temperature *	°C	Laboratory and Field Method	32
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 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 / Mr. Kawee Suthasub is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-7280) \*

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

Examined By :

(Miss Apiradee Chuen-arom)  
(จ-003-ก-4377)  
07/10/2022



Approved By :

(Mr. Kawee Suthasub)  
(จ-003-ก-2205)  
07/10/2022

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## Test Report

Request No : W6509244

Report No : 6510-0364

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 65091049

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 08/09/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/09/2022

Tested Date : 09/09/2022 - 22/09/2022

Reported Date : 07/10/2022

Parameter	Unit	Method	Result
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	56.1

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

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Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

07/10/2022



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Approved By : .....

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

07/10/2022

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## 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 65101341

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 12/10/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/10/2022

Tested Date : 14/10/2022 - 25/10/2022

Reported Date : 03/11/2022

Request No : W6510356

Report No : 6511-0164

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)	70
Copper *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	201
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.51
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	28
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	18

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

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

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

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ท-4377)

03/11/2022



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Approved By : .....

(Mr. Kawee Suthasub)  
(จ-003-ท-2205)

03/11/2022

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## Test Report

Request No : W6510356

Report No : 6511-0164

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 65101341

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 12/10/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:45 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/10/2022

Tested Date : 14/10/2022 - 25/10/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	38.2

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

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

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

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

03/11/2022



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Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

03/11/2022

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## Test Report

Request No : W6510356

Report No : 6511-0164

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 65101341

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 12/10/2022

Sampling By : ETC

Sampling Time : 8:45 AM

Sampling Method : Grab

Received Date : 14/10/2022

Tested Date : 14/10/2022 - 25/10/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	1.7

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

2. Sampling By Mr. Songpon Phiwan (๖-003-ค-7279)



Examined By : .....

(Miss Apiradee Chuen-arom)

03/11/2022

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## Test Report

Request No : W6511298

Report No : 6511-2075

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 65111087

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 10/11/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:40 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/11/2022

Tested Date : 11/11/2022 - 18/11/2022

Reported Date : 29/11/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	11.1
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	86
Copper *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	203
Nickel @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.34
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	29
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	25

Physical Apperance : 1. Sample : slightly-gray, 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,

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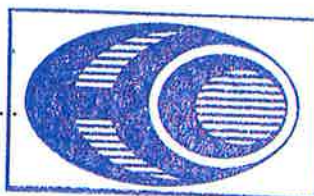
3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (ว-003-ค-7279) \*

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

Examined By : 

(Miss Apiradee Chuen-arom)  
(ว-003-ค-4377)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 

(Mr. Kawee Suthasub)  
(ว-003-ค-2205)

29/11/2022

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## 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 Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling By : ETC \*\*

Sampling Method : Grab \*\*

Tested Date : 11/11/2022 - 18/11/2022

Sample No : W 65111087

Sampling Date : 10/11/2022 \*\*

Sampling Time : 9:40 AM \*\*

Received Date : 11/11/2022

Reported Date : 29/11/2022

Parameter	Unit	Method	Result
Zinc *	mg / l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	100

Physical Apperance : 1. Sample : slightly-gray , 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,

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

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Mr. Kawee Suthasub)

(จ-003-ก-2205)

29/11/2022

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## Test Report

Request No : W6511298

Report No : 6511-2075

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 65111087

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 10/11/2022

Sampling By : ETC

Sampling Time : 9:40 AM

Sampling Method : Grab

Received Date : 11/11/2022

Tested Date : 11/11/2022 - 18/11/2022

Reported Date : 29/11/2022

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

Physical Apperance : 1. Sample : slightly-gray, 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. Songpon Phiwan (จ-003-ค-7279)



Examined By : .....

(Miss Apiradee Chuen-arom)

29/11/2022

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## Test Report

Request No : W6512404

Report No : 6512-1649

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 65121387

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 14/12/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/12/2022

Tested Date : 15/12/2022 - 21/12/2022

Reported Date : 23/12/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.2
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	106
Copper *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	169
Nickel *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.36
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0
Temperature *	°C	Laboratory and Field Method	32
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 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 / Mr. Kawee Suthasub is Technical Management.

3. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-7280) \*

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

Examined By :

(Miss Apiradee Chuen-arom)

(จ-003-ก-4377)

23/12/2022



Approved By :

(Mr. Kawee Suthasub)

(จ-003-ก-2205)

23/12/2022

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## Test Report

Request No : W6512404

Report No : 6512-1649

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 65121387

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent) \*\*

Sampling Date : 14/12/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/12/2022

Tested Date : 15/12/2022 - 21/12/2022

Reported Date : 23/12/2022

Parameter	Unit	Method	Result
Zinc *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	38.4

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

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

Examined By : .....

(Miss Apiradee Chuen-arom)  
(จ-003-ก-4377)  
23/12/2022



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Approved By : .....

(Mr. Kawee Suthasub)  
(จ-003-ก-2205)  
23/12/2022

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## Test Report

Request No : W6512404

Report No : 6512-1649

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 65121387

Sample Name : น้ำก่อนเข้าระบบบำบัด (Influent)

Sampling Date : 14/12/2022

Sampling By : ETC

Sampling Time : 9:50 AM

Sampling Method : Grab

Received Date : 15/12/2022

Tested Date : 15/12/2022 - 21/12/2022

Reported Date : 23/12/2022

Parameter	Unit	Method	Result
pH (on site)		Electrometric Method	2.6

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

2. Sampling By Miss Janthanee Saiphan (จ-003-ค-7281)



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Examined By : 

(Miss Apiradee Chuen-arom)

23/12/2022

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## Test Report

Request No : W6507386

Report No : 6508-0073

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 65071451

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/07/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:20 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/07/2022

Tested Date : 16/07/2022 - 22/07/2022

Reported Date : 01/08/2022

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Copper @	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	0.28	≤2
Nickel @	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	< 0.10	≤1
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	6.1	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 : 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 / Mr. Kawee Suthasub is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334) \*

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

Examined By :

(Miss Apiradee Chuen-arom)  
(จ-003-จ-4377)  
01/08/2022



Approved By :

(Mr. Kawee Suthasub)  
(จ-003-จ-2205)  
01/08/2022

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## Test Report

Request No : W6507386

Report No : 6508-0073

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 65071451

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 15/07/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:20 AM \*\*

Sampling Method : Grab \*\*

Received Date : 16/07/2022

Tested Date : 16/07/2022 - 22/07/2022

Reported Date : 01/08/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.39	≤5

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. /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,

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4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ท-8334) \*

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

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

01/08/2022



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Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

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## Test Report

Request No : W6508220

Report No : 6508-1790

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 65080867

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 08/08/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:15 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/08/2022

Tested Date : 09/08/2022 - 26/08/2022

Reported Date : 26/08/2022

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 750
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.32	≤ 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	6.1	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 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 / Mr. Kawee Suthasub is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334) \*

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

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

26/08/2022



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Approved By : .....

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

26/08/2022

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## Test Report

Request No : W6508220

Report No : 6508-1790

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 65080867

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 08/08/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:15 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/08/2022

Tested Date : 09/08/2022 - 26/08/2022

Reported Date : 26/08/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.45	≤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. /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.

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4. \* = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334) \*

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

Examined By :

(Miss Apiradee Chuen-arom)

(จ-003-จ-4377)

26/08/2022



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Approved By :

(Mr. Kawee Suthasub)

(จ-003-จ-2205)

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## Test Report

Request No : W6509244

Report No : 6510-0365

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 65091050

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 08/09/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/09/2022

Tested Date : 09/09/2022 - 04/10/2022

Reported Date : 07/10/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	61	≤750
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.33	≤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	6.7	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	30	≤45
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	< 5	≤200

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 / Mr. Kawee Suthasub is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ท-7280) \*

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

Examined By :

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

07/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

07/10/2022



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## Test Report

Request No : W6509244

Report No : 6510-0365

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 65091050

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 08/09/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:00 AM \*\*

Sampling Method : Grab \*\*

Received Date : 09/09/2022

Tested Date : 09/09/2022 - 04/10/2022

Reported Date : 07/10/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.49	≤5

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. /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.

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4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ท-7280) \*

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

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

07/10/2022



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Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

07/10/2022

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## Test Report

Request No : W6510356

Report No : 6511-0165

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 65101342

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 12/10/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/10/2022

Tested Date : 14/10/2022 - 01/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	11.0	≤500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	64	≤750
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.93	≤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	7.3	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	31	≤45
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	< 5	≤200

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 / Mr. Kawee Suthasub is Technical Management.

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

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

Examined By :

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

03/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

03/11/2022

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## Test Report

Request No : W6510356

Report No : 6511-0165

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 65101342

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 12/10/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 8:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 14/10/2022

Tested Date : 14/10/2022 - 01/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.28	≤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 / Mr. Kawee Suthasub 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)

03/11/2022



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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)

(จ-003-ก-2205)

03/11/2022

**COPY**

## Test Report

Request No : W6511298

Report No : 6511-2076

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 65111088

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 10/11/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/11/2022

Tested Date : 11/11/2022 - 26/11/2022

Reported Date : 29/11/2022

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤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)	0.51	≤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	30	≤45
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	< 5	≤200

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. /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.

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

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

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

29/11/2022



Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

29/11/2022

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## Test Report

Request No : W6511298

Report No : 6511-2076

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 65111088

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 10/11/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 9:50 AM \*\*

Sampling Method : Grab \*\*

Received Date : 11/11/2022

Tested Date : 11/11/2022 - 26/11/2022

Reported Date : 29/11/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.92	≤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)

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

Examined By : 

(Miss Apiradee Chuen-arom)  
(จ-003-ค-4377)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By : 

(Mr. Kawee Suthasub)  
(จ-003-ค-2205)  
29/11/2022

**COPY**

## Test Report

Request No : W6512404

Report No : 6512-1650

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 65121388

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 14/12/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:05 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/12/2022

Tested Date : 15/12/2022 - 21/12/2022

Reported Date : 23/12/2022

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	33.4	≤500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	74	≤750
Copper @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.57	≤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	7.5	5.5 - 9.0
Temperature *	°C	Laboratory and Field Method	30	≤45
Total Suspended Solids #	mg/l	Dried at 103-105 C (SM:2540D)	6	≤200

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.

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4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ท-7280) \*

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

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

23/12/2022



Approved By : .....

(Mr. Kawee Suthasub)

(จ-003-ท-2205)

23/12/2022

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## Test Report

Request No : W6512404

Report No : 6512-1650

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 65121388

Sample Name : น้ำหลังผ่านระบบบำบัด (Effluent) \*\*

Sampling Date : 14/12/2022 \*\*

Sampling By : ETC \*\*

Sampling Time : 10:05 AM \*\*

Sampling Method : Grab \*\*

Received Date : 15/12/2022

Tested Date : 15/12/2022 - 21/12/2022

Reported Date : 23/12/2022

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.18	≤5

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. /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,

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4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-7280) \*

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

Examined By : 

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

23/12/2022



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Approved By : 

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

23/12/2022

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ISO 9001 / ISO 14001

## EASTERN THAI CONSULTING 1992 CO., LTD.

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



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R0777

Report No. R6507-2801

### TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 18070
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 11-12/07/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 14/07/2022
SAMPLE POINT	: ริมรั้วด้านทิศเหนือ	REPORTED DATE	: 26/07/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 00646443 : Type 2		

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:10 – 10:10 <sup>/3</sup>	64.4	dB(A)
10:10 – 11:10	64.3	dB(A)
11:10 – 12:10	67.2	dB(A)
12:10 – 13:10	65.7	dB(A)
13:10 – 14:10	67.9	dB(A)
14:10 – 15:10	67.9	dB(A)
15:10 – 16:10	65.2	dB(A)
16:10 – 17:10	65.5	dB(A)
17:10 – 18:10	65.3	dB(A)
18:10 – 19:10	65.5	dB(A)
19:10 – 20:10	65.6	dB(A)
20:10 – 21:10	65.4	dB(A)
21:10 – 22:10	65.2	dB(A)
22:10 – 23:10	63.1	dB(A)
23:10 – 00:10	63.0	dB(A)
00:10 – 01:10	63.6	dB(A)
01:10 – 02:10	65.5	dB(A)
02:10 – 03:10	62.9	dB(A)
03:10 – 04:10	64.0	dB(A)
04:10 – 05:10	64.9	dB(A)
05:10 – 06:10	65.4	dB(A)
06:10 – 07:10	66.6	dB(A)
07:10 – 08:10	68.4	dB(A)
08:10 – 09:10	68.0	dB(A)
$L_{eq}$ 24 hr.	65.7	dB(A)
$L_{dn\#}$	71.2	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

<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)

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

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

(Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 22580
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 15-16/08/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 17/08/2022
SAMPLE POINT	: ริมรั้วด้านทิศเหนือ	REPORTED DATE	: 22/08/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dnf}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G300957 : Type 2		

TIME \ DATE	15-16/08/2022 ( $L_{eq}$ )	UNIT
09:10 – 10:10 <sup>/3</sup>	65.8	dB(A)
10:10 – 11:10	65.3	dB(A)
11:10 – 12:10	63.3	dB(A)
12:10 – 13:10	63.0	dB(A)
13:10 – 14:10	62.3	dB(A)
14:10 – 15:10	62.5	dB(A)
15:10 – 16:10	62.4	dB(A)
16:10 – 17:10	63.8	dB(A)
17:10 – 18:10	63.1	dB(A)
18:10 – 19:10	63.5	dB(A)
19:10 – 20:10	65.7	dB(A)
20:10 – 21:10	67.8	dB(A)
21:10 – 22:10	65.4	dB(A)
22:10 – 23:10	65.8	dB(A)
23:10 – 00:10	63.4	dB(A)
00:10 – 01:10	63.2	dB(A)
01:10 – 02:10	63.7	dB(A)
02:10 – 03:10	63.0	dB(A)
03:10 – 04:10	63.9	dB(A)
04:10 – 05:10	63.9	dB(A)
05:10 – 06:10	64.7	dB(A)
06:10 – 07:10	65.0	dB(A)
07:10 – 08:10	65.0	dB(A)
08:10 – 09:10	63.5	dB(A)
$L_{eq}$ 24 hr.	64.3	dB(A)
$L_{dnf}$	70.6	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

\* 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. Thanatporn Klinsonon)



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

22/08/2022

REPORTED TEST RESULT TO SUBMITTED SAMPLES ONLY  
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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 27673
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/09/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: ริมรั้วด้านทิศเหนือ	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301013 : Type 2		

TIME \ DATE	06-07/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	72.5	dB(A)
10:00 - 11:00	70.9	dB(A)
11:00 - 12:00	66.4	dB(A)
12:00 - 13:00	71.1	dB(A)
13:00 - 14:00	71.3	dB(A)
14:00 - 15:00	71.1	dB(A)
15:00 - 16:00	69.8	dB(A)
16:00 - 17:00	69.5	dB(A)
17:00 - 18:00	67.5	dB(A)
18:00 - 19:00	65.2	dB(A)
19:00 - 20:00	66.1	dB(A)
20:00 - 21:00	65.6	dB(A)
21:00 - 22:00	65.6	dB(A)
22:00 - 23:00	67.4	dB(A)
23:00 - 00:00	65.2	dB(A)
00:00 - 01:00	71.5	dB(A)
01:00 - 02:00	67.2	dB(A)
02:00 - 03:00	67.7	dB(A)
03:00 - 04:00	68.0	dB(A)
04:00 - 05:00	66.8	dB(A)
05:00 - 06:00	67.2	dB(A)
06:00 - 07:00	66.8	dB(A)
07:00 - 08:00	67.7	dB(A)
08:00 - 09:00	70.4	dB(A)
$L_{eq}$ 24 hr.	68.9	dB(A)
$L_{dn\#}$	74.5	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

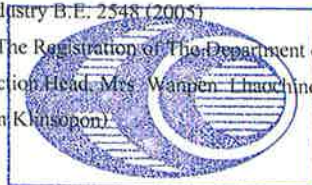
<sup>/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

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

\* 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. Thanatporn Klinsopon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 29959
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 04-05/10/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 07/10/2022
SAMPLE POINT	: รีมรั้วด้านทิศเหนือ	REPORTED DATE	: 17/10/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 00443359 : Type 2		

TIME \ DATE	04-05/10/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	71.5	dB(A)
10:00 - 11:00	72.0	dB(A)
11:00 - 12:00	68.2	dB(A)
12:00 - 13:00	67.5	dB(A)
13:00 - 14:00	70.7	dB(A)
14:00 - 15:00	70.3	dB(A)
15:00 - 16:00	70.5	dB(A)
16:00 - 17:00	73.2	dB(A)
17:00 - 18:00	66.6	dB(A)
18:00 - 19:00	56.9	dB(A)
19:00 - 20:00	60.8	dB(A)
20:00 - 21:00	55.0	dB(A)
21:00 - 22:00	73.1	dB(A)
22:00 - 23:00	65.6	dB(A)
23:00 - 00:00	66.3	dB(A)
00:00 - 01:00	69.5	dB(A)
01:00 - 02:00	67.9	dB(A)
02:00 - 03:00	66.3	dB(A)
03:00 - 04:00	66.5	dB(A)
04:00 - 05:00	65.9	dB(A)
05:00 - 06:00	67.1	dB(A)
06:00 - 07:00	66.5	dB(A)
07:00 - 08:00	68.6	dB(A)
08:00 - 09:00	70.8	dB(A)
$L_{eq}$ 24 hr.	68.9	dB(A)
$L_{dn\#}$	73.9	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/1</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

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

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

(Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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**COPY**

**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 34175
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 08-09/11/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 16/11/2022
SAMPLE POINT	: ริมรั้วด้านทิศเหนือ	REPORTED DATE	: 24/11/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 090087 : Type 2		

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>/3</sup>	67.1	dB(A)
10:30 - 11:30	65.0	dB(A)
11:30 - 12:30	63.4	dB(A)
12:30 - 13:30	63.7	dB(A)
13:30 - 14:30	64.8	dB(A)
14:30 - 15:30	64.8	dB(A)
15:30 - 16:30	64.1	dB(A)
16:30 - 17:30	63.5	dB(A)
17:30 - 18:30	64.3	dB(A)
18:30 - 19:30	64.0	dB(A)
19:30 - 20:30	64.6	dB(A)
20:30 - 21:30	64.1	dB(A)
21:30 - 22:30	62.1	dB(A)
22:30 - 23:30	63.1	dB(A)
23:30 - 00:30	62.6	dB(A)
00:30 - 01:30	62.3	dB(A)
01:30 - 02:30	63.0	dB(A)
02:30 - 03:30	61.6	dB(A)
03:30 - 04:30	62.1	dB(A)
04:30 - 05:30	63.7	dB(A)
05:30 - 06:30	63.6	dB(A)
06:30 - 07:30	65.2	dB(A)
07:30 - 08:30	64.5	dB(A)
08:30 - 09:30	66.7	dB(A)
$L_{eq}$ 24 hr.	64.1	dB(A)
$L_{dn\#}$	69.8	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

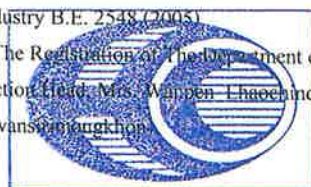
<sup>/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

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


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

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

(Measurement By Mr. Aocha Khwansornrangkhon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)  
24/11/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 35668
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 07-08/12/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/12/2022
SAMPLE POINT	: ริมรั้วด้านทิศเหนือ	REPORTED DATE	: 16/12/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301039 : Type 2		

TIME \ DATE	07-08/12/2022 ( $L_{eq}$ )	UNIT
09:05 - 10:05 <sup>/3</sup>	74.0	dB(A)
10:05 - 11:05	71.8	dB(A)
11:05 - 12:05	64.2	dB(A)
12:05 - 13:05	69.7	dB(A)
13:05 - 14:05	72.7	dB(A)
14:05 - 15:05	72.4	dB(A)
15:05 - 16:05	66.1	dB(A)
16:05 - 17:05	64.5	dB(A)
17:05 - 18:05	70.0	dB(A)
18:05 - 19:05	69.6	dB(A)
19:05 - 20:05	65.4	dB(A)
20:05 - 21:05	64.7	dB(A)
21:05 - 22:05	65.9	dB(A)
22:05 - 23:05	65.8	dB(A)
23:05 - 00:05	63.7	dB(A)
00:05 - 01:05	64.8	dB(A)
01:05 - 02:05	65.6	dB(A)
02:05 - 03:05	67.1	dB(A)
03:05 - 04:05	63.9	dB(A)
04:05 - 05:05	65.0	dB(A)
05:05 - 06:05	66.4	dB(A)
06:05 - 07:05	64.8	dB(A)
07:05 - 08:05	65.0	dB(A)
08:05 - 09:05	71.5	dB(A)
$L_{eq}$ 24 hr.	68.6	dB(A)
$L_{dn\#}$	72.7	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

<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)

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Ms. Thanatporn Klinsoon is Section Head, Ms. Chaiyaporn Chaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinon)

<sup>/3</sup> Start Time



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 18072
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 11-12/07/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 14/07/2022
SAMPLE POINT	: ริมรั้วด้านทิศใต้	REPORTED DATE	: 26/07/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301013 : Type 2		

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:20 – 10:20 <sup>/3</sup>	62.9	dB(A)
10:20 – 11:20	62.8	dB(A)
11:20 – 12:20	63.3	dB(A)
12:20 – 13:20	62.5	dB(A)
13:20 – 14:20	62.7	dB(A)
14:20 – 15:20	63.8	dB(A)
15:20 – 16:20	62.0	dB(A)
16:20 – 17:20	62.8	dB(A)
17:20 – 18:20	63.1	dB(A)
18:20 – 19:20	64.2	dB(A)
19:20 – 20:20	63.7	dB(A)
20:20 – 21:20	63.0	dB(A)
21:20 – 22:20	62.5	dB(A)
22:20 – 23:20	63.2	dB(A)
23:20 – 00:20	62.5	dB(A)
00:20 – 01:20	62.7	dB(A)
01:20 – 02:20	63.0	dB(A)
02:20 – 03:20	62.8	dB(A)
03:20 – 04:20	62.5	dB(A)
04:20 – 05:20	62.7	dB(A)
05:20 – 06:20	64.1	dB(A)
06:20 – 07:20	65.2	dB(A)
07:20 – 08:20	65.5	dB(A)
08:20 – 09:20	66.0	dB(A)
$L_{eq}$ 24 hr.	63.4	dB(A)
$L_{dn#}$	69.7	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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  
(Ms. Thanatporn Klinsoon is Section Chief, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Thanatporn Klinsoon)



Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 22578
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 15-16/08/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 17/08/2022
SAMPLE POINT	: รีมรั้วด้านทิศใต้	REPORTED DATE	: 22/08/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301638 : Type 2		

TIME \ DATE	15-16/08/2022 ( $L_{eq}$ )	UNIT
09:25 – 10:25 <sup>/3</sup>	59.8	dB(A)
10:25 – 11:25	58.2	dB(A)
11:25 – 12:25	56.9	dB(A)
12:25 – 13:25	59.1	dB(A)
13:25 – 14:25	59.3	dB(A)
14:25 – 15:25	58.6	dB(A)
15:25 – 16:25	59.7	dB(A)
16:25 – 17:25	59.6	dB(A)
17:25 – 18:25	60.2	dB(A)
18:25 – 19:25	63.0	dB(A)
19:25 – 20:25	64.3	dB(A)
20:25 – 21:25	61.7	dB(A)
21:25 – 22:25	62.4	dB(A)
22:25 – 23:25	62.9	dB(A)
23:25 – 00:25	59.5	dB(A)
00:25 – 01:25	59.4	dB(A)
01:25 – 02:25	63.4	dB(A)
02:25 – 03:25	57.9	dB(A)
03:25 – 04:25	56.3	dB(A)
04:25 – 05:25	59.3	dB(A)
05:25 – 06:25	62.2	dB(A)
06:25 – 07:25	62.0	dB(A)
07:25 – 08:25	59.6	dB(A)
08:25 – 09:25	59.1	dB(A)
$L_{eq}$ 24 hr.	60.7	dB(A)
$L_{dn\#}$	67.2	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

<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)

\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Ms. Thanatporn Klinsonop is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Thanatporn Klinsonop)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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ISO 9001 / ISO 14001

## EASTERN THAI CONSULTING 1992 CO., LTD.

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



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R0941

Report No. R6509-3597

### TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 27676
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/09/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: รีมรวัค่านทิสใต้	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301635 : Type 2		

TIME \ DATE	06-07/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>13</sup>	60.6	dB(A)
10:00 - 11:00	64.4	dB(A)
11:00 - 12:00	56.4	dB(A)
12:00 - 13:00	68.0	dB(A)
13:00 - 14:00	59.3	dB(A)
14:00 - 15:00	60.4	dB(A)
15:00 - 16:00	59.6	dB(A)
16:00 - 17:00	60.1	dB(A)
17:00 - 18:00	65.8	dB(A)
18:00 - 19:00	60.6	dB(A)
19:00 - 20:00	67.1	dB(A)
20:00 - 21:00	58.7	dB(A)
21:00 - 22:00	71.4	dB(A)
22:00 - 23:00	57.7	dB(A)
23:00 - 00:00	57.5	dB(A)
00:00 - 01:00	66.5	dB(A)
01:00 - 02:00	61.0	dB(A)
02:00 - 03:00	61.4	dB(A)
03:00 - 04:00	61.8	dB(A)
04:00 - 05:00	61.7	dB(A)
05:00 - 06:00	61.4	dB(A)
06:00 - 07:00	64.8	dB(A)
07:00 - 08:00	63.2	dB(A)
08:00 - 09:00	62.4	dB(A)
$L_{eq}$ 24 hr.	63.9	dB(A)
$L_{dn\#}$	69.2	dB(A)
Standard	70 <sup>11</sup> , 70 <sup>12</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

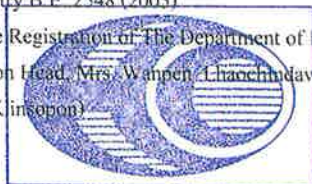
<sup>11</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

<sup>12</sup> Notification of Ministry of the Industry B.E. 2548 (2005)

\* 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. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 29960
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 04-05/10/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 07/10/2022
SAMPLE POINT	: ริมรั้วด้านทิศใต้	REPORTED DATE	: 17/10/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 01209917 : Type 2		

TIME \ DATE	04-05/10/2022 ( $L_{eq}$ )	UNIT
09:25 - 10:25 <sup>1/3</sup>	59.7	dB(A)
10:25 - 11:25	60.6	dB(A)
11:25 - 12:25	56.2	dB(A)
12:25 - 13:25	56.8	dB(A)
13:25 - 14:25	57.8	dB(A)
14:25 - 15:25	62.6	dB(A)
15:25 - 16:25	61.1	dB(A)
16:25 - 17:25	59.6	dB(A)
17:25 - 18:25	58.5	dB(A)
18:25 - 19:25	58.4	dB(A)
19:25 - 20:25	58.6	dB(A)
20:25 - 21:25	57.6	dB(A)
21:25 - 22:25	57.8	dB(A)
22:25 - 23:25	57.2	dB(A)
23:25 - 00:25	55.2	dB(A)
00:25 - 01:25	55.7	dB(A)
01:25 - 02:25	64.3	dB(A)
02:25 - 03:25	61.1	dB(A)
03:25 - 04:25	53.0	dB(A)
04:25 - 05:25	54.8	dB(A)
05:25 - 06:25	63.7	dB(A)
06:25 - 07:25	59.3	dB(A)
07:25 - 08:25	60.5	dB(A)
08:25 - 09:25	59.7	dB(A)
$L_{eq}$ 24 hr.	59.6	dB(A)
$L_{dn\#}$	66.3	dB(A)
Standard	70 <sup>1/1</sup> , 70 <sup>1/2</sup>	dB(A)

**REMARK :** <sup>1/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

\* 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. Thanatporn Klinsoon)



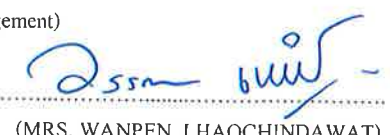
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Approved By



(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

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**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 : รีมรูด้านทิศใต้  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr. &  $L_{dn\#}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter S/N 090086 : Type 2

SAMPLE NO. : 34178  
MEASURING DATE : 08-09/11/2022  
RECEIVED DATE : 16/11/2022  
REPORTED DATE : 24/11/2022

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>/3</sup>	60.1	dB(A)
10:30 - 11:30	59.7	dB(A)
11:30 - 12:30	58.4	dB(A)
12:30 - 13:30	58.8	dB(A)
13:30 - 14:30	59.9	dB(A)
14:30 - 15:30	59.9	dB(A)
15:30 - 16:30	62.3	dB(A)
16:30 - 17:30	57.9	dB(A)
17:30 - 18:30	56.1	dB(A)
18:30 - 19:30	56.1	dB(A)
19:30 - 20:30	62.7	dB(A)
20:30 - 21:30	55.2	dB(A)
21:30 - 22:30	61.6	dB(A)
22:30 - 23:30	53.9	dB(A)
23:30 - 00:30	63.1	dB(A)
00:30 - 01:30	53.3	dB(A)
01:30 - 02:30	53.3	dB(A)
02:30 - 03:30	53.6	dB(A)
03:30 - 04:30	51.7	dB(A)
04:30 - 05:30	54.3	dB(A)
05:30 - 06:30	57.7	dB(A)
06:30 - 07:30	61.0	dB(A)
07:30 - 08:30	60.0	dB(A)
08:30 - 09:30	60.4	dB(A)
$L_{eq}$ 24 hr.	59.1	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

<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)

\* 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 Mr. Aocha K. Wansriwanakhan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By

(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 35666
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/12/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/12/2022
SAMPLE POINT	: ริมรั้วด้านทิศใต้	REPORTED DATE	: 16/12/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 090089 : Type 2		

TIME \ DATE	06-07/12/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	60.0	dB(A)
10:00 - 11:00	63.7	dB(A)
11:00 - 12:00	57.8	dB(A)
12:00 - 13:00	55.2	dB(A)
13:00 - 14:00	61.5	dB(A)
14:00 - 15:00	59.3	dB(A)
15:00 - 16:00	58.4	dB(A)
16:00 - 17:00	59.3	dB(A)
17:00 - 18:00	58.2	dB(A)
18:00 - 19:00	64.3	dB(A)
19:00 - 20:00	59.8	dB(A)
20:00 - 21:00	57.1	dB(A)
21:00 - 22:00	57.8	dB(A)
22:00 - 23:00	57.5	dB(A)
23:00 - 00:00	55.1	dB(A)
00:00 - 01:00	55.7	dB(A)
01:00 - 02:00	55.4	dB(A)
02:00 - 03:00	54.6	dB(A)
03:00 - 04:00	60.5	dB(A)
04:00 - 05:00	52.5	dB(A)
05:00 - 06:00	56.1	dB(A)
06:00 - 07:00	63.1	dB(A)
07:00 - 08:00	59.0	dB(A)
08:00 - 09:00	61.5	dB(A)
$L_{eq}$ 24 hr.	59.5	dB(A)
$L_{dn\#}$	64.8	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

\* Parameter Outside The Scope of The Regulation of the Department of Industrial Works

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

(Measurement By Ms. Savita Kittichonwong)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.

(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 18071
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 11-12/07/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 14/07/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันออก	REPORTED DATE	: 26/07/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301660 : Type 2		

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:15 – 10:15 <sup>/3</sup>	58.7	dB(A)
10:15 – 11:15	56.2	dB(A)
11:15 – 12:15	57.2	dB(A)
12:15 – 13:15	58.1	dB(A)
13:15 – 14:15	56.5	dB(A)
14:15 – 15:15	56.4	dB(A)
15:15 – 16:15	57.0	dB(A)
16:15 – 17:15	57.1	dB(A)
17:15 – 18:15	56.6	dB(A)
18:15 – 19:15	55.7	dB(A)
19:15 – 20:15	56.9	dB(A)
20:15 – 21:15	58.9	dB(A)
21:15 – 22:15	62.3	dB(A)
22:15 – 23:15	62.4	dB(A)
23:15 – 00:15	57.0	dB(A)
00:15 – 01:15	56.8	dB(A)
01:15 – 02:15	56.6	dB(A)
02:15 – 03:15	56.3	dB(A)
03:15 – 04:15	56.6	dB(A)
04:15 – 05:15	56.8	dB(A)
05:15 – 06:15	56.1	dB(A)
06:15 – 07:15	63.1	dB(A)
07:15 – 08:15	62.3	dB(A)
08:15 – 09:15	62.8	dB(A)
$L_{eq}$ 24 hr.	58.9	dB(A)
$L_{dn\#}$	65.3	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

<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)

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

(Ms. Thanatporn Klinson is Section Chief, Mr. Chaochindawat is Technical Management)

(Measurement By Ms. Thanatporn Klinson)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

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Approved By

(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 22579
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 15-16/08/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 17/08/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันออก	REPORTED DATE	: 22/08/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301039 : Type 2		

TIME \ DATE	15-16/08/2022 ( $L_{eq}$ )	UNIT
09:20 – 10:20 <sup>1/3</sup>	58.7	dB(A)
10:20 – 11:20	56.6	dB(A)
11:20 – 12:20	56.4	dB(A)
12:20 – 13:20	57.1	dB(A)
13:20 – 14:20	59.4	dB(A)
14:20 – 15:20	58.1	dB(A)
15:20 – 16:20	59.0	dB(A)
16:20 – 17:20	55.8	dB(A)
17:20 – 18:20	58.7	dB(A)
18:20 – 19:20	58.4	dB(A)
19:20 – 20:20	62.5	dB(A)
20:20 – 21:20	62.1	dB(A)
21:20 – 22:20	63.3	dB(A)
22:20 – 23:20	62.7	dB(A)
23:20 – 00:20	64.5	dB(A)
00:20 – 01:20	66.3	dB(A)
01:20 – 02:20	65.9	dB(A)
02:20 – 03:20	65.2	dB(A)
03:20 – 04:20	62.1	dB(A)
04:20 – 05:20	57.7	dB(A)
05:20 – 06:20	57.2	dB(A)
06:20 – 07:20	56.4	dB(A)
07:20 – 08:20	61.8	dB(A)
08:20 – 09:20	58.7	dB(A)
$L_{eq}$ 24 hr.	61.4	dB(A)
$L_{dn#}$	69.4	dB(A)
Standard	70 <sup>1/</sup> , 70 <sup>2/</sup>	dB(A)

**REMARK :** <sup>1/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

\* Parameter Outside The Scope of The Regulation of The Department of Industrial Works  
(Ms. Thanatporn Klinsoon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 27675
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/09/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันออก	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301607 : Type 2		

TIME \ DATE	06-07/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	57.2	dB(A)
10:00 - 11:00	59.5	dB(A)
11:00 - 12:00	56.8	dB(A)
12:00 - 13:00	58.6	dB(A)
13:00 - 14:00	56.7	dB(A)
14:00 - 15:00	55.4	dB(A)
15:00 - 16:00	57.9	dB(A)
16:00 - 17:00	55.5	dB(A)
17:00 - 18:00	55.7	dB(A)
18:00 - 19:00	56.1	dB(A)
19:00 - 20:00	54.6	dB(A)
20:00 - 21:00	55.6	dB(A)
21:00 - 22:00	55.9	dB(A)
22:00 - 23:00	56.1	dB(A)
23:00 - 00:00	56.0	dB(A)
00:00 - 01:00	65.1	dB(A)
01:00 - 02:00	61.1	dB(A)
02:00 - 03:00	60.7	dB(A)
03:00 - 04:00	60.2	dB(A)
04:00 - 05:00	60.0	dB(A)
05:00 - 06:00	58.8	dB(A)
06:00 - 07:00	57.0	dB(A)
07:00 - 08:00	56.6	dB(A)
08:00 - 09:00	59.7	dB(A)
$L_{eq}$ 24 hr.	58.6	dB(A)
$L_{dn\#}$	66.4	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

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 29961
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 04-05/10/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: รีมรีวด้านทิศตะวันออก	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 00209072 : Type 2		

TIME \ DATE	04-05/10/2022 ( $L_{eq}$ )	UNIT
09:20 - 10:20 <sup>/3</sup>	59.2	dB(A)
10:20 - 11:20	59.8	dB(A)
11:20 - 12:20	56.8	dB(A)
12:20 - 13:20	58.1	dB(A)
13:20 - 14:20	57.9	dB(A)
14:20 - 15:20	57.6	dB(A)
15:20 - 16:20	57.6	dB(A)
16:20 - 17:20	63.5	dB(A)
17:20 - 18:20	61.5	dB(A)
18:20 - 19:20	57.6	dB(A)
19:20 - 20:20	57.1	dB(A)
20:20 - 21:20	59.0	dB(A)
21:20 - 22:20	58.3	dB(A)
22:20 - 23:20	58.1	dB(A)
23:20 - 00:20	59.0	dB(A)
00:20 - 01:20	59.8	dB(A)
01:20 - 02:20	59.9	dB(A)
02:20 - 03:20	57.9	dB(A)
03:20 - 04:20	57.4	dB(A)
04:20 - 05:20	56.9	dB(A)
05:20 - 06:20	56.8	dB(A)
06:20 - 07:20	57.0	dB(A)
07:20 - 08:20	55.1	dB(A)
08:20 - 09:20	61.1	dB(A)
$L_{eq}$ 24 hr.	58.9	dB(A)
$L_{dn\#}$	64.8	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

<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)

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


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

(Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

  
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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 090090 : Type 2

SAMPLE NO. : 34177  
MEASURING DATE : 08-09/11/2022  
RECEIVED DATE : 16/11/2022  
REPORTED DATE : 24/11/2022

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>/3</sup>	55.3	dB(A)
10:30 - 11:30	56.0	dB(A)
11:30 - 12:30	54.2	dB(A)
12:30 - 13:30	56.2	dB(A)
13:30 - 14:30	63.9	dB(A)
14:30 - 15:30	62.6	dB(A)
15:30 - 16:30	54.9	dB(A)
16:30 - 17:30	54.4	dB(A)
17:30 - 18:30	53.8	dB(A)
18:30 - 19:30	53.4	dB(A)
19:30 - 20:30	60.3	dB(A)
20:30 - 21:30	55.8	dB(A)
21:30 - 22:30	55.8	dB(A)
22:30 - 23:30	55.5	dB(A)
23:30 - 00:30	55.9	dB(A)
00:30 - 01:30	55.5	dB(A)
01:30 - 02:30	55.5	dB(A)
02:30 - 03:30	55.5	dB(A)
03:30 - 04:30	55.1	dB(A)
04:30 - 05:30	55.0	dB(A)
05:30 - 06:30	55.6	dB(A)
06:30 - 07:30	54.4	dB(A)
07:30 - 08:30	60.3	dB(A)
08:30 - 09:30	59.9	dB(A)
$L_{eq}$ 24 hr.	57.6	dB(A)
$L_{dn#}$	62.4	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/1</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

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

\* 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 Mr. Aocha Kruangsriamongkorn)



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Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 35669
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 07-08/12/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/12/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันออก	REPORTED DATE	: 16/12/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301638 : Type 2		

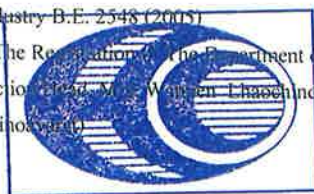
TIME \ DATE	07-08/12/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>13</sup>	58.7	dB(A)
10:00 - 11:00	57.7	dB(A)
11:00 - 12:00	57.3	dB(A)
12:00 - 13:00	56.9	dB(A)
13:00 - 14:00	57.0	dB(A)
14:00 - 15:00	58.8	dB(A)
15:00 - 16:00	58.6	dB(A)
16:00 - 17:00	56.4	dB(A)
17:00 - 18:00	59.4	dB(A)
18:00 - 19:00	60.3	dB(A)
19:00 - 20:00	57.9	dB(A)
20:00 - 21:00	56.3	dB(A)
21:00 - 22:00	56.2	dB(A)
22:00 - 23:00	56.2	dB(A)
23:00 - 00:00	56.1	dB(A)
00:00 - 01:00	56.2	dB(A)
01:00 - 02:00	56.3	dB(A)
02:00 - 03:00	56.2	dB(A)
03:00 - 04:00	56.5	dB(A)
04:00 - 05:00	56.2	dB(A)
05:00 - 06:00	55.9	dB(A)
06:00 - 07:00	55.8	dB(A)
07:00 - 08:00	54.5	dB(A)
08:00 - 09:00	57.0	dB(A)
$L_{eq}$ 24 hr.	57.2	dB(A)
$L_{dn\#}$	62.8	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

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

\* Parameter Outside The Scope of The Regulation of The Department of Industrial Works  
(Ms. Thanatporn Klinsoon is Section Chief, Ms. Wanchan Chaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinontarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

16/12/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 18073
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 11-12/07/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 14/07/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันตก	REPORTED DATE	: 26/07/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301635 : Type 2		

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:25 – 10:25 <sup>/3</sup>	61.8	dB(A)
10:25 – 11:25	61.5	dB(A)
11:25 – 12:25	60.4	dB(A)
12:25 – 13:25	60.0	dB(A)
13:25 – 14:25	60.8	dB(A)
14:25 – 15:25	61.9	dB(A)
15:25 – 16:25	61.5	dB(A)
16:25 – 17:25	62.8	dB(A)
17:25 – 18:25	64.3	dB(A)
18:25 – 19:25	64.7	dB(A)
19:25 – 20:25	66.1	dB(A)
20:25 – 21:25	63.2	dB(A)
21:25 – 22:25	60.4	dB(A)
22:25 – 23:25	59.8	dB(A)
23:25 – 00:25	59.3	dB(A)
00:25 – 01:25	58.5	dB(A)
01:25 – 02:25	59.1	dB(A)
02:25 – 03:25	58.7	dB(A)
03:25 – 04:25	58.8	dB(A)
04:25 – 05:25	59.1	dB(A)
05:25 – 06:25	61.5	dB(A)
06:25 – 07:25	63.6	dB(A)
07:25 – 08:25	66.8	dB(A)
08:25 – 09:25	63.3	dB(A)
$L_{eq}$ 24 hr.	62.2	dB(A)
$L_{dn\#}$	67.1	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

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

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

(Measurement By Ms. Thanatporn)



Approved By

(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 22581
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 15-16/08/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 17/08/2022
SAMPLE POINT	: รีมรีวัดด้านทิศตะวันตก	REPORTED DATE	: 22/08/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G301013 : Type 2		

TIME \ DATE	15-16/08/2022 ( $L_{eq}$ )	UNIT
09:05 – 10:05 <sup>/3</sup>	59.1	dB(A)
10:05 – 11:05	59.7	dB(A)
11:05 – 12:05	59.1	dB(A)
12:05 – 13:05	59.0	dB(A)
13:05 – 14:05	59.3	dB(A)
14:05 – 15:05	60.4	dB(A)
15:05 – 16:05	60.7	dB(A)
16:05 – 17:05	61.4	dB(A)
17:05 – 18:05	63.4	dB(A)
18:05 – 19:05	62.0	dB(A)
19:05 – 20:05	67.3	dB(A)
20:05 – 21:05	72.3	dB(A)
21:05 – 22:05	68.6	dB(A)
22:05 – 23:05	68.1	dB(A)
23:05 – 00:05	62.4	dB(A)
00:05 – 01:05	60.7	dB(A)
01:05 – 02:05	59.7	dB(A)
02:05 – 03:05	59.7	dB(A)
03:05 – 04:05	57.0	dB(A)
04:05 – 05:05	55.8	dB(A)
05:05 – 06:05	60.9	dB(A)
06:05 – 07:05	62.6	dB(A)
07:05 – 08:05	65.0	dB(A)
08:05 – 09:05	61.2	dB(A)
$L_{eq}$ 24 hr.	64.0	dB(A)
$L_{dn\#}$	69.2	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

<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)

\* Parameter Outside The Scope of The Registrar of the Department of Industrial Works  
(Ms. Thanatporn Klinsoon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Thanatporn Klinsoon)

<sup>/3</sup> Start Time



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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WITHOUT THE WRITTEN APPROVAL LABORATORY

**COPY**

**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 27674
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/09/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันตก	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N G300957 : Type 2		

TIME \ DATE	06-07/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	59.4	dB(A)
10:00 - 11:00	62.6	dB(A)
11:00 - 12:00	67.1	dB(A)
12:00 - 13:00	60.8	dB(A)
13:00 - 14:00	59.6	dB(A)
14:00 - 15:00	60.1	dB(A)
15:00 - 16:00	59.5	dB(A)
16:00 - 17:00	60.5	dB(A)
17:00 - 18:00	61.3	dB(A)
18:00 - 19:00	61.1	dB(A)
19:00 - 20:00	63.0	dB(A)
20:00 - 21:00	60.7	dB(A)
21:00 - 22:00	58.9	dB(A)
22:00 - 23:00	58.8	dB(A)
23:00 - 00:00	58.2	dB(A)
00:00 - 01:00	74.6	dB(A)
01:00 - 02:00	71.0	dB(A)
02:00 - 03:00	71.4	dB(A)
03:00 - 04:00	70.2	dB(A)
04:00 - 05:00	68.6	dB(A)
05:00 - 06:00	66.0	dB(A)
06:00 - 07:00	64.7	dB(A)
07:00 - 08:00	66.0	dB(A)
08:00 - 09:00	70.2	dB(A)
$L_{eq}$ 24 hr.	66.8	dB(A)
$L_{dn}$	75.5	dB(A)
Standard	70 <sup>/1</sup> - 70 <sup>/2</sup>	dB(A)

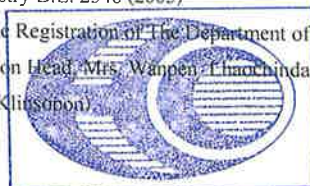
**REMARK :** Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

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



Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 29962
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 04-05/10/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/09/2022
SAMPLE POINT	: รีมรีวด้านทิศตะวันตก	REPORTED DATE	: 19/09/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 090090 : Type 2		

TIME \ DATE	04-05/10/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>13</sup>	67.1	dB(A)
10:30 - 11:30	65.0	dB(A)
11:30 - 12:30	67.9	dB(A)
12:30 - 13:30	65.1	dB(A)
13:30 - 14:30	63.2	dB(A)
14:30 - 15:30	63.0	dB(A)
15:30 - 16:30	64.1	dB(A)
16:30 - 17:30	65.2	dB(A)
17:30 - 18:30	62.2	dB(A)
18:30 - 19:30	61.9	dB(A)
19:30 - 20:30	60.9	dB(A)
20:30 - 21:30	60.8	dB(A)
21:30 - 22:30	60.8	dB(A)
22:30 - 23:30	60.7	dB(A)
23:30 - 00:30	60.5	dB(A)
00:30 - 01:30	60.1	dB(A)
01:30 - 02:30	60.0	dB(A)
02:30 - 03:30	59.5	dB(A)
03:30 - 04:30	59.5	dB(A)
04:30 - 05:30	60.6	dB(A)
05:30 - 06:30	63.1	dB(A)
06:30 - 07:30	62.8	dB(A)
07:30 - 08:30	62.0	dB(A)
08:30 - 09:30	61.2	dB(A)
$L_{eq}$ 24 hr.	63.1	dB(A)
$L_{dn\#}$	67.8	dB(A)
Standard	70 <sup>11</sup> , 70 <sup>12</sup>	dB(A)

**REMARK :** <sup>11</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<sup>11</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

<sup>12</sup> Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsoon is Section Chief of Ms. Wanpen Lhaochindawat is Technical Management)

(Measurement By Ms. Thanatporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 34176
ADDRESS	: 38/14 Moo 5 T. Tungsukla A, Sriracha, Chonburi 20230	MEASURING DATE	: 08-09/11/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 16/11/2022
SAMPLE POINT	: ริมรั้วด้านทิศตะวันตก	REPORTED DATE	: 24/11/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 090089 : Type 2		

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>/3</sup>	56.7	dB(A)
10:30 - 11:30	56.4	dB(A)
11:30 - 12:30	55.2	dB(A)
12:30 - 13:30	56.4	dB(A)
13:30 - 14:30	56.0	dB(A)
14:30 - 15:30	56.7	dB(A)
15:30 - 16:30	58.7	dB(A)
16:30 - 17:30	56.5	dB(A)
17:30 - 18:30	59.4	dB(A)
18:30 - 19:30	60.9	dB(A)
19:30 - 20:30	54.1	dB(A)
20:30 - 21:30	54.8	dB(A)
21:30 - 22:30	53.8	dB(A)
22:30 - 23:30	52.3	dB(A)
23:30 - 00:30	51.5	dB(A)
00:30 - 01:30	51.3	dB(A)
01:30 - 02:30	51.7	dB(A)
02:30 - 03:30	51.1	dB(A)
03:30 - 04:30	56.1	dB(A)
04:30 - 05:30	59.3	dB(A)
05:30 - 06:30	62.0	dB(A)
06:30 - 07:30	58.6	dB(A)
07:30 - 08:30	56.8	dB(A)
08:30 - 09:30	56.0	dB(A)
$L_{eq}$ 24 hr.	56.9	dB(A)
$L_{dn\#}$	63.2	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

\* 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 Mr. Aocha Khwansamkongkorn)



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Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

**COPY**



ACCREDITED  
ISO 9001 / ISO 14001

## EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230

Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R1236

Report No. R6512-0741

### TEST REPORT

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	SAMPLE NO.	: 35667
ADDRESS	: 38/14 Moo 5 T. Tungsukla A. Sriracha, Chonburi 20230	MEASURING DATE	: 06-07/12/2022
SAMPLE SOURCE	: Siam Poongsan Metal Co., Ltd.	RECEIVED DATE	: 10/12/2022
SAMPLE POINT	: รีมวัดด้านทิศตะวันตก	REPORTED DATE	: 16/12/2022
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 24 hr. & $L_{dn\#}$		
DETERMINATION METHOD	: ISO 1996-1:2016		
INSTRUMENT	: Integrated Sound Level Meter S/N 090085 : Type 2		

TIME \ DATE	06-07/12/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	59.6	dB(A)
10:00 - 11:00	59.8	dB(A)
11:00 - 12:00	59.1	dB(A)
12:00 - 13:00	59.2	dB(A)
13:00 - 14:00	59.2	dB(A)
14:00 - 15:00	59.7	dB(A)
15:00 - 16:00	60.2	dB(A)
16:00 - 17:00	59.6	dB(A)
17:00 - 18:00	61.5	dB(A)
18:00 - 19:00	60.6	dB(A)
19:00 - 20:00	61.3	dB(A)
20:00 - 21:00	60.9	dB(A)
21:00 - 22:00	59.8	dB(A)
22:00 - 23:00	59.8	dB(A)
23:00 - 00:00	59.7	dB(A)
00:00 - 01:00	59.5	dB(A)
01:00 - 02:00	59.3	dB(A)
02:00 - 03:00	59.5	dB(A)
03:00 - 04:00	59.0	dB(A)
04:00 - 05:00	58.6	dB(A)
05:00 - 06:00	59.8	dB(A)
06:00 - 07:00	61.3	dB(A)
07:00 - 08:00	63.7	dB(A)
08:00 - 09:00	61.5	dB(A)
$L_{eq}$ 24 hr.	60.3	dB(A)
$L_{dn\#}$	66.2	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	dB(A)

**REMARK :** <sup>/3</sup> Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

<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)

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

(Ms. Thanatporn Klinsoon is Section Chief of The Department of Industrial Works)

(Measurement By Ms. Savita Kittinon)

<sup>/3</sup> Start Time



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungskukla
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.	: 18068
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 11-12/07/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 14/07/2022
	S/N 01147298 : Type 2	REPORTED DATE	: 26/07/2022

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:00 – 10:00 <sup>/3</sup>	78.1	dB(A)
10:00 – 11:00	80.7	dB(A)
11:00 – 12:00	78.9	dB(A)
12:00 – 13:00	78.2	dB(A)
13:00 – 14:00	80.9	dB(A)
14:00 – 14:00	83.1	dB(A)
14:00 – 16:00	79.0	dB(A)
16:00 – 17:00	77.7	dB(A)
17:00 – 18:00	81.4	dB(A)
18:00 – 19:00	79.0	dB(A)
19:00 – 20:00	77.6	dB(A)
20:00 – 21:00	80.9	dB(A)
21:00 – 22:00	81.1	dB(A)
22:00 – 23:00	79.5	dB(A)
23:00 – 00:00	79.4	dB(A)
00:00 – 01:00	80.6	dB(A)
01:00 – 02:00	80.4	dB(A)
02:00 – 03:00	79.7	dB(A)
03:00 – 04:00	79.8	dB(A)
04:00 – 05:00	83.5	dB(A)
05:00 – 06:00	79.5	dB(A)
06:00 – 07:00	80.1	dB(A)
07:00 – 08:00	80.5	dB(A)
08:00 – 09:00	82.5	dB(A)
$L_{eq}$ 24 hr.	80.4	dB(A)
<hr/>		
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 – 17:00 น. = 79    17:00 – 01:00 น. = 80    01:00 – 09:00 น. = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 – 17:00 น. = 79    17:00 – 01:00 น. = 80    01:00 – 09:00 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

(Ms. Thanatporn Krasopon is Supervisor Head Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement Engineer Krasopon Krasopon)



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

26/07/2022

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**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.	: 22577
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 15-16/08/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 17/08/2022
	S/N 00310458 : Type 2	REPORTED DATE	: 22/08/2022

TIME \ DATE	15-16/08/2022 ( $L_{eq}$ )	UNIT
09:45 – 10:45 <sup>/3</sup>	82.7	dB(A)
10:45 – 11:45	82.2	dB(A)
11:45 – 12:45	82.2	dB(A)
12:45 – 13:45	82.4	dB(A)
13:45 – 14:45	82.3	dB(A)
14:45 – 15:45	82.3	dB(A)
15:45 – 16:45	81.9	dB(A)
16:45 – 17:45	82.2	dB(A)
17:45 – 18:45	81.9	dB(A)
18:45 – 19:45	81.8	dB(A)
19:45 – 20:45	82.2	dB(A)
20:45 – 21:45	83.2	dB(A)
21:45 – 22:45	83.0	dB(A)
22:45 – 23:45	82.8	dB(A)
23:45 – 00:45	82.6	dB(A)
00:45 – 01:45	83.7	dB(A)
01:45 – 02:45	82.4	dB(A)
02:45 – 03:45	82.9	dB(A)
03:45 – 04:45	82.7	dB(A)
04:45 – 05:45	82.5	dB(A)
05:45 – 06:45	82.9	dB(A)
06:45 – 07:45	82.2	dB(A)
07:45 – 08:45	81.9	dB(A)
08:45 – 09:45	82.2	dB(A)
$L_{eq}$ 24 hr.	82.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:45 – 17:45 น. = 82    17:45 – 01:45 น. = 82    01:45 – 09:45 น. = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:45 – 17:45 น. = 82    17:45 – 01:45 น. = 82    01:45 – 09:45 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

(Ms. Thanaporn Kongsornwis Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement by Ms. Thanaporn Kongsornwis)



Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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**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.	: 27680
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G301607 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	07-08/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	82.3	dB(A)
10:00 - 11:00	83.0	dB(A)
11:00 - 12:00	81.4	dB(A)
12:00 - 13:00	80.9	dB(A)
13:00 - 14:00	81.7	dB(A)
14:00 - 15:00	83.0	dB(A)
15:00 - 16:00	80.2	dB(A)
16:00 - 17:00	81.7	dB(A)
17:00 - 18:00	82.7	dB(A)
18:00 - 19:00	81.7	dB(A)
19:00 - 20:00	81.7	dB(A)
20:00 - 21:00	82.0	dB(A)
21:00 - 22:00	83.1	dB(A)
22:00 - 23:00	82.7	dB(A)
23:00 - 00:00	82.4	dB(A)
00:00 - 01:00	81.7	dB(A)
01:00 - 02:00	82.6	dB(A)
02:00 - 03:00	82.4	dB(A)
03:00 - 04:00	81.3	dB(A)
04:00 - 05:00	82.1	dB(A)
05:00 - 06:00	83.0	dB(A)
06:00 - 07:00	81.7	dB(A)
07:00 - 08:00	82.0	dB(A)
08:00 - 09:00	81.4	dB(A)
$L_{eq}$ 24 hr.	82.1	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 81    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. = 81    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  
<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  
(Ms. Thanatporn Klinasopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoyavanat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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.	: 29957
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 05-06/10/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 07/10/2022
	S/N 00443359 : Type 2	REPORTED DATE	: 17/10/2022

TIME \ DATE	05-06/10/2022 ( $L_{eq}$ )			UNIT
09:00 - 10:00 <sup>/3</sup>	82.1			dB(A)
10:00 - 11:00	81.2			dB(A)
11:00 - 12:00	82.4			dB(A)
12:00 - 13:00	82.3			dB(A)
13:00 - 14:00	83.3			dB(A)
14:00 - 15:00	81.0			dB(A)
15:00 - 16:00	82.0			dB(A)
16:00 - 17:00	82.8			dB(A)
17:00 - 18:00	81.2			dB(A)
18:00 - 19:00	82.3			dB(A)
19:00 - 20:00	83.6			dB(A)
20:00 - 21:00	82.2			dB(A)
21:00 - 22:00	81.7			dB(A)
22:00 - 23:00	82.9			dB(A)
23:00 - 00:00	83.0			dB(A)
00:00 - 01:00	80.7			dB(A)
01:00 - 02:00	82.7			dB(A)
02:00 - 03:00	83.1			dB(A)
03:00 - 04:00	81.3			dB(A)
04:00 - 05:00	81.3			dB(A)
05:00 - 06:00	83.1			dB(A)
06:00 - 07:00	81.1			dB(A)
07:00 - 08:00	79.8			dB(A)
08:00 - 09:00	79.8			dB(A)
$L_{eq}$ 24 hr.	82.1			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. = 81	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. = 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

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

(Measurement By: Ms. Savitak Kiatmanan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

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**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.	: 34179
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/11/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/11/2022
	S/N 090088 : Type 2	REPORTED DATE	: 24/11/2022

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	81.8	dB(A)
10:00 - 11:00	79.8	dB(A)
11:00 - 12:00	79.1	dB(A)
12:00 - 13:00	79.2	dB(A)
13:00 - 14:00	81.4	dB(A)
14:00 - 15:00	78.2	dB(A)
15:00 - 16:00	78.0	dB(A)
16:00 - 17:00	78.0	dB(A)
17:00 - 18:00	78.0	dB(A)
18:00 - 19:00	78.0	dB(A)
19:00 - 20:00	78.2	dB(A)
20:00 - 21:00	78.8	dB(A)
21:00 - 22:00	78.8	dB(A)
22:00 - 23:00	79.7	dB(A)
23:00 - 00:00	81.5	dB(A)
00:00 - 01:00	78.9	dB(A)
01:00 - 02:00	80.5	dB(A)
02:00 - 03:00	81.0	dB(A)
03:00 - 04:00	80.3	dB(A)
04:00 - 05:00	80.1	dB(A)
05:00 - 06:00	81.3	dB(A)
06:00 - 07:00	79.6	dB(A)
07:00 - 08:00	79.0	dB(A)
08:00 - 09:00	81.4	dB(A)
$L_{eq}$ 24 hr.	79.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 $L_{eq}$ = 79    17:00 - 01:00 $L_{eq}$ = 79    01:00 - 09:00 $L_{eq}$ = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 $L_{eq}$ = 79    17:00 - 01:00 $L_{eq}$ = 79    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 :**

<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 not have License Registration of Department of Labour Protection and Welfare

(Ms. Thanaporn Klinson is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement by Ms. Jutarat Sukaeng)



Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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## EASTERN THAI CONSULTING 1992 CO., LTD.

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



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R1236

Report No. R6512-0744

### 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		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 35670
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/12/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/12/2022
	S/N G301635 : Type 2	REPORTED DATE	: 16/12/2022

TIME \ DATE	07-08/12/2022 ( $L_{eq}$ )	UNIT
09:10 - 10:10 <sup>/3</sup>	82.7	dB(A)
10:10 - 11:10	80.8	dB(A)
11:10 - 12:10	82.9	dB(A)
12:10 - 13:10	80.3	dB(A)
13:10 - 14:10	80.2	dB(A)
14:10 - 15:10	82.7	dB(A)
15:10 - 16:10	80.0	dB(A)
16:10 - 17:10	79.8	dB(A)
17:10 - 18:10	80.0	dB(A)
18:10 - 19:10	79.6	dB(A)
19:10 - 20:10	80.9	dB(A)
20:10 - 21:10	80.9	dB(A)
21:10 - 22:10	81.2	dB(A)
22:10 - 23:10	80.6	dB(A)
23:10 - 00:10	82.7	dB(A)
00:10 - 01:10	81.3	dB(A)
01:10 - 02:10	80.7	dB(A)
02:10 - 03:10	81.2	dB(A)
03:10 - 04:10	82.6	dB(A)
04:10 - 05:10	80.6	dB(A)
05:10 - 06:10	81.5	dB(A)
06:10 - 07:10	81.8	dB(A)
07:10 - 08:10	81.0	dB(A)
08:10 - 09:10	80.1	dB(A)
$L_{eq}$ 24 hr.	81.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>/1, /1</sup>	09:10 - 17:10 น. = 81    17:10 - 01:10 น. = 80    01:10 - 09:10 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:10 - 17:10 น. = 81    17:10 - 01:10 น. = 80    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>#</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  
 (Ms. Thanatporn ... as Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement By Ms. Savitree ...)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**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	: Casting		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 18069
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 11-12/07/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 14/07/2022
	S/N 090088 : Type 2	REPORTED DATE	: 26/07/2022

TIME \ DATE	11-12/07/2022 ( $L_{eq}$ )	UNIT
09:00 – 10:00 <sup>/3</sup>	76.5	dB(A)
10:00 – 11:00	76.1	dB(A)
11:00 – 12:00	73.8	dB(A)
12:00 – 13:00	74.2	dB(A)
13:00 – 14:00	75.9	dB(A)
14:00 – 14:00	75.7	dB(A)
14:00 – 16:00	73.0	dB(A)
16:00 – 17:00	74.2	dB(A)
17:00 – 18:00	73.8	dB(A)
18:00 – 19:00	72.8	dB(A)
19:00 – 20:00	73.7	dB(A)
20:00 – 21:00	75.7	dB(A)
21:00 – 22:00	73.6	dB(A)
22:00 – 23:00	74.2	dB(A)
23:00 – 00:00	75.9	dB(A)
00:00 – 01:00	74.3	dB(A)
01:00 – 02:00	73.9	dB(A)
02:00 – 03:00	74.9	dB(A)
03:00 – 04:00	77.5	dB(A)
04:00 – 05:00	73.5	dB(A)
05:00 – 06:00	75.6	dB(A)
06:00 – 07:00	76.3	dB(A)
07:00 – 08:00	76.6	dB(A)
08:00 – 09:00	75.7	dB(A)
$L_{eq}$ 24 hr.	75.1	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 – 17:00 $\bar{u}_t$ = 75    17:00 – 01:00 $\bar{u}_t$ = 74    01:00 – 09:00 $\bar{u}_t$ = 75	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 – 17:00 $\bar{u}_t$ = 75    17:00 – 01:00 $\bar{u}_t$ = 74    01:00 – 09:00 $\bar{u}_t$ = 75	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 not have L<sub>max</sub> - P<sub>max</sub> of Department of Labour Protection and Welfare

(Ms. Thanaporn Kinsornkiet, Sriracha Road, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement by Ms. Thanaporn Kinsornkiet)



Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
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**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.	: 22576
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 16-17/08/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 17/08/2022
	S/N 00310458 : Type 2	REPORTED DATE	: 22/08/2022

TIME \ DATE	16-17/08/2022 ( $L_{eq}$ )	UNIT
09:50 – 10:50 <sup>/3</sup>	84.7	dB(A)
10:50 – 11:50	85.0	dB(A)
11:50 – 12:50	82.8	dB(A)
12:50 – 13:50	84.5	dB(A)
13:50 – 14:50	83.6	dB(A)
14:50 – 15:50	82.7	dB(A)
15:50 – 16:50	84.4	dB(A)
16:50 – 17:50	83.2	dB(A)
17:50 – 18:50	83.0	dB(A)
18:50 – 19:50	84.5	dB(A)
19:50 – 20:50	83.3	dB(A)
20:50 – 21:50	83.2	dB(A)
21:50 – 22:50	83.0	dB(A)
22:50 – 23:50	84.6	dB(A)
23:50 – 00:50	82.9	dB(A)
00:50 – 01:50	83.4	dB(A)
01:50 – 02:50	84.4	dB(A)
02:50 – 03:50	83.7	dB(A)
03:50 – 04:50	83.0	dB(A)
04:50 – 05:50	82.9	dB(A)
05:50 – 06:50	84.9	dB(A)
06:50 – 07:50	82.9	dB(A)
07:50 – 08:50	82.9	dB(A)
08:50 – 09:50	83.3	dB(A)
$L_{eq}$ 24 hr.	83.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:50 – 17:50 น. = 83    17:50 – 01:50 น. = 83    01:50 – 09:50 น. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:50 – 17:50 น. = 83    17:50 – 01:50 น. = 83    01:50 – 09:50 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); 3 dB Exchange Rate  
<sup>\*</sup> Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
 (Ms. Thanaporn Silasophon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement by Ms. Thanaporn Silasophon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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**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.	: 27679
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G301635 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	07-08/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	82.2	dB(A)
10:00 - 11:00	80.3	dB(A)
11:00 - 12:00	80.8	dB(A)
12:00 - 13:00	80.0	dB(A)
13:00 - 14:00	79.4	dB(A)
14:00 - 15:00	85.8	dB(A)
15:00 - 16:00	79.0	dB(A)
16:00 - 17:00	79.9	dB(A)
17:00 - 18:00	79.6	dB(A)
18:00 - 19:00	80.1	dB(A)
19:00 - 20:00	84.0	dB(A)
20:00 - 21:00	79.4	dB(A)
21:00 - 22:00	82.1	dB(A)
22:00 - 23:00	80.5	dB(A)
23:00 - 00:00	80.4	dB(A)
00:00 - 01:00	79.8	dB(A)
01:00 - 02:00	79.1	dB(A)
02:00 - 03:00	78.5	dB(A)
03:00 - 04:00	80.3	dB(A)
04:00 - 05:00	79.7	dB(A)
05:00 - 06:00	80.0	dB(A)
06:00 - 07:00	80.0	dB(A)
07:00 - 08:00	79.4	dB(A)
08:00 - 09:00	79.3	dB(A)
$L_{eq}$ 24 hr.	80.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 81    17:00 - 01:00 น. = 81    01:00 - 09:00 น. = 79	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 81    17:00 - 01:00 น. = 80    01:00 - 09:00 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 License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

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

(Measurement By Ms. Savita Kittinavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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.	: 29958
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 05-06/10/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 07/10/2022
	S/N 01209917 : Type 2	REPORTED DATE	: 17/10/2022

TIME \ DATE	05-06/10/2022 ( $L_{eq}$ )			UNIT
09:35 - 10:35 <sup>/3</sup>	84.0			dB(A)
10:35 - 11:35	82.6			dB(A)
11:35 - 12:35	82.3			dB(A)
12:35 - 13:35	84.4			dB(A)
13:35 - 14:35	82.0			dB(A)
14:35 - 15:35	82.3			dB(A)
15:35 - 16:35	85.1			dB(A)
16:35 - 17:35	81.8			dB(A)
17:35 - 18:35	82.1			dB(A)
18:35 - 19:35	85.1			dB(A)
19:35 - 20:35	83.1			dB(A)
20:35 - 21:35	82.5			dB(A)
21:35 - 22:35	83.1			dB(A)
22:35 - 23:35	84.7			dB(A)
23:35 - 00:35	82.2			dB(A)
00:35 - 01:35	82.5			dB(A)
01:35 - 02:35	84.8			dB(A)
02:35 - 03:35	82.2			dB(A)
03:35 - 04:35	82.0			dB(A)
04:35 - 05:35	83.4			dB(A)
05:35 - 06:35	83.8			dB(A)
06:35 - 07:35	81.8			dB(A)
07:35 - 08:35	81.2			dB(A)
08:35 - 09:35	82.1			dB(A)
$L_{eq}$ 24 hr.	83.1			dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	09:35 ~ 17:35 น. = 83	17:35 ~ 01:35 น. = 83	01:35 ~ 09:35 น. = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:35 ~ 17:35 น. = 83	17:35 ~ 01:35 น. = 83	01:35 ~ 09:35 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

<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

(Ms. Thanaporn K. Khamphais Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By: Ms. Sanyia Khamphais)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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**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.	: 34180
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/11/2022
INSTRUMENT	: Integrated Sound Level Meter ; S/N 01209917 : Type 2	RECEIVED DATE	: 16/11/2022
		REPORTED DATE	: 24/11/2022

TIME \ DATE	08-09/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	82.1	dB(A)
10:00 - 11:00	80.1	dB(A)
11:00 - 12:00	79.1	dB(A)
12:00 - 13:00	80.8	dB(A)
13:00 - 14:00	81.9	dB(A)
14:00 - 15:00	79.1	dB(A)
15:00 - 16:00	78.9	dB(A)
16:00 - 17:00	78.9	dB(A)
17:00 - 18:00	79.0	dB(A)
18:00 - 19:00	78.8	dB(A)
19:00 - 20:00	78.8	dB(A)
20:00 - 21:00	79.6	dB(A)
21:00 - 22:00	79.7	dB(A)
22:00 - 23:00	79.9	dB(A)
23:00 - 00:00	81.9	dB(A)
00:00 - 01:00	80.2	dB(A)
01:00 - 02:00	79.3	dB(A)
02:00 - 03:00	82.2	dB(A)
03:00 - 04:00	80.9	dB(A)
04:00 - 05:00	80.9	dB(A)
05:00 - 06:00	80.4	dB(A)
06:00 - 07:00	82.2	dB(A)
07:00 - 08:00	80.0	dB(A)
08:00 - 09:00	80.0	dB(A)
$L_{eq}$ 24 hr.	80.4	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 79    01:00 - 09:00 น. = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 79    01:00 - 09:00 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 not have License Registration of Department of Labour Protection and Welfare  
(Ms. Thanatporn Khasopon's Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement by Ms. Jitarat Sulagat)



Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**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.	: 35671
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/12/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/12/2022
	S/N G301661 : Type 2	REPORTED DATE	: 16/12/2022

TIME \ DATE	07-08/12/2022 ( $L_{eq}$ )	UNIT
09:15 - 10:15 <sup>/3</sup>	80.9	dB(A)
10:15 - 11:15	80.4	dB(A)
11:15 - 12:15	82.9	dB(A)
12:15 - 13:15	79.8	dB(A)
13:15 - 14:15	79.8	dB(A)
14:15 - 15:15	83.0	dB(A)
15:15 - 16:15	79.7	dB(A)
16:15 - 17:15	79.6	dB(A)
17:15 - 18:15	79.5	dB(A)
18:15 - 19:15	79.8	dB(A)
19:15 - 20:15	82.2	dB(A)
20:15 - 21:15	80.7	dB(A)
21:15 - 22:15	81.1	dB(A)
22:15 - 23:15	80.7	dB(A)
23:15 - 00:15	83.3	dB(A)
00:15 - 01:15	80.6	dB(A)
01:15 - 02:15	80.3	dB(A)
02:15 - 03:15	82.1	dB(A)
03:15 - 04:15	82.3	dB(A)
04:15 - 05:15	80.9	dB(A)
05:15 - 06:15	80.8	dB(A)
06:15 - 07:15	81.7	dB(A)
07:15 - 08:15	82.0	dB(A)
08:15 - 09:15	80.6	dB(A)
$L_{eq}$ 24 hr.	81.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:15 - 17:15 น. = 80    17:15 - 01:15 น. = 81    01:15 - 09:15 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:15 - 17:15 น. = 80    17:15 - 01:15 น. = 81    01:15 - 09:15 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 from Department of Labour Protection and Welfare No. 0403-03-2564-0009  
 (Ms. Thanatporn Boonrat, Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement By Mrs. Savitree Lhaochindawat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
 (MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**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.	: 18074
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 13-14/07/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 14/07/2022
	S/N 00310455 : Type 2	REPORTED DATE	: 26/07/2022

TIME \ DATE	13-14/07/2022 ( $L_{eq}$ )	UNIT
09:30 – 10:30 <sup>/3</sup>	81.8	dB(A)
10:30 – 11:30	78.9	dB(A)
11:30 – 12:30	74.7	dB(A)
12:30 – 13:30	79.7	dB(A)
13:30 – 14:30	78.3	dB(A)
14:30 – 15:30	78.3	dB(A)
15:30 – 16:30	78.6	dB(A)
16:30 – 17:30	78.8	dB(A)
17:30 – 18:30	74.1	dB(A)
18:30 – 19:30	79.6	dB(A)
19:30 – 20:30	75.7	dB(A)
20:30 – 21:30	77.8	dB(A)
21:30 – 22:30	79.1	dB(A)
22:30 – 23:30	78.7	dB(A)
23:30 – 00:30	76.1	dB(A)
00:30 – 01:30	79.0	dB(A)
01:30 – 02:30	77.3	dB(A)
02:30 – 03:30	77.7	dB(A)
03:30 – 03:30	76.4	dB(A)
03:30 – 04:30	71.8	dB(A)
04:30 – 05:30	79.6	dB(A)
05:30 – 06:30	80.2	dB(A)
06:30 – 07:30	75.9	dB(A)
07:30 – 09:30	76.3	dB(A)
$L_{eq}$ 24 hr.	78.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#.11</sup>	09:30 – 17:30 $L_{eq}$ = 78    17:30 – 01:30 $L_{eq}$ = 77    01:30 – 09:30 $L_{eq}$ = 77	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##.12</sup>	09:30 – 17:30 $L_{eq}$ = 78    17:30 – 01:30 $L_{eq}$ = 77    01:30 – 09:30 $L_{eq}$ = 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

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

(Measurement By ...)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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**TEST REPORT**

CUSTOMER	: Siam Poongsan Metal Co., Ltd.	ADDRESS	: 38/14 Moo 5 T. Tungskukla
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.	: 22575
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 16-17/08/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 17/08/2022
	S/N G301013 : Type 2	REPORTED DATE	: 22/08/2022

TIME \ DATE	16-17/08/2022 ( $L_{eq}$ )	UNIT
09:45 – 10:45 <sup>/3</sup>	83.9	dB(A)
10:45 – 11:45	84.0	dB(A)
11:45 – 12:45	85.1	dB(A)
12:45 – 13:45	84.4	dB(A)
13:45 – 14:45	83.3	dB(A)
14:45 – 15:45	83.1	dB(A)
15:45 – 16:45	83.2	dB(A)
16:45 – 17:45	81.9	dB(A)
17:45 – 18:45	80.1	dB(A)
18:45 – 19:45	80.0	dB(A)
19:45 – 20:45	80.8	dB(A)
20:45 – 21:45	80.8	dB(A)
21:45 – 22:45	80.5	dB(A)
22:45 – 23:45	79.0	dB(A)
23:45 – 00:45	80.1	dB(A)
00:45 – 01:45	82.8	dB(A)
01:45 – 02:45	84.3	dB(A)
02:45 – 03:45	82.5	dB(A)
03:45 – 04:45	78.8	dB(A)
04:45 – 05:45	83.6	dB(A)
05:45 – 06:45	83.3	dB(A)
06:45 – 07:45	78.5	dB(A)
07:45 – 08:45	81.2	dB(A)
08:45 – 09:45	82.8	dB(A)
$L_{eq}$ 24 hr.	82.4	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:45 – 17:45 น. = 83    17:45 – 01:45 น. = 80    01:45 – 09:45 น. = 82	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:45 – 17:45 น. = 83    17:45 – 01:45 น. = 80    01:45 – 09:45 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  
<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  
 (Ms. Thanaporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement By Ms. Thanaporn Klinsoon)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By:   
 (MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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## EASTERN THAI CONSULTING 1992 CO., LTD.

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



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R0941

Report No. R6509-3604

### 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.	: 27683
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 09-10/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G301638 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	09-10/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	73.2	dB(A)
10:00 - 11:00	86.3	dB(A)
11:00 - 12:00	81.4	dB(A)
12:00 - 13:00	79.6	dB(A)
13:00 - 14:00	79.7	dB(A)
14:00 - 15:00	78.8	dB(A)
15:00 - 16:00	78.1	dB(A)
16:00 - 17:00	82.5	dB(A)
17:00 - 18:00	77.9	dB(A)
18:00 - 19:00	79.1	dB(A)
19:00 - 20:00	76.1	dB(A)
20:00 - 21:00	77.3	dB(A)
21:00 - 22:00	81.2	dB(A)
22:00 - 23:00	80.2	dB(A)
23:00 - 00:00	78.5	dB(A)
00:00 - 01:00	82.3	dB(A)
01:00 - 02:00	78.2	dB(A)
02:00 - 03:00	80.0	dB(A)
03:00 - 04:00	78.3	dB(A)
04:00 - 05:00	79.0	dB(A)
05:00 - 06:00	79.8	dB(A)
06:00 - 07:00	80.0	dB(A)
07:00 - 08:00	80.5	dB(A)
08:00 - 09:00	78.6	dB(A)
$L_{eq}$ 24 hr.	80.2	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	09:00 - 17:00 น. = 81    17:00 - 01:00 น. = 79    01:00 - 09:00 น. = 79	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 79    01:00 - 09:00 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 License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

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

(Measurement By Ms. Savita Kittinavarat)



Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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.	: 29956
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 06-07/10/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 07/10/2022
	S/N 00443359 : Type 2	REPORTED DATE	: 17/10/2022

TIME \ DATE	06-07/10/2022 ( $L_{eq}$ )	UNIT
08:50 - 09:50 <sup>/3</sup>	83.9	dB(A)
09:50 - 10:50	83.6	dB(A)
10:50 - 11:50	84.0	dB(A)
11:50 - 12:50	83.4	dB(A)
12:50 - 13:50	84.6	dB(A)
13:50 - 14:50	84.9	dB(A)
14:50 - 15:50	84.5	dB(A)
15:50 - 16:50	84.8	dB(A)
16:50 - 17:50	84.5	dB(A)
17:50 - 18:50	85.2	dB(A)
18:50 - 19:50	84.5	dB(A)
19:50 - 20:50	84.5	dB(A)
20:50 - 21:50	85.6	dB(A)
21:50 - 22:50	86.0	dB(A)
22:50 - 23:50	84.4	dB(A)
23:50 - 00:50	85.2	dB(A)
00:50 - 01:50	85.5	dB(A)
01:50 - 02:50	84.6	dB(A)
02:50 - 03:50	84.7	dB(A)
03:50 - 04:50	84.7	dB(A)
04:50 - 05:50	84.5	dB(A)
05:50 - 06:50	85.9	dB(A)
06:50 - 07:50	84.6	dB(A)
07:50 - 08:50	83.4	dB(A)
$L_{eq}$ 24 hr.	84.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	08:50 - 16:50 น. = 84    16:50 - 00:50 น. = 85    00:50 - 08:50 น. = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	08:50 - 16:50 น. = 84    16:50 - 00:50 น. = 85    00:50 - 08:50 น. = 84	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

(Ms. Thanaporn Kinsirachon, Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement by Ms. Vanita Kinsirachon)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

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**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.	34181
DETERMINATION METHOD	ISO 11202:2010	MEASURING DATE	10-11/11/2022
INSTRUMENT	Integrated Sound Level Meter ; S/N 090089 : Type 2	RECEIVED DATE	16/11/2022
		REPORTED DATE	24/11/2022

TIME \ DATE	10-11/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	80.7	dB(A)
10:00 - 11:00	79.6	dB(A)
11:00 - 12:00	77.6	dB(A)
12:00 - 13:00	79.3	dB(A)
13:00 - 14:00	79.7	dB(A)
14:00 - 15:00	76.8	dB(A)
15:00 - 16:00	80.5	dB(A)
16:00 - 17:00	85.6	dB(A)
17:00 - 18:00	81.4	dB(A)
18:00 - 19:00	82.6	dB(A)
19:00 - 20:00	80.6	dB(A)
20:00 - 21:00	82.1	dB(A)
21:00 - 22:00	83.5	dB(A)
22:00 - 23:00	82.6	dB(A)
23:00 - 00:00	81.6	dB(A)
00:00 - 01:00	82.2	dB(A)
01:00 - 02:00	82.2	dB(A)
02:00 - 03:00	81.9	dB(A)
03:00 - 04:00	82.1	dB(A)
04:00 - 05:00	80.1	dB(A)
05:00 - 06:00	79.8	dB(A)
06:00 - 07:00	81.1	dB(A)
07:00 - 08:00	80.1	dB(A)
08:00 - 09:00	80.2	dB(A)
$L_{eq}$ 24 hr.	81.4	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 82    01:00 - 09:00 น. = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 82    01:00 - 09:00 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

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

(Measurement By Ms. Jutarat Suksumet)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**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.	: 35674
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 09-10/12/2022
INSTRUMENT	: Integrated Sound Level Meter ; S/N G301635 ; Type 2	RECEIVED DATE	: 10/12/2022
		REPORTED DATE	: 16/12/2022

TIME \ DATE	09-10/12/2022 ( $L_{eq}$ )	UNIT
10:00 - 11:00 <sup>/3</sup>	80.7	dB(A)
11:00 - 12:00	78.5	dB(A)
12:00 - 13:00	79.7	dB(A)
13:00 - 14:00	80.1	dB(A)
14:00 - 15:00	80.0	dB(A)
15:00 - 16:00	79.4	dB(A)
16:00 - 17:00	79.2	dB(A)
17:00 - 18:00	78.1	dB(A)
18:00 - 19:00	77.6	dB(A)
19:00 - 20:00	76.8	dB(A)
20:00 - 21:00	80.2	dB(A)
21:00 - 22:00	80.5	dB(A)
22:00 - 23:00	80.3	dB(A)
23:00 - 00:00	77.4	dB(A)
00:00 - 01:00	80.0	dB(A)
01:00 - 02:00	78.6	dB(A)
02:00 - 03:00	79.6	dB(A)
03:00 - 04:00	78.4	dB(A)
04:00 - 05:00	75.5	dB(A)
05:00 - 06:00	79.9	dB(A)
06:00 - 07:00	82.2	dB(A)
07:00 - 08:00	79.9	dB(A)
08:00 - 09:00	81.1	dB(A)
09:00 - 10:00	82.8	dB(A)
$L_{eq}$ 24 hr.	79.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	10:00 - 18:00 น. = 79      18:00 - 02:00 น. = 79      02:00 - 10:00 น. = 80	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	10:00 - 18:00 น. = 79      18:00 - 02:00 น. = 79      02:00 - 10:00 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); 3 dB Exchange Rate  
<sup>\*</sup> Parameter have Lie in Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
 (Ms. Thanatporn ... .. S. ... .. Head ... .. Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement By ... ..)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**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.	: 27678
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G301013 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	07-08/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	87.2	dB(A)
10:00 - 11:00	82.1	dB(A)
11:00 - 12:00	78.4	dB(A)
12:00 - 13:00	81.2	dB(A)
13:00 - 14:00	81.0	dB(A)
14:00 - 15:00	80.1	dB(A)
15:00 - 16:00	83.1	dB(A)
16:00 - 17:00	81.0	dB(A)
17:00 - 18:00	84.2	dB(A)
18:00 - 19:00	85.6	dB(A)
19:00 - 20:00	85.8	dB(A)
20:00 - 21:00	87.0	dB(A)
21:00 - 22:00	86.9	dB(A)
22:00 - 23:00	87.0	dB(A)
23:00 - 00:00	86.9	dB(A)
00:00 - 01:00	86.9	dB(A)
01:00 - 02:00	86.7	dB(A)
02:00 - 03:00	82.2	dB(A)
03:00 - 04:00	85.0	dB(A)
04:00 - 05:00	75.2	dB(A)
05:00 - 06:00	81.9	dB(A)
06:00 - 07:00	86.2	dB(A)
07:00 - 08:00	82.2	dB(A)
08:00 - 09:00	85.1	dB(A)
$L_{eq}$ 24 hr.	84.6	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 82      17:00 - 01:00 น. = 86      01:00 - 09:00 น. = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 82      17:00 - 01:00 น. = 86      01:00 - 09:00 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); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009

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

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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.	: 27682
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G301013 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	08-09/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	85.9	dB(A)
10:00 - 11:00	85.5	dB(A)
11:00 - 12:00	82.5	dB(A)
12:00 - 13:00	84.7	dB(A)
13:00 - 14:00	85.5	dB(A)
14:00 - 15:00	85.7	dB(A)
15:00 - 16:00	86.1	dB(A)
16:00 - 17:00	85.8	dB(A)
17:00 - 18:00	85.8	dB(A)
18:00 - 19:00	84.3	dB(A)
19:00 - 20:00	82.4	dB(A)
20:00 - 21:00	85.7	dB(A)
21:00 - 22:00	82.8	dB(A)
22:00 - 23:00	86.9	dB(A)
23:00 - 00:00	85.5	dB(A)
00:00 - 01:00	84.9	dB(A)
01:00 - 02:00	86.2	dB(A)
02:00 - 03:00	85.5	dB(A)
03:00 - 04:00	85.8	dB(A)
04:00 - 05:00	75.8	dB(A)
05:00 - 06:00	82.2	dB(A)
06:00 - 07:00	84.6	dB(A)
07:00 - 08:00	81.9	dB(A)
08:00 - 09:00	77.2	dB(A)
$L_{eq}$ 24 hr.	84.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	09:00 - 17:00 น. = 85    17:00 - 01:00 น. = 85    01:00 - 09:00 น. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 85    17:00 - 01:00 น. = 84    01:00 - 09:00 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); 5 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Ms. Thanatporn Khaisopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittimovarat)



Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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	: BK06		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 34183
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 11-12/11/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/11/2022
	S/N 01209915 : Type 2	REPORTED DATE	: 24/11/2022

TIME \ DATE	11-12/11/2022 ( $L_{eq}$ )	UNIT
09:30 - 10:30 <sup>/3</sup>	86.8	dB(A)
10:30 - 11:30	90.6	dB(A)
11:30 - 12:30	87.9	dB(A)
12:30 - 13:30	86.8	dB(A)
13:30 - 14:30	89.4	dB(A)
14:30 - 15:30	89.6	dB(A)
15:30 - 16:30	88.7	dB(A)
16:30 - 17:30	87.5	dB(A)
17:30 - 18:30	81.4	dB(A)
18:30 - 19:30	86.0	dB(A)
19:30 - 20:30	80.5	dB(A)
20:30 - 21:30	88.4	dB(A)
21:30 - 22:30	91.0	dB(A)
22:30 - 23:30	89.1	dB(A)
23:30 - 00:30	89.7	dB(A)
00:30 - 01:30	88.6	dB(A)
01:30 - 02:30	88.0	dB(A)
02:30 - 03:30	88.1	dB(A)
03:30 - 04:30	87.1	dB(A)
04:30 - 05:30	86.1	dB(A)
05:30 - 06:30	86.2	dB(A)
06:30 - 07:30	87.9	dB(A)
07:30 - 08:30	87.0	dB(A)
08:30 - 09:30	85.9	dB(A)
$L_{eq}$ 24 hr.	88.0	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:30 - 17:30 $\bar{u}$ = 88    17:30 - 01:30 $\bar{u}$ = 88    01:30 - 09:30 $\bar{u}$ = 87	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:30 - 17:30 $\bar{u}$ = 88    17:30 - 01:30 $\bar{u}$ = 87    01:30 - 09:30 $\bar{u}$ = 87	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

(Ms. Thanaporn Khinanon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Ms. Jirarat Saksapet)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

24/11/2022

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ISO 9001 / ISO 14001

## EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230

Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



NSC-TISI-TIS 17025

TESTING 0031

Request No. LA65-R1173

Report No. R6511-2971

### 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.	: 34184
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 15-16/11/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/11/2022
	S/N G301013 : Type 2	REPORTED DATE	: 24/11/2022

TIME \ DATE	15-16/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	81.9	dB(A)
10:00 - 11:00	78.8	dB(A)
11:00 - 12:00	80.4	dB(A)
12:00 - 13:00	79.3	dB(A)
13:00 - 14:00	81.3	dB(A)
14:00 - 15:00	81.3	dB(A)
15:00 - 16:00	82.0	dB(A)
16:00 - 17:00	73.7	dB(A)
17:00 - 18:00	71.5	dB(A)
18:00 - 19:00	71.4	dB(A)
19:00 - 20:00	71.9	dB(A)
20:00 - 21:00	80.6	dB(A)
21:00 - 22:00	82.4	dB(A)
22:00 - 23:00	83.3	dB(A)
23:00 - 00:00	81.3	dB(A)
00:00 - 01:00	81.1	dB(A)
01:00 - 02:00	83.1	dB(A)
02:00 - 03:00	81.2	dB(A)
03:00 - 04:00	78.4	dB(A)
04:00 - 05:00	70.6	dB(A)
05:00 - 06:00	69.8	dB(A)
06:00 - 07:00	70.1	dB(A)
07:00 - 08:00	70.4	dB(A)
08:00 - 09:00	82.7	dB(A)
$L_{eq}$ 24 hr.	79.9	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 80    01:00 - 09:00 น. = 78	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 80    17:00 - 01:00 น. = 79    01:00 - 09:00 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

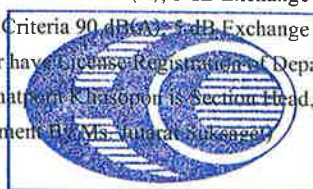
# Based on Criteria 85 dB(A); 3 dB Exchange Rate

## 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

(Ms. Thanaporn Khasopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Ms. Jitnara Sukong)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**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	: BK06		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 35673
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/12/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/12/2022
	S/N G301038 : Type 2	REPORTED DATE	: 16/12/2022

TIME \ DATE	08-09/12/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	87.0	dB(A)
10:00 - 11:00	87.8	dB(A)
11:00 - 12:00	86.4	dB(A)
12:00 - 13:00	86.0	dB(A)
13:00 - 14:00	88.3	dB(A)
14:00 - 15:00	90.0	dB(A)
15:00 - 16:00	87.5	dB(A)
16:00 - 17:00	87.2	dB(A)
17:00 - 18:00	79.3	dB(A)
18:00 - 19:00	83.0	dB(A)
19:00 - 20:00	80.2	dB(A)
20:00 - 21:00	89.4	dB(A)
21:00 - 22:00	90.2	dB(A)
22:00 - 23:00	89.3	dB(A)
23:00 - 00:00	89.2	dB(A)
00:00 - 01:00	87.9	dB(A)
01:00 - 02:00	87.8	dB(A)
02:00 - 03:00	84.1	dB(A)
03:00 - 04:00	82.5	dB(A)
04:00 - 05:00	76.1	dB(A)
05:00 - 06:00	80.8	dB(A)
06:00 - 07:00	83.3	dB(A)
07:00 - 08:00	77.1	dB(A)
08:00 - 09:00	85.0	dB(A)
$L_{eq}$ 24 hr.	86.6	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 87    17:00 - 01:00 น. = 87    01:00 - 09:00 น. = 83	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 87    17:00 - 01:00 น. = 87    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

<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  
(Ms. Thanatporn Khaisophon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kiatnavejanee)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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**COPY**

**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.	: 27677
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 07-08/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G300957 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	07-08/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	82.8	dB(A)
10:00 - 11:00	80.7	dB(A)
11:00 - 12:00	80.2	dB(A)
12:00 - 13:00	82.5	dB(A)
13:00 - 14:00	79.0	dB(A)
14:00 - 15:00	81.6	dB(A)
15:00 - 16:00	80.5	dB(A)
16:00 - 17:00	80.0	dB(A)
17:00 - 18:00	82.5	dB(A)
18:00 - 19:00	80.1	dB(A)
19:00 - 20:00	80.3	dB(A)
20:00 - 21:00	82.7	dB(A)
21:00 - 22:00	80.8	dB(A)
22:00 - 23:00	80.6	dB(A)
23:00 - 00:00	82.6	dB(A)
00:00 - 01:00	81.5	dB(A)
01:00 - 02:00	82.2	dB(A)
02:00 - 03:00	75.5	dB(A)
03:00 - 04:00	79.2	dB(A)
04:00 - 05:00	69.0	dB(A)
05:00 - 06:00	71.7	dB(A)
06:00 - 07:00	79.2	dB(A)
07:00 - 08:00	80.4	dB(A)
08:00 - 09:00	75.2	dB(A)
$L_{eq}$ 24 hr.	80.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	09:00 - 17:00 น. = 81    17:00 - 01:00 น. = 81    01:00 - 09:00 น. = 78	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 81    17:00 - 01:00 น. = 81    01:00 - 09:00 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

<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  
(Ms. Thanatporn Khinsophon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
(Measurement By Ms. Savita Kittinoayarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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**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.	: 27681
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/09/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/09/2022
	S/N G300957 : Type 2	REPORTED DATE	: 19/09/2022

TIME \ DATE	08-09/09/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	81.9	dB(A)
10:00 - 11:00	77.3	dB(A)
11:00 - 12:00	82.2	dB(A)
12:00 - 13:00	81.4	dB(A)
13:00 - 14:00	76.8	dB(A)
14:00 - 15:00	73.3	dB(A)
15:00 - 16:00	74.9	dB(A)
16:00 - 17:00	79.6	dB(A)
17:00 - 18:00	80.0	dB(A)
18:00 - 19:00	82.4	dB(A)
19:00 - 20:00	79.7	dB(A)
20:00 - 21:00	80.0	dB(A)
21:00 - 22:00	82.4	dB(A)
22:00 - 23:00	80.6	dB(A)
23:00 - 00:00	80.5	dB(A)
00:00 - 01:00	82.7	dB(A)
01:00 - 02:00	82.7	dB(A)
02:00 - 03:00	81.1	dB(A)
03:00 - 04:00	80.1	dB(A)
04:00 - 05:00	80.7	dB(A)
05:00 - 06:00	78.8	dB(A)
06:00 - 07:00	81.0	dB(A)
07:00 - 08:00	82.6	dB(A)
08:00 - 09:00	80.5	dB(A)
$L_{eq}$ 24 hr.	80.7	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /1</sup>	09:00 - 17:00 $L_{eq}$ = 79    17:00 - 01:00 $L_{eq}$ = 81    01:00 - 09:00 $L_{eq}$ = 81	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 $L_{eq}$ = 79    17:00 - 01:00 $L_{eq}$ = 81    01:00 - 09:00 $L_{eq}$ = 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)

# 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

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

(Measurement By Ms. Savita Kittinogavarat)



Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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**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.	: 34182
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 11-12/11/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/11/2022
	S/N 00443358 : Type 2	REPORTED DATE	: 24/11/2022

TIME \ DATE	11-12/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	92.8	dB(A)
10:00 - 11:00	89.0	dB(A)
11:00 - 12:00	91.4	dB(A)
12:00 - 13:00	92.0	dB(A)
13:00 - 14:00	91.3	dB(A)
14:00 - 15:00	87.7	dB(A)
15:00 - 16:00	85.5	dB(A)
16:00 - 17:00	78.6	dB(A)
17:00 - 18:00	74.5	dB(A)
18:00 - 19:00	75.3	dB(A)
19:00 - 20:00	73.6	dB(A)
20:00 - 21:00	85.3	dB(A)
21:00 - 22:00	92.2	dB(A)
22:00 - 23:00	92.6	dB(A)
23:00 - 00:00	92.9	dB(A)
00:00 - 01:00	92.9	dB(A)
01:00 - 02:00	92.7	dB(A)
02:00 - 03:00	92.5	dB(A)
03:00 - 04:00	85.2	dB(A)
04:00 - 05:00	85.0	dB(A)
05:00 - 06:00	85.1	dB(A)
06:00 - 07:00	85.2	dB(A)
07:00 - 08:00	81.2	dB(A)
08:00 - 09:00	73.7	dB(A)
$L_{eq}$ 24 hr.	89.4	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 น. = 90    17:00 - 01:00 น. = 89    01:00 - 09:00 น. = 88	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 น. = 89    17:00 - 01:00 น. = 88    01:00 - 09:00 น. = 87	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  
 (Ms. Thanaporn Kinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)  
 (Measurement By Ms. Jitarat Suksager)



Approved By:   
 (MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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**GOPY**

**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.	: 34185
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 15-16/11/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 16/11/2022
	S/N G300957 : Type 2	REPORTED DATE	: 24/11/2022

TIME \ DATE	15-16/11/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	91.4	dB(A)
10:00 - 11:00	90.9	dB(A)
11:00 - 12:00	88.7	dB(A)
12:00 - 13:00	89.9	dB(A)
13:00 - 14:00	89.7	dB(A)
14:00 - 15:00	89.2	dB(A)
15:00 - 16:00	78.5	dB(A)
16:00 - 17:00	73.5	dB(A)
17:00 - 18:00	73.3	dB(A)
18:00 - 19:00	72.7	dB(A)
19:00 - 20:00	80.4	dB(A)
20:00 - 21:00	91.4	dB(A)
21:00 - 22:00	90.3	dB(A)
22:00 - 23:00	90.5	dB(A)
23:00 - 00:00	90.0	dB(A)
00:00 - 01:00	90.9	dB(A)
01:00 - 02:00	90.7	dB(A)
02:00 - 03:00	86.6	dB(A)
03:00 - 04:00	74.3	dB(A)
04:00 - 05:00	73.3	dB(A)
05:00 - 06:00	73.1	dB(A)
06:00 - 07:00	73.6	dB(A)
07:00 - 08:00	74.8	dB(A)
08:00 - 09:00	86.4	dB(A)
$L_{eq}$ 24 hr.	87.8	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 $L_{eq}$ = 88    17:00 - 01:00 $L_{eq}$ = 88    01:00 - 09:00 $L_{eq}$ = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 $L_{eq}$ = 88    17:00 - 01:00 $L_{eq}$ = 87    01:00 - 09:00 $L_{eq}$ = 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

<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

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

(Measurement By: Ms. Jutarat Sukasat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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ISO 9001 / ISO 14001

## EASTERN THAI CONSULTING 1992 CO., LTD.

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



NSC-TISI-TIS 17025  
TESTING 0031

Request No. LA65-R1236

Report No. R6512-0746

### 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	: PK07		
PARAMETER*	: $L_{eq}$ 1 hr., $L_{eq}$ 8 hr. & $L_{eq}$ 24 hr.	SAMPLE NO.	: 35672
DETERMINATION METHOD	: ISO 11202:2010	MEASURING DATE	: 08-09/12/2022
INSTRUMENT	: Integrated Sound Level Meter ;	RECEIVED DATE	: 10/12/2022
	S/N G301039 : Type 2	REPORTED DATE	: 16/12/2022

TIME \ DATE	08-09/12/2022 ( $L_{eq}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	83.4	dB(A)
10:00 - 11:00	84.1	dB(A)
11:00 - 12:00	83.6	dB(A)
12:00 - 13:00	83.0	dB(A)
13:00 - 14:00	79.4	dB(A)
14:00 - 15:00	79.9	dB(A)
15:00 - 16:00	86.1	dB(A)
16:00 - 17:00	83.5	dB(A)
17:00 - 18:00	83.6	dB(A)
18:00 - 19:00	86.1	dB(A)
19:00 - 20:00	85.3	dB(A)
20:00 - 21:00	81.8	dB(A)
21:00 - 22:00	85.6	dB(A)
22:00 - 23:00	85.6	dB(A)
23:00 - 00:00	85.7	dB(A)
00:00 - 01:00	87.0	dB(A)
01:00 - 02:00	85.8	dB(A)
02:00 - 03:00	86.3	dB(A)
03:00 - 04:00	83.8	dB(A)
04:00 - 05:00	77.7	dB(A)
05:00 - 06:00	75.7	dB(A)
06:00 - 07:00	83.8	dB(A)
07:00 - 08:00	86.1	dB(A)
08:00 - 09:00	86.8	dB(A)
$L_{eq}$ 24 hr.	84.5	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>#, /1</sup>	09:00 - 17:00 $L_{eq}$ = 83    17:00 - 01:00 $L_{eq}$ = 85    01:00 - 09:00 $L_{eq}$ = 84	dB(A)
$L_{eq}$ 8 hr. (TWA) <sup>##, /2</sup>	09:00 - 17:00 $L_{eq}$ = 83    17:00 - 01:00 $L_{eq}$ = 85    01:00 - 09:00 $L_{eq}$ = 84	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>#</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 reference to Department of Labour Protection and Welfare No. 0403-03-2564-0009

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

(Measurement by Ms. ... )



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By:   
(MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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Request No. ATR6507043

Report No. 6507-0563

## 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 : 12/07/2022  
 RECEIVED DATE : 19/07/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20180903082

SAMPLE NO. : A65070563  
 SAMPLING TIME : 09:10-11:10  
 TESTED DATE : 19/07/2022-22/07/2022  
 REPORTED DATE : 26/07/2022

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. Nitchaphon Tonglor)

Examined By

(Miss Thanatporn Klinsoon)

26/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

26/07/2022

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Request No. ATR6508031

Report No. 6508-0554

## 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 : 17/08/2022 SAMPLE NO. : A65080554  
 RECEIVED DATE : 18/08/2022 SAMPLING TIME : 08:54-09:54  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 18/08/2022-24/08/2022  
 Serial No. 20200403072 REPORTED DATE : 29/08/2022

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)

29/08/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Approved By



(Mr. Kawee Suthasub)

29/08/2022

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Request No. ATR6509025

Report No. 6509-0444

## 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 : 07/09/2022  
RECEIVED DATE : 14/09/2022  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
Serial No. 218402

SAMPLE NO. : A65090444  
SAMPLING TIME : 09:10-10:10  
TESTED DATE : 14/09/2022-15/09/2022  
REPORTED DATE : 22/09/2022

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.

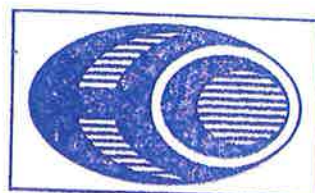
(Sampling By Mr. Aocha Khwansirimongkon)

Examined By



(Miss Thanatporn Klinsohon)

22/09/2022



Approved By



(Mr. Kawee Suthasub)

22/09/2022

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Request No. ATR6510009

Report No. 6510-0248

## 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 : 07/10/2022 SAMPLE NO. : A65100248  
 RECEIVED DATE : 12/10/2022 SAMPLING TIME : 09:35-10:35  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 12/10/2022-14/10/2022  
 Serial No. 218403 REPORTED DATE : 17/10/2022

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)

17/10/2022

Approved By 

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511045

Report No. 6511-0795

## 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 : 09/11/2022 SAMPLE NO. : A65110795  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 08:50-09:50  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/11/2022-21/11/2022  
 Serial No. 218444 REPORTED DATE : 24/11/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.053	1.00	mg/m <sup>3</sup>
		0.013	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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512033

Report No. 6512-0650

## 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 : 08/12/2022 SAMPLE NO. : A65120650  
 RECEIVED DATE : 15/12/2022 SAMPLING TIME : 09:10-10:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/12/2022-15/12/2022  
 Serial No. 218391 REPORTED DATE : 24/12/2022

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)

24/12/2022



Approved By

(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6511045

Report No. 6511-0803

## 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 : 14/11/2022  
 RECEIVED DATE : 21/11/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20180903076

SAMPLE NO. : A65110803  
 SAMPLING TIME : 09:30-10:30  
 TESTED DATE : 21/11/2022-21/11/2022  
 REPORTED DATE : 24/11/2022

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.

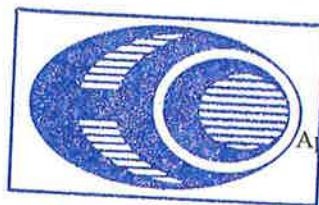
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6511045

Report No. 6511-0800

## 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 : 14/11/2022 SAMPLE NO. : A65110800  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 10:35-11:35  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/11/2022-21/11/2022  
 Serial No. 20100401024 REPORTED DATE : 24/11/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.059	1.00	mg/m <sup>3</sup>
		0.015	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.

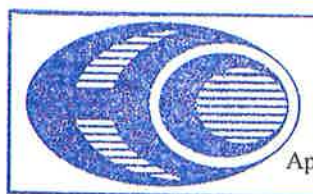
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsonon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512048

Report No. 6512-0921

## 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 NAME : PK03  
 SAMPLING DATE : 19/12/2022 SAMPLE NO. : A65120921  
 RECEIVED DATE : 21/12/2022 SAMPLING TIME : 08:27-09:27  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/12/2022-22/12/2022  
 Serial No. 218413 REPORTED DATE : 24/12/2022

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 Klinsonon)

24/12/2022



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

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Approved By

(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6511045

Report No. 6511-0804

## 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 : PK03  
 SAMPLING DATE : 14/11/2022  
 RECEIVED DATE : 21/11/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20180903076

SAMPLE NO. : A65110804  
 SAMPLING TIME : 09:30-10:30  
 TESTED DATE : 21/11/2022-21/11/2022  
 REPORTED DATE : 24/11/2022

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.

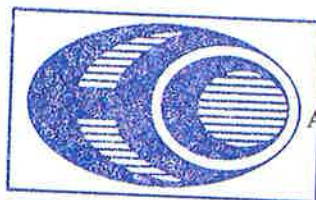
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By 

(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6511045

Report No. 6511-0801

## 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 : 14/11/2022 SAMPLE NO. : A65110801  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 10:35-11:35  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/11/2022-21/11/2022  
 Serial No. 20100401024 REPORTED DATE : 24/11/2022

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.

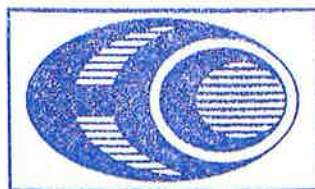
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsonon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512048

Report No. 6512-0922

## 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 : 19/12/2022 SAMPLE NO. : A65120922  
 RECEIVED DATE : 21/12/2022 SAMPLING TIME : 08:27-09:27  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/12/2022-22/12/2022  
 Serial No. 218432 REPORTED DATE : 24/12/2022

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. Wattana Khotla)

Examined By

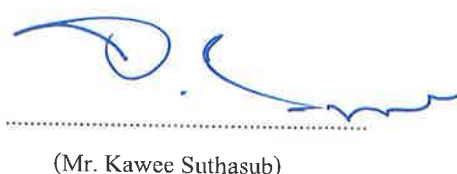

  
(Miss Thanatporn Klinsoon)

24/12/2022



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Approved By


  
(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6509025

Report No. 6509-0449

## 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 : 09/09/2022  
 RECEIVED DATE : 14/09/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218402

SAMPLE NO. : A65090449  
 SAMPLING TIME : 09:05-10:05  
 TESTED DATE : 14/09/2022-15/09/2022  
 REPORTED DATE : 22/09/2022

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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

22/09/2022

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Request No. ATR6509025

Report No. 6509-0446

## 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 : 07/09/2022  
 RECEIVED DATE : 14/09/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218412

SAMPLE NO. : A65090446  
 SAMPLING TIME : 09:30-10:30  
 TESTED DATE : 14/09/2022-15/09/2022  
 REPORTED DATE : 22/09/2022

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.

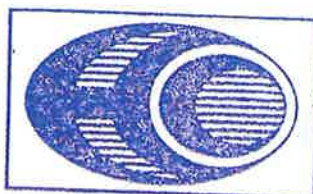
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

22/09/2022

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Request No. ATR6511045

Report No. 6511-0802

## 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 : 11/11/2022  
 RECEIVED DATE : 21/11/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218383

SAMPLE NO. : A65110802  
 SAMPLING TIME : 10:30-11:30  
 TESTED DATE : 21/11/2022-21/11/2022  
 REPORTED DATE : 24/11/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.054	1.00	mg/m <sup>3</sup>
		0.013	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.

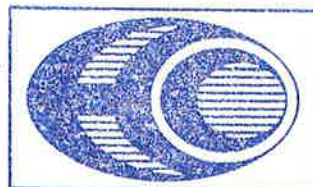
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoyon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6511045

Report No. 6511-0799

## 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 : 11/11/2022  
 RECEIVED DATE : 21/11/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218432

SAMPLE NO. : A65110799  
 SAMPLING TIME : 09:00-10:00  
 TESTED DATE : 21/11/2022-21/11/2022  
 REPORTED DATE : 24/11/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.048	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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsopon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6512033

Report No. 6512-0652

## 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 : 08/12/2022 SAMPLE NO. : A65120652  
 RECEIVED DATE : 15/12/2022 SAMPLING TIME : 09:00-10:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/12/2022-15/12/2022  
 Serial No. 218402 REPORTED DATE : 24/12/2022

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 Klinsonpon)

24/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/12/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6507043

Report No. 6507-0564

## 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 : 12/07/2022  
 RECEIVED DATE : 19/07/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20181001042

SAMPLE NO. : A65070564  
 SAMPLING TIME : 09:12-11:12  
 TESTED DATE : 19/07/2022-22/07/2022  
 REPORTED DATE : 26/07/2022

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. Nitchaphon Tonglor)

Examined By

(Miss Thanatporn Klinsohon)

26/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

26/07/2022

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Request No. ATR6508031

Report No. 6508-0555

## 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 : 17/08/2022  
 RECEIVED DATE : 18/08/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20200403078  
 SAMPLE NO. : A65080555  
 SAMPLING TIME : 08:58-09:58  
 TESTED DATE : 18/08/2022-24/08/2022  
 REPORTED DATE : 29/08/2022

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 Klinsonpon)

29/08/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/08/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. ATR6509025

Report No. 6509-0445

## 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 : 07/09/2022 SAMPLE NO. : A65090445  
 RECEIVED DATE : 14/09/2022 SAMPLING TIME : 09:12-10:12  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 14/09/2022-15/09/2022  
 Serial No. 218408 REPORTED DATE : 22/09/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.103	1.00	mg/m <sup>3</sup>
		0.026	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. Aocha Khwansirimongkon)

Examined By



(Miss Thanaporn Klinsopon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

22/09/2022

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Request No. ATR6510009

Report No. 6510-0249

## 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 : 07/10/2022 SAMPLE NO. : A65100249  
 RECEIVED DATE : 12/10/2022 SAMPLING TIME : 09:38-10:38  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 12/10/2022-14/10/2022  
 Serial No. 218411 REPORTED DATE : 17/10/2022

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)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511045

Report No. 6511-0796

## 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 : 09/11/2022  
 RECEIVED DATE : 21/11/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218406

SAMPLE NO. : A65110796  
 SAMPLING TIME : 08:55-09:55  
 TESTED DATE : 21/11/2022-21/11/2022  
 REPORTED DATE : 24/11/2022

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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512033

Report No. 6512-0651

## 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 : 08/12/2022  
 RECEIVED DATE : 15/12/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218383

SAMPLE NO. : A65120651  
 SAMPLING TIME : 09:13-10:13  
 TESTED DATE : 15/12/2022-15/12/2022  
 REPORTED DATE : 24/12/2022

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)

24/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6507043

Report No. 6507-0565

## 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 : 12/07/2022  
 RECEIVED DATE : 19/07/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 20200403075

SAMPLE NO. : A65070565  
 SAMPLING TIME : 09:05-11:05  
 TESTED DATE : 19/07/2022-22/07/2022  
 REPORTED DATE : 26/07/2022

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. Nitchaphon Tonglor)

Examined By



(Miss Thanatporn Klinsoyon)

26/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

26/07/2022

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Request No. ATR6508031

Report No. 6508-0551

## 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 : 15/08/2022 SAMPLE NO. : A65080551  
 RECEIVED DATE : 18/08/2022 SAMPLING TIME : 08:58-09:58  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 18/08/2022-24/08/2022  
 Serial No. 20200403072 REPORTED DATE : 29/08/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.074	1.00	mg/m <sup>3</sup>
		0.018	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.

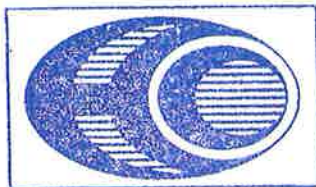
(Sampling By Mr. Wattana Khotla)

Examined By



(Miss Thanatporn Klinsoon)

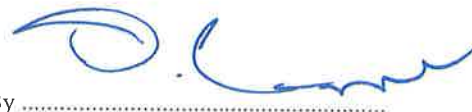
29/08/2022



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Approved By



(Mr. Kawee Suthasub)

29/08/2022

COPY



Request No. ATR6509025

Report No. 6509-0443

## 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 : 06/09/2022  
 RECEIVED DATE : 14/09/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
 Serial No. 218402

SAMPLE NO. : A65090443  
 SAMPLING TIME : 09:00-10:00  
 TESTED DATE : 14/09/2022-15/09/2022  
 REPORTED DATE : 22/09/2022

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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsopon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

22/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. ATR6510009

Report No. 6510-0245

## 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 : 04/10/2022  
RECEIVED DATE : 12/10/2022  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min  
Serial No. 218432

SAMPLE NO. : A65100245  
SAMPLING TIME : 08:40-09:40  
TESTED DATE : 12/10/2022-14/10/2022  
REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Sulfuric acid	Ion Chromatography Method (OSHA ID 165sg)	0.065	1.00	mg/m <sup>3</sup>
		0.016	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)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511045

Report No. 6511-0794

## 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 : 08/11/2022 SAMPLE NO. : A65110794  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 09:25-10:25  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/11/2022-21/11/2022  
 Serial No. 218412 REPORTED DATE : 24/11/2022

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. Aocha Khwansirimongkon)

Examined By


  
(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By


  
(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512033

Report No. 6512-0649

## 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 : 06/12/2022 SAMPLE NO. : A65120649  
 RECEIVED DATE : 15/12/2022 SAMPLING TIME : 08:40-09:40  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/12/2022-15/12/2022  
 Serial No. 218402 REPORTED DATE : 24/12/2022

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)

24/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6507043

Report No. 6507-0562

## 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 : 11/07/2022  
 RECEIVED DATE : 19/07/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
 Serial No. 20180903085

SAMPLE NO. : A65070562  
 SAMPLING TIME : 09:35-11:35  
 TESTED DATE : 19/07/2022-23/07/2022  
 REPORTED DATE : 26/07/2022


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. Nitchaphon Tonglor)

Examined By   
 (Miss Thanatporn Klinsopon)

26/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
 (Mr. Kawee Suthasub)

26/07/2022

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Request No. ATR6508031

Report No. 6508-0553

## 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 : 15/08/2022 SAMPLE NO. : A65080553  
 RECEIVED DATE : 18/08/2022 SAMPLING TIME : 10:00-11:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 3,00 L/min TESTED DATE : 18/08/2022-18/08/2022  
 Serial No. 20200403078 REPORTED DATE : 29/08/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.02	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 Klinsoon)

29/08/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

29/08/2022

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Request No. ATR6509025

Report No. 6509-0448

## 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 : 07/09/2022  
 RECEIVED DATE : 14/09/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
 Serial No. 20180903085

SAMPLE NO. : A65090448  
 SAMPLING TIME : 08:54-09:54  
 TESTED DATE : 14/09/2022-20/09/2022  
 REPORTED DATE : 22/09/2022

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)

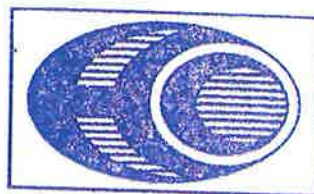
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

22/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. ATR6510009

Report No. 6510-0247

## 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 : 05/10/2022 SAMPLE NO. : A65100247  
 RECEIVED DATE : 12/10/2022 SAMPLING TIME : 09:10-10:10  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 12/10/2022-14/10/2022  
 Serial No. 20180903083 REPORTED DATE : 17/10/2022

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. Wattana Khotla)

Examined By

(Miss Thanatporn Klinsoon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

17/10/2022

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COPY

Request No. ATR6511045

Report No. 6511-0798

## 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 : 09/11/2022 SAMPLE NO. : A65110798  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 09:05-10:05  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 21/11/2022-22/11/2022  
 Serial No. 20200403080 REPORTED DATE : 24/11/2022


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:**

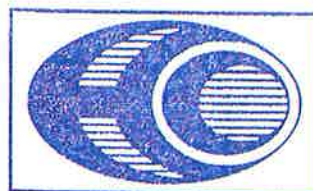
<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.  
 (Standard for Zinc oxide fume)

\* 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. Aocha Khwansirimongkon)

Examined By   
 (Miss Thanatporn Klinsopon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
 (Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512033

Report No. 6512-0654

## 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 : Casting Area  
 SAMPLING DATE : 09/12/2022 SAMPLE NO. : A65120654  
 RECEIVED DATE : 15/12/2022 SAMPLING TIME : 09:32-10:32  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 15/12/2022-22/12/2022  
 Serial No. 20160502015 REPORTED DATE : 24/12/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.04	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)

24/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

24/12/2022

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Request No. ATR6507043

Report No. 6507-0561

## 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 : 11/07/2022  
 RECEIVED DATE : 19/07/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
 Serial No. 20200403080  
 SAMPLE NO. : A65070561  
 SAMPLING TIME : 09:30-11:30  
 TESTED DATE : 19/07/2022-23/07/2022  
 REPORTED DATE : 26/07/2022

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. Nitchaphon Tonglor)

Examined By

(Miss Thanatporn Klinsoon)

26/07/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

26/07/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. ATR6508031

Report No. 6508-0552

## 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 : 15/08/2022 SAMPLE NO. : A65080552  
 RECEIVED DATE : 18/08/2022 SAMPLING TIME : 09:50-11:00  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 3.00 L/min TESTED DATE : 18/08/2022-18/08/2022  
 Serial No. 20180903082 REPORTED DATE : 29/08/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.02	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)

29/08/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

29/08/2022

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Request No. ATR6509025

Report No. 6509-0447

## 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 : 07/09/2022  
 RECEIVED DATE : 14/09/2022  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min  
 Serial No. 20160502012

SAMPLE NO. : A65090447  
 SAMPLING TIME : 08:52-09:52  
 TESTED DATE : 14/09/2022-20/09/2022  
 REPORTED DATE : 22/09/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.07	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)

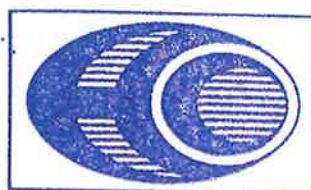
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
 No.0202-03-2564-0005.

(Sampling By Mr. Aocha Khwansirimongkon)

Examined By .....

(Miss Thanatporn Klinsopon)

22/09/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

22/09/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6510009

Report No. 6510-0246

## 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 : 05/10/2022 SAMPLE NO. : A65100246  
 RECEIVED DATE : 12/10/2022 SAMPLING TIME : 09:05-10:05  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 12/10/2022-14/10/2022  
 Serial No. 20200403077 REPORTED DATE : 17/10/2022

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. Wattana Khotla)

Examined By


  
(Miss Thanatporn Klinsopon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

17/10/2022

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 WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. ATR6511045

Report No. 6511-0797

## 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 : 09/11/2022 SAMPLE NO. : A65110797  
 RECEIVED DATE : 21/11/2022 SAMPLING TIME : 09:05-10:05  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 21/11/2022-22/11/2022  
 Serial No. 20160502017 REPORTED DATE : 24/11/2022

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. Aocha Khwansirimongkon)

Examined By

(Miss Thanatporn Klinsoon)

24/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

24/11/2022

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Request No. ATR6512033

Report No. 6512-0653

## 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 : Melting Area  
 SAMPLING DATE : 09/12/2022 SAMPLE NO. : A65120653  
 RECEIVED DATE : 15/12/2022 SAMPLING TIME : 09:31-10:31  
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 15/12/2022-22/12/2022  
 Serial No. 20100402002 REPORTED DATE : 24/12/2022

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Zinc Oxide (ZnO)	Filtration, ICP-OES /NIOSH 7300	0.02	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 Klinsoon)

24/12/2022



Approved By

(Mr. Kawee Suthasub)

24/12/2022

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Request No. LA65-R0777

Report No. R6507-2788 - R6507-2790

## 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. : 18057-18059  
MEASURING DATE : 11/07/2022 RECEIVED DATE : 14/07/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 26/07/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPH060001, TPL060040, TPL090016

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:30-11:30	29.2	29.3	29.6	29.8	29.5
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	28.3	28.4	28.6	28.8	28.5
Heat Stress (Melting) (ห้องพักพนักงาน)	09:30-11:30	21.6	21.7	21.7	21.7	21.7
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	25.4
<b>STANDARD</b>		-	-	-	-	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

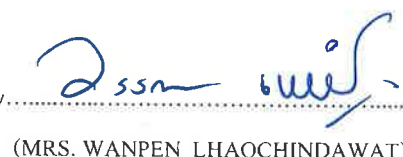
WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Thanatporn Klinsohon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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Request No. LA65-R0835

Report No. R6508-1969 - R6508-1971

## 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. : 22566-22568  
MEASURING DATE : 15/08/2022 RECEIVED DATE : 17/08/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPH060001, TPQ030023, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.4	29.6	29.3	29.3	29.4
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.9	29.1	29.1	29.4	29.1
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	24.5	24.2	23.9	23.4	24.0
<b>WBGT AVERAGE</b>	09:00-11:00	-	-	-	-	26.7
<b>STANDARD</b>		-	-	-	-	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 Klinsonpon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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Request No. LA65-R0941

Report No. R6509-3585 - R6509-3587

## 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. : 27664-27666  
MEASURING DATE : 08/09/2022 RECEIVED DATE : 10/09/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/09/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPI050069, TEU080014, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.9	29.6	29.3	29.8	29.7
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	27.7	27.6	27.7	27.7	27.7
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	22.2	22.2	22.1	22.1	22.2
WBGT AVERAGE	09:00-11:00	-	-	-	-	25.6
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

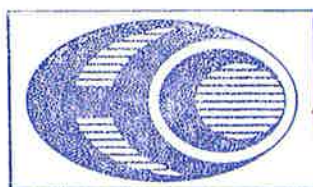
GT = Globe Temperature

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 อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-R1027

Report No. R6510-0645 - R6510-0647

## 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. : 29947-29949  
MEASURING DATE : 05/10/2022 RECEIVED DATE : 07/10/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 17/10/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPL060040, TEU080012, TPI050070

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	30.0	30.0	29.8	30.2	30.0
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.6	28.6	28.6	28.8	28.6
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	23.6	23.5	23.5	23.5	23.5
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.5
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)

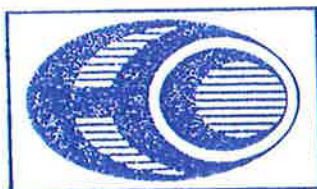
NWB = Natural Wet - Bulb Temperature

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

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

COPY



Request No. LA65-R1173

Report No. R6511-2956 - R6511-2958

## 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. : 34169-34171  
MEASURING DATE : 08/11/2022 RECEIVED DATE : 16/11/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 24/11/2022  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPL090017, TEU080014, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:00-11:00	29.7	30.2	29.9	29.1	29.7
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	27.3	27.4	27.4	27.5	27.4
Heat Stress (Melting) (ห้องพักพนักงาน)	09:00-11:00	21.1	21.5	21.4	21.4	21.3
<b>WBGT AVERAGE</b>	09:00-11:00	-	-	-	-	25.1
<b>STANDARD</b>		-	-	-	-	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)

24/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA65-R1236

Report No. R6512-0734 - R6512-0736

## 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. : 35660-35662  
MEASURING DATE : 07/12/2022 RECEIVED DATE : 10/12/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 16/12/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080015, TEU080014

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Melting) (หน้าเตาหลอม)	09:30-11:30	28.1	28.7	29.1	30.0	29.0
Heat Stress (Melting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	26.7	27.3	27.8	28.1	27.4
Heat Stress (Melting) (ห้องพักพนักงาน)	09:30-11:30	21.9	21.3	21.1	21.5	21.5
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	25.0
<b>STANDARD</b>		-	-	-	-	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)

16/12/2022

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Request No. LA65-R0777

Report No. R6507-2791 - R6507-2793

## 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. : 18060-18062  
MEASURING DATE : 11/07/2022 RECEIVED DATE : 14/07/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 26/07/2022  
Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TPL090017, TPI050070

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:30-11:30	29.2	29.3	29.5	29.6	29.4
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	20.7	21.1	21.1	21.8	21.2
Heat Stress (Casting) (ห้องพักพนักงาน)	09:30-11:30	27.5	27.8	27.8	28.3	27.8
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	27.2
<b>STANDARD</b>		-	-	-	-	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 Klinsonon)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

COPY

Request No. LA65-R0835

Report No. R6508-1972 - R6508-1974

## 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. : 22569-22571  
MEASURING DATE : 15/08/2022 RECEIVED DATE : 17/08/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPQ030023, TPH060001, TUE080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	13:00-15:00	29.6	29.6	29.4	29.2	29.5
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	13:00-15:00	29.6	29.3	29.0	29.0	29.2
Heat Stress (Casting) (ห้องพักพนักงาน)	13:00-15:00	25.5	24.5	22.8	21.9	23.7
<b>WBGT AVERAGE</b>	13:00-15:00	-	-	-	-	26.5
<b>STANDARD</b>		-	-	-	-	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 Klinsonpon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-R0941

Report No. R6509-3588 - R6509-3590

## 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. : 27667-27669  
MEASURING DATE : 08/09/2022 RECEIVED DATE : 10/09/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/09/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TPI050070, TUE080015

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	28.1	28.0	27.5	28.0	27.9
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.4	28.1	28.7	28.3	28.4
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	24.0	24.0	24.0	24.0	24.0
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.0
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

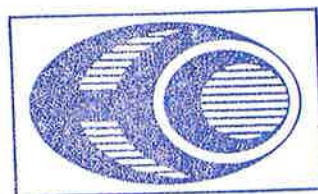
GT = Globe Temperature

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)

19/09/2022

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Request No. LA65-R1027

Report No. R6510-0648 - R6510-0650

## TEST REPORT

CUSTOMER : Siam Poongsan Metal Co., Ltd. ADDRESS : 38/14 Moo 5 T. Tung Sukla  
SAMPLE SOURCE : Siam Poongsan Metal Co., Ltd. A. Sriracha, Chonburi 20230  
SAMPLE POINT : Casting SAMPLE NO. : 29950-29952  
MEASURING DATE : 05/10/2022 RECEIVED DATE : 07/10/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 17/10/2022  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPH060001, TEU080011, TPI050069

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	29.0	29.1	29.0	29.2	29.1
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.3	27.8	27.7	27.8	27.9
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	23.5	23.6	24.3	22.7	23.5
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.1
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)

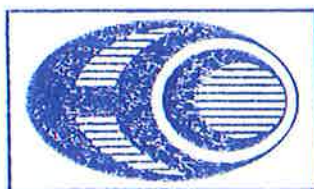
NWB = Natural Wet - Bulb Temperature

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)

17/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-R1173

Report No. R6511-2953 - R6511-2955

## 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. : 34166-34168  
MEASURING DATE : 08/11/2022 RECEIVED DATE : 16/11/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 24/11/2022  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPL060039, TEU080011, TPI050069

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:00-11:00	27.0	28.0	28.1	28.0	27.8
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:00-11:00	28.0	26.4	27.1	27.1	27.2
Heat Stress (Casting) (ห้องพักพนักงาน)	09:00-11:00	20.6	20.6	20.5	20.8	20.6
<b>WBGT AVERAGE</b>	09:00-11:00	-	-	-	-	24.1
<b>STANDARD</b>		-	-	-	-	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)



Approved By



(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Request No. LA65-R1236

Report No. R6512-0731 - R6512-0733

## 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. : 35657-35659  
MEASURING DATE : 07/12/2022 RECEIVED DATE : 10/12/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 16/12/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TPL090016, TPQ030024, TEU080013

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress (Casting) (หน้าเตาหลอม)	09:30-11:30	27.9	28.1	28.5	28.9	28.3
Heat Stress (Casting) (พื้นที่ทำงานทั่วไป)	09:30-11:30	26.3	27.0	27.5	27.9	27.2
Heat Stress (Casting) (ห้องพักพนักงาน)	09:30-11:30	20.4	20.5	20.5	20.7	20.5
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	24.2
<b>STANDARD</b>		-	-	-	-	32.0 <sup>1/2</sup>

## REMARK :

Work Load = 203.25 Kcal/hr.

<sup>1/1</sup> Regulation of The Ministry of Labour B.E. 2559 (2016) (Moderate)<sup>1/2</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)

16/12/2022

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Request No. LA65-R0777

Report No. R6507-2794 - R6507-2796

## 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. : 18063-18065  
MEASURING DATE : 13/07/2022 RECEIVED DATE : 14/07/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 26/07/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080011, TPH060001, TPL060040

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:30-11:30	18.9	19.2	19.2	19.1	19.1
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:30-11:30	29.8	30.5	30.6	30.8	30.4
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:30-11:30	29.8	30.0	30.8	31.0	30.4
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	25.3
<b>STANDARD</b>		-	-	-	-	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 Klinsohon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

26/07/2022

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Request No. LA65-R0835

Report No. R6508-1975 - R6508-1977

## 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. : 22572-22574  
MEASURING DATE : 16/08/2022 RECEIVED DATE : 17/08/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 22/08/2022  
Wet Bulb Globe Temperature (WBGT) : Serial No. TPQ030023, TEU080013, TPH060001

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	10:00-12:00	19.7	20.1	19.8	19.9	19.9
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	10:00-12:00	30.2	29.9	30.2	30.4	30.2
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	10:00-12:00	30.5	30.9	31.3	31.4	31.0
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
<b>WBGT AVERAGE</b>	10:00-12:00	-	-	-	-	25.7
<b>STANDARD</b>		-	-	-	-	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>1/2</sup> Notification of The Ministry of Industry B.E. 2546 (2003) (Light)

NWB = Natural Wet - Bulb Temperature

GT = Globe Temperature

DB = Dry - Bulb Temperature

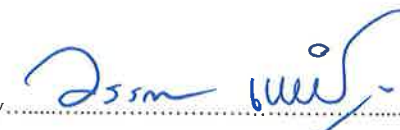
WBGT = Wet - Bulb Globe Temperature

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009  
(Measurement By Ms. Thanatporn Klinsonon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

22/08/2022

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Request No. LA65-R0941

Report No. R6509-3591 - R6509-3593

## 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. : 27670-27672  
MEASURING DATE : 09/09/2022 RECEIVED DATE : 10/09/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 19/09/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080012, TEU080015, TEU080014

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:30-11:30	21.8	21.4	22.1	21.6	21.7
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:30-11:30	28.9	28.1	30.8	28.6	29.1
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:30-11:30	29.3	29.3	29.3	29.3	29.3
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
<b>WBGT AVERAGE</b>	09:30-11:30	-	-	-	-	25.8
<b>STANDARD</b>		-	-	-	-	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

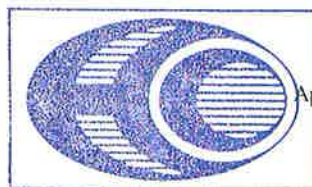
GT = Globe Temperature

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)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/09/2022

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Request No. LA65-R1027

Report No. R6510-0651 - R6510-0653

## 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. : 29953-29955  
MEASURING DATE : 06/10/2022 RECEIVED DATE : 07/10/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 17/10/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080014, TEU080011, TEU080012

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:00-11:00	22.4	21.9	22.9	20.4	21.9
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:00-11:00	29.2	28.7	29.9	30.3	29.5
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:00-11:00	29.2	29.5	29.7	29.5	29.5
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:00-11:00	-	-	-	-	26.1
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)



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Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

17/10/2022

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Request No. LA65-R1173

Report No. R6511-2959 - R6510-0653

## 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. : 34172-34174  
MEASURING DATE : 10/11/2022 RECEIVED DATE : 16/11/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 24/11/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080015, TEU080011, TEU080012

PARAMETER*	Sampling Time	WBGT (°C)				Average (°C)
		30 min	60 min	90 min	120 min	
Heat Stress	09:00-11:00	18.9	18.7	18.5	18.6	18.7
เตารีดขนาด (Hot Rolling) (Control Room)						
Heat Stress	09:00-11:00	28.6	29.3	29.5	29.9	29.3
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:00-11:00	29.7	28.2	28.7	28.5	28.8
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:00-11:00	-	-	-	-	24.4
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)

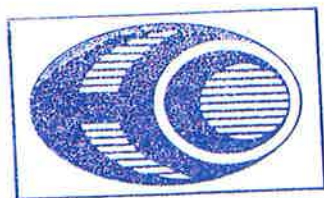
NWB = Natural Wet - Bulb Temperature

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. Jutarat Suksaget)



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Approved By

(MRS. WANPEN LHAOCHINDAWAT)

24/11/2022

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Request No. LA65-R1236

Report No. R6512-0737 - R6512-0739

## 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. : 35663-35665  
MEASURING DATE : 09/12/2022 RECEIVED DATE : 10/12/2022  
SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 16/12/2022

Wet Bulb Globe Temperature (WBGT) : Serial No. TEU080014, TEU080015, 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	27.9	28.5	28.8	29.0	28.5
เตารีดขนาด (Hot Rolling) พื้นที่วางแท่ง Slab						
Heat Stress	09:30-11:30	28.6	28.9	29.7	30.0	29.3
เตารีดขนาด (Hot Rolling) (จุดวางชิ้นงาน, พื้นที่หน้าเตาอบแท่ง Slab)						
WBGT AVERAGE	09:30-11:30	-	-	-	-	25.5
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

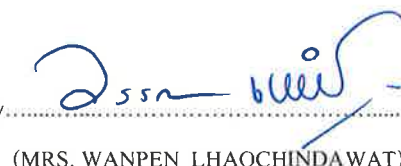
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0401-03-2564-0009

(Measurement By Ms. Savita Kittinoavarat)



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Approved By


 (MRS. WANPEN LHAOCHINDAWAT)

16/12/2022

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