

Request No. LA65-1136

Report No. 6511-0418

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 1 (S4)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 07044/1

RECEIVED DATE : 17/11/2022

SAMPLING TIME : 09:25-09:30

TESTED DATE : 17-25/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height : 36.00 m
Diameter : 1.35 m
Temperature : 795.00 °C
Air Velocity : 8.94 m/s
Dry Basic Flow rate³ : 3.35 m³/s
Moisture Content : 5.88 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 8.20 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 32.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			8.20 % O ₂	7 % O ₂		
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	09:25-09:30	37.7	41.3	376 , 77 ²	mg/m ³
			20.0	21.9	200 , 41 ²	ppm
			0.1263	-	0.33 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. TEERAPONG NUALIN (จ-003-ค-5620)

Examined By

(MISS APIRADEE CHUEN-AROM)

(จ-003-ค-4377)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MR. THONGCHAI BOONSAN)

(จ-003-ค-5618)

29/11/2022

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Request No. LA65-1136

Report No. 6511-0420

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 1 (S4)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 07045

RECEIVED DATE : 17/11/2022

SAMPLING TIME : 09:30-09:40

TESTED DATE : 17-23/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height :	36.00	m	Type of Process :	Combustion
Diameter :	1.35	m	Type of Fuel :	Natural Gas
Temperature :	795.00	°C	Oxygen Content :	8.20 %
Air Velocity :	8.94	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ³ :	3.35	m ³ /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	5.88	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			8.20 % O ₂	7 % O ₂		
Carbon monoxide (CO)	Bag, Non Dispersive Infrared	09:30-09:40	68.6	75.1	790 , 350 ²	mg/m ³
			59.9	65.6	690 , 306 ²	ppm
			0.2298	-	1.49 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....

(MISS SUNISA HENGSENG)

(ว-003-จ-7278)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

29/11/2022

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Request No. LA65-1136

Report No. 6511-0417

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 1 (S4)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 07043

RECEIVED DATE : 17/11/2022

SAMPLING TIME : 09:10-10:00

TESTED DATE : 17-19/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height : 36.00 m
Diameter : 1.35 m
Temperature : 795.00 °C
Air Velocity : 8.94 m/s
Dry Basic Flow rate³ : 3.35 m³/s
Moisture Content : 5.88 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 8.20 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 32.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			8.20 % O ₂	7 % O ₂		
Particulate (TSP)	Isokinetic, Gravimetric	09:10-10:00	8.3	9.1	240 , 20 ²	mg/m ³
			0.0278	-	0.09 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

29/11/2022

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Request No. LA65-1046

Report No. 6511-0080

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 2 (S8)

SAMPLING DATE : 17/10/2022

SAMPLE NO. : 06629/1

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 09:10-09:15

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height : 39.30 m
Diameter : 1.40 m
Temperature : 200.00 °C
Air Velocity : 4.04 m/s
Dry Basic Flow rate³ : 3.72 m³/s
Moisture Content : 4.81 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 13.40 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 32.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			13.40 % O ₂	7 % O ₂		
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	09:10-09:15	14.8	27.4	376 , 95 ²	mg/m ³
			7.9	14.6	200 , 51 ²	ppm
			0.0551	-	0.70 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1046

Report No. 6511-0082

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 2 (S8)

SAMPLING DATE : 17/10/2022

SAMPLE NO. : 06630

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 09:30-09:40

TESTED DATE : 27/10/2022 – 02/11/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	39.30	m	Type of Process :	Combustion
Diameter :	1.40	m	Type of Fuel :	Natural Gas
Temperature :	200.00	°C	Oxygen Content :	13.40 %
Air Velocity :	4.04	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ³ :	3.72	m ³ /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	4.81	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			13.40 % O ₂	7 % O ₂		
Carbon monoxide (CO)	Bag, Non Dispersive Infrared	09:30-09:40	66.1	122.5	790 , 350 ²	mg/m ³
			57.7	106.9	690 , 306 ²	ppm
			0.2459	-	2.56 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1201

Report No. 6512-0082

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 2 (S8)

SAMPLING DATE : 30/11/2022

SAMPLE NO. : 07259

RECEIVED DATE : 02/12/2022

SAMPLING TIME : 10:30-11:20

TESTED DATE : 02-06/12/2022

REPORTED DATE : 07/12/2022

STACK DESCRIPTION

Height : 39.30 m
Diameter : 1.40 m
Temperature : 188.00 °C
Air Velocity : 4.02 m/s
Dry Basic Flow rate³ : 3.80 m³/s
Moisture Content : 4.65 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 13.90 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 34.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			13.90 % O ₂	7 % O ₂		
Particulate (TSP)	Isokinetic, Gravimetric	10:30-11:20	0.3	0.6	240 , 20 ²	mg/m ³
			0.0011	-	0.15 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

07/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

07/12/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1039

Report No. 6511-0065

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : ROPT Oven Stack CPL (S12)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06569

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:15-10:20

TESTED DATE : 26-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	0.50	m	Type of Fuel :	Natural Gas
Temperature :	209.00	°C	Oxygen Content :	20.90 %
Air Velocity :	9.66	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ³ :	1.11	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.53	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:15-10:20	2.3	376 , 50 ²	mg/m ³
			1.2	200 , 27 ²	ppm
			0.0026	0.06 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. METEE SUKPRASERT (๖-003-๑-8333)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(๖-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(๖-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1039

Report No. 6511-0066

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakongsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : ROPT Oven Stack CPL (S12)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06570

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:25-10:35

TESTED DATE : 26-29/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height : 24.00 m
Diameter : 0.50 m
Temperature : 209.00 °C
Air Velocity : 9.66 m/s
Dry Basic Flow rate³ : 1.11 m³/s
Moisture Content : 4.53 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 20.90 %
Barometric Pressure : 755.50 mm.Hg
Atmospheric Temperature : 33.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Carbon monoxide (CO)	Bag,Non Dispersive Infrared	10:25-10:35	1.1	790 , 100 ²	mg/m ³
			1.0	690 , 87 ²	ppm
			0.0012	0.13 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. METEE SUKPRASERT (ว-003-ก-8333)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1039

Report No. 6511-0064

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : ROPT Oven Stack CPL (S12)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06568

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:10-10:45

TESTED DATE : 26-29/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	0.50	m	Type of Fuel :	Natural Gas
Temperature :	209.00	°C	Oxygen Content :	20.90 %
Air Velocity :	9.66	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ² :	1.11	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.53	%		

PARAMETER*	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Chromium	Isokinetic, Digestion, Inductively	10:10-10:45	< 0.05	1	mg/m ³
	Coupled Plasma		< 0.00006	0.0013	g/s

REMARK:¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. METEE SUKPRASERT (ว-003-จ-8333)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ก-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

04/11/2022

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Request No. LA65-1039

Report No. 6511-0069

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : RTO Stack CPL (S13)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06573

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:05-10:10

TESTED DATE : 26-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	1.70	m	Type of Fuel :	Natural Gas
Temperature :	103.00	°C	Oxygen Content :	20.90 %
Air Velocity :	5.42	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ³ :	9.47	m ³ /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:05-10:10	10.2	376 , 25 ²	mg/m ³
			5.4	200 , 13 ²	ppm
			0.0966	0.42 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

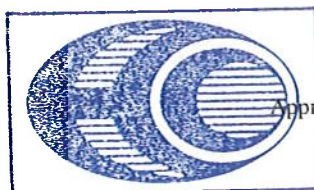
* SAMPLING BY MR. METEE SUKPRASERT (ว-003-จ-8333)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

COPY

Request No. LA65-1039

Report No. 6511-0070

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : RTO Stack CPL (S13)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06574

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:15-10:25

TESTED DATE : 26-29/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	1.70	m	Type of Fuel :	Natural Gas
Temperature :	103.00	°C	Oxygen Content :	20.90 %
Air Velocity :	5.42	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ¹³ :	9.47	m ³ /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ¹³	STD ¹¹	UNIT
Carbon monoxide (CO)	Bag, Non Dispersive Infrared	10:15-10:25	1.1	790 , 300 ¹²	mg/m ³
			1.0	690 , 262 ¹²	ppm
			0.0104	4.98 ¹²	g/s

REMARK:

¹¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)¹² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558¹³ DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. METEE SUKPRASERT (1-003-1-8333)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(1-003-1-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(1-003-1-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

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Request No. LA65-1039

Report No. 6511-0067

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakongsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : RTO Stack CPL (S13)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06572

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:00-10:25

TESTED DATE : 26-28/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	1.70	m	Type of Fuel :	Natural Gas
Temperature :	103.00	°C	Oxygen Content :	20.90 %
Air Velocity :	5.42	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ² :	9.47	m ³ /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Toluene	Sorbent Adsorption,	10:00-10:25	<2.07	5.0	mg/m ³
	Gas Chromatography		<0.55	1.3	ppm
			<0.0196	0.08	g/s

REMARK:¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)

* PARAMETER OUTSIDE THE SCOPE OF THE REGISTRATION

OF THE DEPARTMENT OF INDUSTRIAL WORKS

(SAMPLING BY MR. METEE SUKPRASERT (ว-003-จ-8333))



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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COPY

Request No. LA65-1039

Report No. 6511-0068

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : RTO Stack CPL (S13)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06571

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:00-10:25

TESTED DATE : 26-28/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.00	m	Type of Process :	Combustion
Diameter :	1.70	m	Type of Fuel :	Natural Gas
Temperature :	103.00	°C	Oxygen Content :	20.90 %
Air Velocity :	5.42	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ² :	9.47	m ³ /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Xylene	Adsorption, Gas Chromatographic	10:00-10:25	< 2.05	70	mg/m ³
			< 0.47	16	ppm
			< 0.0194	1.16	g/s

REMARK: ¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)

* SAMPLING BY MR. METEE SUKPRASERT (ว-003-ท-8333)

Examined By

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1132

Report No. 6511-0434

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Inline Painting Stack MCL 1 (S6)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 06974/1

RECEIVED DATE : 14/11/2022

SAMPLING TIME : 10:45-10:50

TESTED DATE : 14-23/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height :	30.00	m	Type of Process :	Exhaust
Diameter :	1.00	m	Type of Fuel :	-
Temperature :	80.00	°C	Oxygen Content :	20.90 %
Air Velocity :	9.10	m/s	Barometric Pressure :	757.00 mm.Hg
Dry Basic Flow rate ³ :	5.80	m ³ /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:45-10:50	12.4	376 , 50 ²	mg/m ³
			6.6	200 , 27 ²	ppm
			0.0719	0.17 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/11/2022

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

COPY

Request No. LA65-1132

Report No. 6511-0433

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Inline Painting Stack MCL 1 (S6)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 06973

RECEIVED DATE : 14/11/2022

SAMPLING TIME : 10:40-11:05

TESTED DATE : 14-21/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height :	30.00	m	Type of Process :	Exhaust
Diameter :	1.00	m	Type of Fuel :	-
Temperature :	80.00	°C	Oxygen Content :	20.90 %
Air Velocity :	9.10	m/s	Barometric Pressure :	757.00 mm.Hg
Dry Basic Flow rate ^{1/2} :	5.80	m ³ /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	-	%		

PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Formaldehyde	Gas Chromatography	10:40-11:05	< 0.31	2.5	mg/m ³
			< 0.25	2.04	ppm
			< 0.0018	0.008	g/s

REMARK: ^{1/} มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558^{2/} 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 Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

29/11/2022

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COPY

Request No. LA65-1039

Report No. 6511-0075

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Pickle Line Fume Stack PKL (S1)

SAMPLING DATE : 15/10/2022

SAMPLE NO. : 06579

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 09:10-10:10

TESTED DATE : 26/10/2022 – 04/11/2022

REPORTED DATE : 11/11/2022

STACK DESCRIPTION

Height :	21.50	m	Type of Process :	Exhaust
Diameter :	0.90	m	Type of Fuel :	-
Temperature :	40.00	°C	Oxygen Content :	20.90 %
Air Velocity :	4.25	m/s	Barometric Pressure :	754.75 mm.Hg
Dry Basic Flow rate ³ :	2.49	m ³ /s	Stack Pressure :	754.66 mm.Hg
Moisture Content :	-	%	Atmospheric Temperature :	32.00 °C

PARAMETER	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Hydrogen Chloride ⁴	Spectrophotometer	09:10-10:10	0.710	200 , 15 ²	mg/m ³
(HCl)			0.476	134 , 10 ²	ppm
			0.0018	0.06 ²	g/s

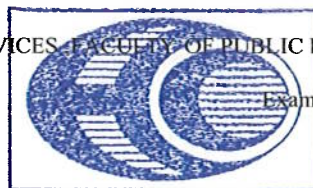
REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)⁴ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

SAMPLING BY MR. METEE SUKPRASERT (ว-003-จ-8333)

ANALYSED BY THE OFFICE OF PUBLIC HEALTH AND ENVIRONMENTAL

TECHNOLOGY SERVICES, FACULTY OF PUBLIC HEALTH, MAHIDOL UNIVERSITY



Examined By.....

(MR. THONGCHAI BOONSAK)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

11/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1034

Report No. 6510-0698

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : WWTP Sludge Dryer (S14)

SAMPLING DATE : 15/10/2022

SAMPLE NO. : 06477

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 10:10-10:15

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height :	12.00	m	Type of Process :	Combustion
Diameter :	0.60	m	Type of Fuel :	Natural Gas
Temperature :	105.00	°C	Oxygen Content :	20.40 %
Air Velocity :	4.13	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ³ :	0.88	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.27	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:10-10:15	8.6	376 , 15 ²	mg/m ³
			4.6	200 , 8 ²	ppm
			0.0076	0.03 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

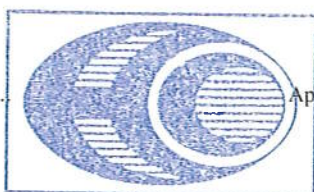
* SAMPLING BY MR. TEERAPONG NUALIN (ว-003-ค-5620)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

31/10/2022

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1034

Report No. 6510-0699

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : WWTP Sludge Dryer (S14)

SAMPLING DATE : 15/10/2022

SAMPLE NO. : 06478

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 10:20-10:30

TESTED DATE : 25-29/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height : 12.00 m

Type of Process : Combustion

Diameter : 0.60 m

Type of Fuel : Natural Gas

Temperature : 105.00 °C

Oxygen Content : 20.40 %

Air Velocity : 4.13 m/s

Barometric Pressure : 757.75 mm.Hg

Dry Basic Flow rate³ : 0.88 m³/s

Atmospheric Temperature : 33.00 °C

Moisture Content : 4.27 %

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Carbon monoxide (CO)	Bag, Non Dispersive Infrared	10:20-10:30	0.7	790 , 119 ²	mg/m ³
			0.6	690 , 104 ²	ppm
			0.0006	0.26 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบต่อสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

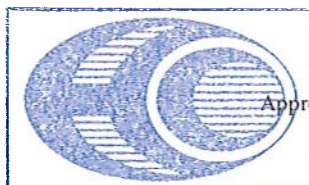
* SAMPLING BY MR. TEERAPONG NUALIN (จ-003-ค-5620)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(จ-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(จ-003-ค-5618)

31/10/2022

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Request No. LA65-1034

Report No. 6510-0697

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : WWTP Sludge Dryer (S14)

SAMPLING DATE : 15/10/2022

SAMPLE NO. : 06476

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 09:50-10:30

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height :	12.00	m	Type of Process :	Combustion
Diameter :	0.60	m	Type of Fuel :	Natural Gas
Temperature :	105.00	°C	Oxygen Content :	20.40 %
Air Velocity :	4.13	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ³ :	0.88	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.27	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:50-10:30	2.3	240 , 200 ²	mg/m ³
			0.0020	0.44 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

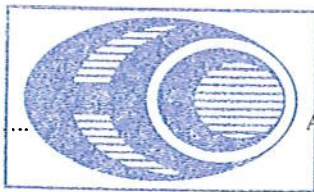
* SAMPLING BY MR. TEERAPONG NUALIN (ว-003-ค-5620)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

31/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

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Request No. LA65-1136

Report No. 6511-0424

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Alkali Cleaning Stack MCL 1 (S3)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 07049

RECEIVED DATE : 17/11/2022

SAMPLING TIME : 09:30-10:00

TESTED DATE : 17/11/2022 – 15/12/2022

REPORTED DATE : 15/12/2022

STACK DESCRIPTION

Height :	36.00	m	Type of Process :	Exhaust
Diameter :	0.25	m	Type of Fuel :	-
Temperature :	55.00	°C	Oxygen Content :	20.90 %
Air Velocity :	5.65	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ² :	0.24	m ³ /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	-	%		

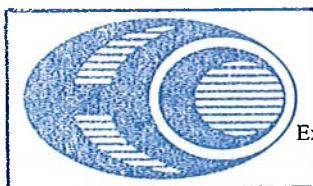
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Sodium Hydroxide ³	Acid-Base Titration	09:30-10:00	1.370	10	mg/m ³
(NaOH)			0.837	6	ppm
			0.0003	0.02	g/s

REMARK:

¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

(SAMPLING BY MR. TEERAPONG NUALIN)

ANALYSED BY THE ENVIRONMENTAL CENTER RAJABHAT SUAN DUSIT UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

15/12/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1046

Report No. 6511-0077

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Alkali Cleaning Stack MCL 2 (S7)

SAMPLING DATE : 17/10/2022

SAMPLE NO. : 06627/1

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 11:00-11:30

TESTED DATE : 27/10/2022 – 21/11/2022

REPORTED DATE : 22/11/2022

STACK DESCRIPTION

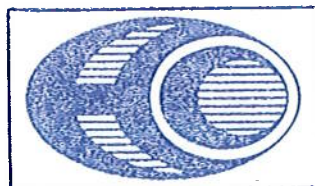
Height :	40.30	m	Type of Process :	Exhaust
Diameter :	0.80	m	Type of Fuel :	-
Temperature :	44.00	°C	Oxygen Content :	20.90 %
Air Velocity :	3.33	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ² :	1.52	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	-	%		

PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Sodium Hydroxide ³ (NaOH)	Acid-Base Titration	11:00-11:30	2.749	10	mg/m ³
			1.680	6	ppm
			0.0042	0.04	g/s

REMARK: ¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

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

ANALYSED BY THE ENVIRONMENTAL CENTER RAJABHAT SUAN DUSIT UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

 Examined By Thongchai Boonsak
 (MR. THONGCHAI BOONSAK)

22/11/2022

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Request No. LA65-1046

Report No. 6511-0105

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Cold Mill Stack CRM (S2)

SAMPLING DATE : 15/10/2022

SAMPLE NO. : 06649

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 09:30-10:05

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	24.50	m	Type of Process :	Exhaust
Diameter :	1.60	m.	Type of Fuel :	-
Temperature :	35.00	°C	Oxygen Content :	20.90 %
Air Velocity :	15.02	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ³ :	28.15	m ³ /s	Stack Pressure :	756.37 mm.Hg
Moisture Content :	3.20	%	Atmospheric Temperature :	30.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Particulate (TSP)	Isokinetic, Gravimetric	09:30-10:05	0.7	240, 15 ²	mg/m ³
			0.0197	0.50 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(จ-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(จ-003-ค-5618)

04/11/2022

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Request No. LA65-1039

Report No. 6511-0060

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Alkali Cleaning Stack CPL (S11)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06564

RECEIVED DATE : 26/10/2022

SAMPLING TIME : 10:20-10:50

TESTED DATE : 26/10/2022 – 11/11/2022

REPORTED DATE : 11/11/2022

STACK DESCRIPTION

Height : 24.00 m

Type of Process : Exhaust

Diameter : 0.25 m

Type of Fuel : -

Temperature : 38.00 °C

Oxygen Content : 20.90 %

Air Velocity : 5.17 m/s

Barometric Pressure : 755.50 mm.Hg

Dry Basic Flow rate² : 0.24 m³/s

Atmospheric Temperature : 34.00 °C

Moisture Content : - %

PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Potassium Hydroxide ³	Acid-Base Titration	10:20-10:50	< 0.100	2	mg/m ³
(KOH)			< 0.0001	0.0043	g/s

REMARK:¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

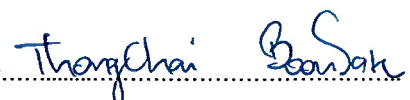
SAMPLING BY MR. METEE SUKPRASERT (๖-003-๖-8333)

ANALYSED BY THE ENVIRONMENTAL CENTER RAJABHAT SUAN DUSIT UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....



(MR. THONGCHAI BOONSACK)

11/11/2022

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Request No. LA65-1046

Report No. 6511-0092

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Passivation & Resin Combine Stack MCL 2 (S9)

SAMPLING DATE : 18/10/2022

SAMPLE NO. : 06639

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:30-10:35

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	39.30	m	Type of Process :	Combustion
Diameter :	1.00	m	Type of Fuel :	Natural Gas
Temperature :	121.00	°C	Oxygen Content :	20.80 %
Air Velocity :	8.43	m/s	Barometric Pressure :	754.75 mm.Hg
Dry Basic Flow rate ³ :	4.83	m ³ /s	Atmospheric Temperature :	34.20 °C
Moisture Content :	3.02	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:30-10:35	2.3	376 , 25 ¹²	mg/m ³
			1.2	200 , 13 ¹²	ppm
			0.0111	0.16 ¹²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25⁰C, 760 mm.Hg)

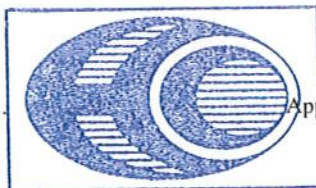
* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ค-7283)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

04/11/2022

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Request No. LA65-1046

Report No. 6511-0091

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakongsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Passivation & Resin Combine Stack MCL 2 (S9)

SAMPLING DATE : 18/10/2022

SAMPLE NO. : 06638

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:10-10:50

TESTED DATE : 27/10/2022 – 04/11/2022

REPORTED DATE : 11/11/2022

STACK DESCRIPTION

Height :	39.30	m	Type of Process :	Combustion
Diameter :	1.00	m	Type of Fuel :	Natural Gas
Temperature :	121.00	°C	Oxygen Content :	20.80 %
Air Velocity :	8.43	m/s	Barometric Pressure :	754.75 mm.Hg
Dry Basic Flow rate ² :	4.83	m ³ /s	Atmospheric Temperature :	34.20 °C
Moisture Content :	3.02	%		

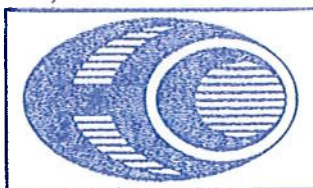
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Chromic Acid ³	Spectrophotometer	10:10-10:50	0.0016	0.01	mg/m ³
			0.00001	0.00007	g/s

REMARK:¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

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

ANALYSED BY THE OFFICE OF PUBLIC HEALTH AND ENVIRONMENTAL

TECHNOLOGY SERVICES ,FACULTY OF PUBLIC HEALTH ,MAHIDOL UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....



(MR. THONGCHAI BOONSAK)

20/10/2021

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Request No. LA65-1046

Report No. 6511-0090

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Passivation & Resin Combine Stack MCL 2 (S9)

SAMPLING DATE : 18/10/2022

SAMPLE NO. : 06637

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:10-10:35

TESTED DATE : 27/10/2022 – 04/11/2022

REPORTED DATE : 11/11/2022

STACK DESCRIPTION

Height :	39.30	m	Type of Process :	Combustion
Diameter :	1.00	m	Type of Fuel :	Natural Gas
Temperature :	121.00	°C	Oxygen Content :	20.80 %
Air Velocity :	8.43	m/s	Barometric Pressure :	754.75 mm.Hg
Dry Basic Flow rate ² :	4.83	m ³ /s	Atmospheric Temperature :	34.20 °C
Moisture Content :	3.02	%		

PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Phosphoric Acid ³	Ion Chromatography	10:10-10:35	<0.01	0.01	mg/m ³
(H ₃ PO ₄)			<0.002	0.002	ppm
			<0.00005	0.00007	g/s

REMARK:

¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

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

ANALYSED BY THE OFFICE OF PUBLIC HEALTH AND ENVIRONMENTAL

TECHNOLOGY SERVICES, FACULTY OF PUBLIC HEALTH, MAHIDOL UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By: Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

11/11/2022

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Request No. LA65-1132

Report No. 6511-0428

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Passivation Stack MCL 1 (S5)

SAMPLING DATE : 11/11/2022

SAMPLE NO. : 06969/1

RECEIVED DATE : 14/11/2022

SAMPLING TIME : 09:10-09:15

TESTED DATE : 14-23/11/2022

REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height : 30.00 m
Diameter : 0.40 m
Temperature : 340.00 °C
Air Velocity : 10.71 m/s
Dry Basic Flow rate³ : 0.63 m³/s
Moisture Content : 3.60 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 17.80 %
Barometric Pressure : 757.00 mm.Hg
Atmospheric Temperature : 34.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	09:10-09:15	8.9	376 , 25 ²	mg/m ³
			4.7	200 , 13 ²	ppm
			0.0056	0.05 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

29/11/2022

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Request No. LA65-1132

Report No. 6511-0427

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : Passivation Stack MCL I (S5)
 SAMPLING DATE : 11/11/2022 SAMPLE NO. : 06968
 RECEIVED DATE : 14/11/2022 SAMPLING TIME : 09:00-09:35
 TESTED DATE : 14-29/11/2022 REPORTED DATE : 29/11/2022

STACK DESCRIPTION

Height :	30.00	m	Type of Process :	Combustion
Diameter :	0.40	m	Type of Fuel :	Natural Gas
Temperature :	340.00	°C	Oxygen Content :	17.80 %
Air Velocity :	10.71	m/s	Barometric Pressure :	757.00 mm.Hg
Dry Basic Flow rate ² :	0.63	m ³ /s	Atmospheric Temperature :	34.00 °C
Moisture Content :	3.60	%		

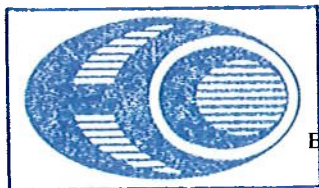
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Chromic Acid ³	Spectrophotometer	09:00-09:35	0.0037	0.01	mg/m ³
			< 0.00001	0.00002	g/s

REMARK:¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

(SAMPLING BY MR. WARAKORN VITAYASEWEE)

ANALYSED BY THE OFFICE OF PUBLIC HEALTH AND ENVIRONMENTAL

TECHNOLOGY SERVICES ,FACULTY OF PUBLIC HEALTH ,MAHIDOL UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....



(MR. THONGCHAI BOONSAK)

29/11/2022

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Request No. LA65-1046

Report No. 6511-0093

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Passivation Stack MCL 2 (S10)

SAMPLING DATE : 18/10/2022

SAMPLE NO. : 06640/1

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 11:10-11:15

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	31.00	m	Type of Process :	Combustion
Diameter :	0.55	m	Type of Fuel :	Natural Gas
Temperature :	40.00	°C	Oxygen Content :	20.90 %
Air Velocity :	8.70	m/s	Barometric Pressure :	754.75 mm.Hg
Dry Basic Flow rate ³ :	1.89	m ³ /s	Atmospheric Temperature :	34.60 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	11:10-11:15	<2.0	376 , 7 ²	mg/m ³
			<1.0	200 , 3 ²	ppm
			<0.0038	0.02 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSANAK)

(ว-003-ค-5618)

04/11/2022

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Request No. LA65-1046

Report No. 6511-0103

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 3 (S16)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06647

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:35-10:40

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	50.00	m	Type of Process :	Combustion
Diameter :	1.40	m	Type of Fuel :	Natural Gas
Temperature :	174.00	°C	Oxygen Content :	11.66 %
Air Velocity :	3.92	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ³ :	3.80	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.85	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			11.66 % O ₂	7 % O ₂		
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	10:35-10:40	29.5	44.4	376 , 160 ²	mg/m ³
			15.7	23.6	200 , 85 ²	ppm
			0.1121	-	0.422 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ 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)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

04/11/2022

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Request No. LA65-1046

Report No. 6511-0104

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 3 (S16)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06648

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:45-10:55

TESTED DATE : 27/10/2022 – 02/11/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height :	50.00	m	Type of Process :	Combustion
Diameter :	1.40	m	Type of Fuel :	Natural Gas
Temperature :	174.00	°C	Oxygen Content :	11.66 %
Air Velocity :	3.92	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ³ :	3.80	m ³ /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	4.85	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			11.66 % O ₂	7 % O ₂		
Carbon monoxide (CO)	Bag, Non Dispersive Infrared	10:45-10:55	15.7	23.6	790 , 350 ²	mg/m ³
			13.7	20.6	690 , 306 ²	ppm
			0.0597	-	0.924 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

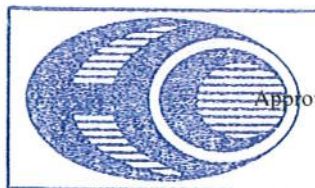
* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ก-7283)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ก-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ก-5618)

04/11/2022

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Request No. LA65-1046

Report No. 6511-0102

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Furnace Stack MCL 3 (S16)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06646

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 10:25-11:15

TESTED DATE : 27-31/10/2022

REPORTED DATE : 04/11/2022

STACK DESCRIPTION

Height : 50.00 m
Diameter : 1.40 m
Temperature : 174.00 °C
Air Velocity : 3.92 m/s
Dry Basic Flow rate³ : 3.80 m³/s
Moisture Content : 4.85 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 11.66 %
Barometric Pressure : 755.50 mm.Hg
Atmospheric Temperature : 33.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³		STD ¹	UNIT
			11.66 % O ₂	7 % O ₂		
Particulate (TSP)	Isokinetic, Gravimetric	10:25-11:15	0.4	0.6	240 , 30 ²	mg/m ³
			0.0015	-	0.079 ²	g/s

REMARK: ¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

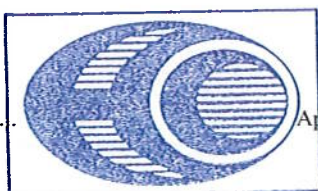
* SAMPLING BY MR. WARAKORN VITAYASEWEE (ว-003-ก-7283)

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ก-4377)

04/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSACK)

(ว-003-ก-5618)

04/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1034

Report No. 6510-0709

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Oven Stack MCL 3 (S17)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06487

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 09:20-09:25

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height : 52.50 m
Diameter : 0.60 m
Temperature : 61.00 °C
Air Velocity : 2.27 m/s
Dry Basic Flow rate³ : 0.55 m³/s
Moisture Content : 4.34 %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 18.94 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 30.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	09:20-09:25	13.2	376 , 45 ²	mg/m ³
			7.0	200 , 23 ²	ppm
			0.0073	0.023 ²	g/s

REMARK:

¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

31/10/2022

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Request No. LA65-1034

Report No. 6510-0710

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Oven Stack MCL 3 (S17)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06488

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 09:20-09:30

TESTED DATE : 25-29/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height :	52.50	m	Type of Process :	Combustion
Diameter :	0.60	m	Type of Fuel :	Natural Gas
Temperature :	61.00	°C	Oxygen Content :	18.94 %
Air Velocity :	2.27	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ³ :	0.55	m ³ /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	4.34	%		

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Carbon monoxide	Bag,Non Dispersive Infrared	09:20-09:30	1.6	790 , 350 ²	mg/m ³
(CO)			1.4	690 , 305 ²	ppm
			0.0009	0.175 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

31/10/2022

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Request No. LA65-1034

Report No. 6510-0708

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Oven Stack MCL 3 (S17)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06486

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 09:10-10:10

TESTED DATE : 25/10/2022 – 04/11/2022

REPORTED DATE : 07/11/2022

STACK DESCRIPTION

Height :	52.50	m	Type of Process :	Combustion
Diameter :	0.60	m	Type of Fuel :	Natural Gas
Temperature :	61.00	°C	Oxygen Content :	18.94 %
Air Velocity :	2.27	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ² :	0.55	m ³ /s	Atmospheric Temperature :	30.00 °C
Moisture Content :	4.34	%		

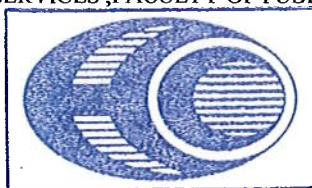
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Chromic Acid ³	Spectrophotometric Method	09:10-10:10	0.0031	0.01	mg/m ³
			0.000002	0.000005	g/s

REMARK: ¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

SAMPLING BY MR. TEERAPONG NUALIN (ว-003-ค-5620)

ANALYSED BY THE OFFICE OF PUBLIC HEALTH AND ENVIRONMENTAL

TECHNOLOGY SERVICES ,FACULTY OF PUBLIC HEALTH ,MAHIDOL UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....*Thongchai Boonsak*.....

(MR. THONGCHAI BOONSAK)

07/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Request No. LA65-1034

Report No. 6510-0702

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Painting stack MCL 3 (S18)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06481

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 13:40-13:45

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height : 52.50 m
Diameter : 1.80 m
Temperature : 112.00 °C
Air Velocity : 4.00 m/s
Dry Basic Flow rate³ : 7.58 m³/s
Moisture Content : - %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 20.26 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 35.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Oxides of Nitrogen (NO _x as NO ₂)	Chemical Absorption, Colorimetric	13:40-13:45	9.3	376 , 20 ²	mg/m ³
			4.9	200 , 10 ²	ppm
			0.0705	0.20 ²	g/s

REMARK:¹ NOTIFICATION OF MINISTRY OF SCIENCE, TECHNOLOGY AND ENVIRONMENTAL B.E. 2544 (2001)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MR. THONGCHAI BOONSAN)

(ว-003-ค-5618)

31/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1034

Report No. 6510-0703

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Painting stack MCL 3 (S18)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06482

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 13:30-13:40

TESTED DATE : 25-29/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height : 52.50 m
Diameter : 1.80 m
Temperature : 112.00 °C
Air Velocity : 4.00 m/s
Dry Basic Flow rate³ : 7.58 m³/s
Moisture Content : - %

Type of Process : Combustion
Type of Fuel : Natural Gas
Oxygen Content : 20.26 %
Barometric Pressure : 757.75 mm.Hg
Atmospheric Temperature : 35.00 °C

PARAMETER*	TEST METHOD	TIME	RESULT ³	STD ¹	UNIT
Carbon monoxide (CO)	Bag,Non Dispersive Infrared	13:30-13:40	43.2	790 , 350 ²	mg/m ³
			37.7	690 , 305 ²	ppm
			0.3275	3.00 ²	g/s

REMARK:

¹ NOTIFICATION OF THE MINISTRY OF INDUSTRY B.E. 2549 (2006)² มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558³ DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....

(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MR. THONGCHAI BOONSAK)

(ว-003-ค-5618)

31/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1034

Report No. 6510-0700

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Painting stack MCL 3 (S18)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06479

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 13:30-13:55

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

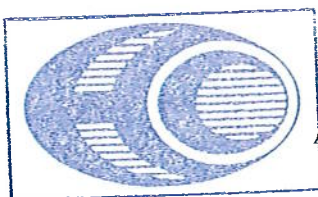
STACK DESCRIPTION

Height :	52.50	m	Type of Process :	Combustion
Diameter :	1.80	m	Type of Fuel :	Natural Gas
Temperature :	112.00	°C	Oxygen Content :	20.26 %
Air Velocity :	4.00	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ² :	7.58	m ³ /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Toluene	Sorbent Adsorption,	13:30-13:55	<2.07	5.0	mg/m ³
	Gas Chromatography		<0.55	1.3	ppm
			<0.0157	0.05	g/s

REMARK: ¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)

* PARAMETER OUTSIDE THE SCOPE OF THE REGISTRATION
OF THE DEPARTMENT OF INDUSTRIAL WORKS
(SAMPLING BY MR. TEERAPONG NUALIN (ว-003-ค-5620))



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(MR. THONGCHAI BOONSAK)

31/10/2022

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Request No. LA65-1034

Report No. 6510-0701

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Painting stack MCL 3 (S18)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06480

RECEIVED DATE : 25/10/2022

SAMPLING TIME : 13:30-13:55

TESTED DATE : 25-28/10/2022

REPORTED DATE : 31/10/2022

STACK DESCRIPTION

Height :	52.50	m	Type of Process :	Combustion
Diameter :	1.80	m	Type of Fuel :	Natural Gas
Temperature :	112.00	°C	Oxygen Content :	20.26 %
Air Velocity :	4.00	m/s	Barometric Pressure :	757.75 mm.Hg
Dry Basic Flow rate ² :	7.58	m ³ /s	Atmospheric Temperature :	35.00 °C
Moisture Content :	-	%		

PARAMETER*	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Xylene	Adsorption, Gas Chromatographic	13:30-13:55	<2.05	70	mg/m ³
			<0.47	16	ppm
			<0.0155	0.70	g/s

REMARK: ¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)

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

Examined By.....
(MISS APIRADEE CHUEN-AROM)

(ว-003-ค-4377)

31/10/2022



บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

Approved By.....
(MR. THONGCHAI BOONSACK)

(ว-003-ค-5618)

31/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-1046

Report No. 6511-0096

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang , Rayong

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Cleaning Fume Exhaust Scrubber Stack MCL 3 (S15)

SAMPLING DATE : 14/10/2022

SAMPLE NO. : 06641

RECEIVED DATE : 27/10/2022

SAMPLING TIME : 09:40-10:10

TESTED DATE : 27/10/2022 – 11/11/2022

REPORTED DATE : 11/11/2022

STACK DESCRIPTION

Height :	20.00	m	Type of Process :	Exhaust
Diameter :	0.75	m	Type of Fuel :	-
Temperature :	57.00	°C	Oxygen Content :	20.90 %
Air Velocity :	13.85	m/s	Barometric Pressure :	755.50 mm.Hg
Dry Basic Flow rate ² :	5.32	m ³ /s	Atmospheric Temperature :	31.00 °C
Moisture Content :	-	%		

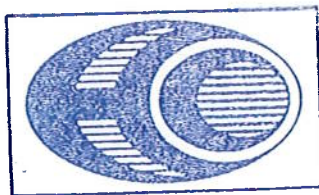
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Sodium Hydroxide ³	Acid-Base Titration	09:40-10:10	<0.100	10	mg/m ³
(NaOH)			<0.061	6	ppm
			<0.0005	0.065	g/s

REMARK:

¹ มาตรฐานที่กำหนดไว้ในรายงานการประเมินผลกระทบสิ่งแวดล้อมฉบับสมบูรณ์ ฉบับเดือน กันยายน 2558² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO., LTD.

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

ANALYSED BY THE ENVIRONMENTAL CENTER RAJABHAT SUAN DUSIT UNIVERSITY



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

11/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. LA65-R1056

Report No. R6510-1664 – R6510-1670

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : ชุมชนมาบชอุตสาหกรรม

RECEIVED DATE : 19/10/2022

DETERMINATION METHOD : Non-Dispersive Infrared SAMPLE NO. : 30983-30989

INSTRUMENT : API Model T300 S/N 5402 REPORTED DATE : 01/11/2022

PARAMETER*	SAMPLING DATE	TIME	RESULT	STANDARD ¹	UNIT
Carbon monoxide (CO)	12/10/2022	11:00-19:00	0.50	9.0	ppm
	13/10/2022	11:00-19:00	0.65	9.0	ppm
	14/10/2022	11:00-19:00	0.65	9.0	ppm
	15/10/2022	11:00-19:00	0.66	9.0	ppm
	16/10/2022	11:00-19:00	0.39	9.0	ppm
	17/10/2022	11:00-19:00	0.49	9.0	ppm
	18/10/2022	11:00-19:00	0.38	9.0	ppm

REMARK : ¹ Notification of Office of The National Environmental Board Volume 10 B.E. 2538 (1995)

Standard for 8-hr Average

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

(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Request No. ATR6510035

Report No. 6510-0658 - 6510-0664

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : วัดมาบชอุบล
RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100658 - A65100664
TESTED DATE : 31/10/2022-01/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD ¹	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/10/2022	0.051	0.33	mg/m ³
		13-14/10/2022	0.045	0.33	mg/m ³
		14-15/10/2022	0.058	0.33	mg/m ³
		15-16/10/2022	0.036	0.33	mg/m ³
		16-17/10/2022	0.038	0.33	mg/m ³
		17-18/10/2022	0.078	0.33	mg/m ³
		18-19/10/2022	0.094	0.33	mg/m ³

REMARK:

¹ 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

Examined By.....



(Miss Thanatporn Klinsoon)

14/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL
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Request No. ATR6510035

Report No. 6510-0665 - 6510-0671

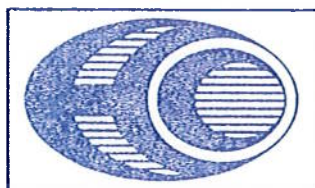
TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดมาบขลุค
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100665 - A65100671
 TESTED DATE : 31/10/2022-03/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc (Zn)	Filtration, ICP-OES Method	12-13/10/2022	< 0.01	mg/m ³
		13-14/10/2022	< 0.01	mg/m ³
		14-15/10/2022	< 0.01	mg/m ³
		15-16/10/2022	< 0.01	mg/m ³
		16-17/10/2022	< 0.01	mg/m ³
		17-18/10/2022	< 0.01	mg/m ³
		18-19/10/2022	< 0.01	mg/m ³

REMARK:

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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Request No. ATR6510035

Report No. 6510-0672 - 6510-0678

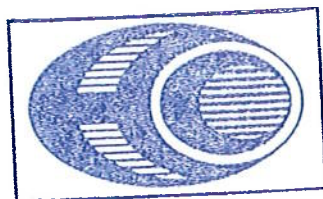
TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดมาบชอุค
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100672 - A65100678
 TESTED DATE : 31/10/2022-03/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Aluminium (Al)	Filtration, ICP-OES	12-13/10/2022	< 0.01	mg/m ³
	/NIOSH 7300	13-14/10/2022	< 0.01	mg/m ³
		14-15/10/2022	< 0.01	mg/m ³
		15-16/10/2022	< 0.01	mg/m ³
		16-17/10/2022	< 0.01	mg/m ³
		17-18/10/2022	< 0.01	mg/m ³
		18-19/10/2022	< 0.01	mg/m ³

REMARK:

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



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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Request No. ATR6510035

Report No. 6510-0679 - 6510-0685

TEST REPORT

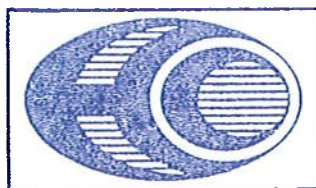
CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดมาบขลุ่ย
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100679 - A65100685
 TESTED DATE : 31/10/2022-11/11/2022 REPORTED DATE : 14/11/2022

PARAMETER**	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Hydrogen Chloride (HCl)	Ion Chromatography Method	12-13/10/2022	< 0.01	mg/m ³
			< 0.01	ppm
		13-14/10/2022	0.03	mg/m ³
			0.02	ppm
		14-15/10/2022	< 0.01	mg/m ³
			< 0.01	ppm
		15-16/10/2022	0.05	mg/m ³
			0.03	ppm
		16-17/10/2022	0.02	mg/m ³
			0.01	ppm
		17-18/10/2022	< 0.01	mg/m ³
			< 0.01	ppm
		18-19/10/2022	< 0.01	mg/m ³
			< 0.01	ppm

REMARK:

** Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Sampling By Mr. Tummarat Photankhum)

Analysed By The Office of Public Health and Environmental Technology Services, Faculty of Public Health, Mahidol University.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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Request No. LA65-R1056

Report No. R6510-1678 – R6510-1684

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : ชุมชนหนองไผ่

RECEIVED DATE : 19/10/2022

DETERMINATION METHOD : Non-Dispersive Infrared SAMPLE NO. : 30997-31003

INSTRUMENT : API Model T300 S/N 5401 REPORTED DATE : 01/11/2022

PARAMETER*	SAMPLING DATE	TIME	RESULT	STANDARD ¹	UNIT
Carbon monoxide (CO)	12/10/2022	11:00-19:00	0.44	9.0	ppm
	13/10/2022	11:00-19:00	<0.04	9.0	ppm
	14/10/2022	11:00-19:00	0.08	9.0	ppm
	15/10/2022	11:00-19:00	0.10	9.0	ppm
	16/10/2022	11:00-19:00	0.06	9.0	ppm
	17/10/2022	11:00-19:00	<0.04	9.0	ppm
	18/10/2022	11:00-19:00	<0.04	9.0	ppm

REMARK : ¹ Notification of Office of The National Environmental Board Volume 10 B.E. 2538 (1995)

Standard for 8-hr Average

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

(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

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Request No. ATR6510035

Report No. 6510-0630 - 6510-0636

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : วัดหนองแฟบ
RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100630 - A65100636
TESTED DATE : 31/10/2022-01/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD ^{1/}	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	12-13/10/2022	0.025	0.33	mg/m ³
		13-14/10/2022	0.027	0.33	mg/m ³
		14-15/10/2022	0.028	0.33	mg/m ³
		15-16/10/2022	0.025	0.33	mg/m ³
		16-17/10/2022	0.023	0.33	mg/m ³
		17-18/10/2022	0.044	0.33	mg/m ³
		18-19/10/2022	0.053	0.33	mg/m ³

REMARK:

^{1/} 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

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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Request No. ATR6510035

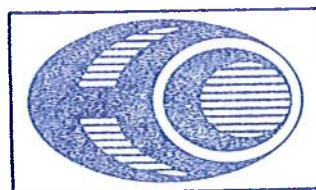
Report No. 6510-0637 - 6510-0643

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดหนองแฟบ
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100637 - A65100643
 TESTED DATE : 31/10/2022-03/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Zinc (Zn)	Filtration, ICP-OES Method	12-13/10/2022	< 0.01	mg/m ³
		13-14/10/2022	< 0.01	mg/m ³
		14-15/10/2022	< 0.01	mg/m ³
		15-16/10/2022	< 0.01	mg/m ³
		16-17/10/2022	< 0.01	mg/m ³
		17-18/10/2022	< 0.01	mg/m ³
		18-19/10/2022	< 0.01	mg/m ³

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsonon)

14/11/2022

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Request No. ATR6510035

Report No. 6510-0644 - 6510-0650

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดหนองแพบ
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100644 - A65100650
 TESTED DATE : 31/10/2022-03/11/2022 REPORTED DATE : 14/11/2022

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Aluminium (Al)	Filtration, ICP-OES	12-13/10/2022	< 0.01	mg/m ³
	/NIOSH 7300	13-14/10/2022	< 0.01	mg/m ³
		14-15/10/2022	< 0.01	mg/m ³
		15-16/10/2022	< 0.01	mg/m ³
		16-17/10/2022	< 0.01	mg/m ³
		17-18/10/2022	< 0.01	mg/m ³
		18-19/10/2022	< 0.01	mg/m ³

REMARK:

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



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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Request No. ATR6510035

Report No. 6510-0651 - 6510-0657

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : วัดหนองแฟบ
 RECEIVED DATE : 31/10/2022 SAMPLE NO. : A65100651 - A65100657
 TESTED DATE : 31/10/2022-11/11/2022 REPORTED DATE : 14/11/2022

PARAMETER**	TEST METHOD	SAMPLING DATE	RESULT	UNIT
Hydrogen Chloride (HCl)	Ion Chromatography Method	12-13/10/2022	< 0.01	mg/m ³
			< 0.01	ppm
		13-14/10/2022	0.04	mg/m ³
			0.03	ppm
		14-15/10/2022	0.06	mg/m ³
			0.04	ppm
		15-16/10/2022	< 0.01	mg/m ³
			< 0.01	ppm
		16-17/10/2022	0.02	mg/m ³
			0.01	ppm
		17-18/10/2022	0.05	mg/m ³
			0.03	ppm
		18-19/10/2022	0.02	mg/m ³
			0.01	ppm

REMARK:

** Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Sampling By Mr. Tummarat Photankhum)

Analysed By The Office of Public Health and Environmental Technology Services, Faculty of Public Health, Mahidol University.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

14/11/2022

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ISO/IEC 17025

Request No. LA65-R1056

Report No. R6510-1671 -- R6510-1677

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ชุมชนมาบชอุตสาหกรรม
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : Environnement SA. Model AC32e S/N 693

SAMPLE NO. : 30990-30996
 SAMPLING DATE : 12-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME / DATE	12- 13/10/2022	13-14/10/2022	14-15/10/2022	UNIT
11:00 – 12:00 ²	0.009	0.010	0.022	ppm
12:00 – 13:00	0.004	0.006	0.031	ppm
13:00 – 14:00	<0.001	0.004	0.016	ppm
14:00 – 15:00	0.004	0.003	0.011	ppm
15:00 – 16:00	0.006	0.002	0.009	ppm
16:00 – 17:00	0.003	<0.001	0.007	ppm
17:00 – 18:00	0.003	0.001	0.010	ppm
18:00 – 19:00	0.003	0.004	0.004	ppm
19:00 – 20:00	0.012	0.008	0.013	ppm
20:00 – 21:00	0.005	0.011	0.005	ppm
21:00 – 22:00	0.007	0.010	0.005	ppm
22:00 – 23:00	0.017	0.016	0.008	ppm
23:00 – 00:00	0.018	0.019	0.008	ppm
00:00 – 01:00	0.014	0.017	0.006	ppm
01:00 – 02:00	0.006	0.013	0.004	ppm
02:00 – 03:00	0.006	0.016	0.003	ppm
03:00 – 04:00	0.003	0.015	0.002	ppm
04:00 – 05:00	0.002	0.015	0.007	ppm
05:00 – 06:00	0.003	0.012	0.015	ppm
06:00 – 07:00	0.002	0.013	0.013	ppm
07:00 – 08:00	0.001	0.011	0.012	ppm
08:00 – 09:00	0.001	0.010	0.010	ppm
09:00 – 10:00	0.003	0.014	0.008	ppm
10:00 – 11:00	0.007	0.019	0.009	ppm
Maximum 1 hr.	0.018	0.019	0.031	ppm
Average 24 hr.	0.006	0.010	0.010	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

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

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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ISO/IEC 17025

Request No. LA65-R1056

Report No. R6510-1671 – R6510-1677

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ชุมชนมาบพิตร
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : Environnement SA. Model AC32c S/N 693

SAMPLE NO. : 30990-30996
 SAMPLING DATE : 12-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME / DATE	15-16/10/2022	16-17/10/2022	17-18/10/2022	UNIT
11:00 – 12:00 ²	0.007	0.004	0.006	ppm
12:00 – 13:00	0.004	0.004	0.007	ppm
13:00 – 14:00	0.001	0.003	0.010	ppm
14:00 – 15:00	<0.001	<0.001	0.010	ppm
15:00 – 16:00	0.001	0.003	0.015	ppm
16:00 – 17:00	0.007	0.001	0.013	ppm
17:00 – 18:00	0.008	0.001	0.009	ppm
18:00 – 19:00	0.004	0.001	0.005	ppm
19:00 – 20:00	0.011	0.004	0.009	ppm
20:00 – 21:00	0.010	0.001	0.008	ppm
21:00 – 22:00	0.013	0.003	0.016	ppm
22:00 – 23:00	0.015	0.008	0.004	ppm
23:00 – 00:00	0.012	0.010	0.004	ppm
00:00 – 01:00	0.011	0.009	0.009	ppm
01:00 – 02:00	0.009	0.009	0.012	ppm
02:00 – 03:00	0.003	0.006	0.008	ppm
03:00 – 04:00	0.001	0.008	0.004	ppm
04:00 – 05:00	<0.001	0.005	0.006	ppm
05:00 – 06:00	0.002	0.006	0.008	ppm
06:00 – 07:00	0.001	0.005	0.010	ppm
07:00 – 08:00	<0.001	0.003	0.016	ppm
08:00 – 09:00	<0.001	0.004	0.015	ppm
09:00 – 10:00	0.001	0.005	0.008	ppm
10:00 – 11:00	0.003	0.006	0.009	ppm
Maximum 1 hr.	0.015	0.010	0.016	ppm
Average 24 hr.	0.005	0.005	0.009	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

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ISO/IEC 17025

Request No. LA65-R1056

Report No. R6510-1671 – R6510-1677

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ชุมชนมาบพิตร
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : Environnement SA. Model AC32e S/N 693

SAMPLE NO. : 30990-30996
 SAMPLING DATE : 12-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME / DATE	18-19/10/2022	UNIT
11:00 – 12:00 ²	0.009	ppm
12:00 – 13:00	0.004	ppm
13:00 – 14:00	0.005	ppm
14:00 – 15:00	0.006	ppm
15:00 – 16:00	0.001	ppm
16:00 – 17:00	0.001	ppm
17:00 – 18:00	0.002	ppm
18:00 – 19:00	0.005	ppm
19:00 – 20:00	0.005	ppm
20:00 – 21:00	0.004	ppm
21:00 – 22:00	0.004	ppm
22:00 – 23:00	0.008	ppm
23:00 – 00:00	0.010	ppm
00:00 – 01:00	0.009	ppm
01:00 – 02:00	0.011	ppm
02:00 – 03:00	0.010	ppm
03:00 – 04:00	0.002	ppm
04:00 – 05:00	0.001	ppm
05:00 – 06:00	0.001	ppm
06:00 – 07:00	0.007	ppm
07:00 – 08:00	0.006	ppm
08:00 – 09:00	0.002	ppm
09:00 – 10:00	0.006	ppm
10:00 – 11:00	0.007	ppm
Maximum 1 hr.	0.011	ppm
Average 24 hr.	0.005	ppm
Standard (1 hr.) ¹	0.17	ppm

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1685 – R6510-1691

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ชุมชนหนองเพอ SAMPLE NO. : 31004-31010
 PARAMETER* : Nitrogen Dioxide SAMPLING DATE : 12-19/10/2022
 DETERMINATION METHOD : Chemiluminescence RECEIVED DATE : 19/10/2022
 INSTRUMENT : Horiba Model APNA-370 S/N XXSSJ4FM REPORTED DATE : 01/11/2022

TIME / DATE	12-13/10/2022	13-14/10/2022	14-15/10/2022	UNIT
11:00 – 12:00 ²	0.010	0.005	0.006	ppm
12:00 – 13:00	0.008	0.007	0.005	ppm
13:00 – 14:00	0.005	0.002	0.004	ppm
14:00 – 15:00	0.004	0.006	0.004	ppm
15:00 – 16:00	0.004	0.003	0.004	ppm
16:00 – 17:00	0.004	0.008	0.005	ppm
17:00 – 18:00	0.006	0.012	0.005	ppm
18:00 – 19:00	0.009	0.004	0.007	ppm
19:00 – 20:00	0.012	0.010	0.009	ppm
20:00 – 21:00	0.001	0.013	0.008	ppm
21:00 – 22:00	0.001	0.010	0.012	ppm
22:00 – 23:00	0.007	0.009	0.010	ppm
23:00 – 00:00	0.005	0.006	0.010	ppm
00:00 – 01:00	0.009	0.005	0.010	ppm
01:00 – 02:00	0.008	0.004	0.004	ppm
02:00 – 03:00	0.010	0.003	0.008	ppm
03:00 – 04:00	0.003	0.001	0.004	ppm
04:00 – 05:00	0.004	0.003	0.003	ppm
05:00 – 06:00	0.003	0.003	0.003	ppm
06:00 – 07:00	0.002	0.004	0.004	ppm
07:00 – 08:00	0.006	0.006	0.008	ppm
08:00 – 09:00	0.006	0.007	0.010	ppm
09:00 – 10:00	0.006	0.006	0.007	ppm
10:00 – 11:00	0.008	0.006	0.006	ppm
Maximum 1 hr.	0.012	0.013	0.012	ppm
Average 24 hr.	0.006	0.006	0.007	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

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COPY

Request No. LA65-R1056

Report No. R6510-1685 – R6510-1691

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ขุมชนหนองเพิบ SAMPLE NO. : 31004-31010
 PARAMETER* : Nitrogen Dioxide SAMPLING DATE : 12-19/10/2022
 DETERMINATION METHOD : Chemiluminescence RECEIVED DATE : 19/10/2022
 INSTRUMENT : Horiba Model APNA-370 S/N XXSSJ4FM REPORTED DATE : 01/11/2022

TIME / DATE	15-16/10/2022	16-17/10/2022	17-18/10/2022	UNIT
11:00 – 12:00 ²	0.006	0.004	0.008	ppm
12:00 – 13:00	0.006	0.006	0.007	ppm
13:00 – 14:00	0.006	0.005	0.006	ppm
14:00 – 15:00	0.005	0.005	0.006	ppm
15:00 – 16:00	0.006	0.004	0.005	ppm
16:00 – 17:00	0.005	0.004	0.004	ppm
17:00 – 18:00	0.004	0.005	0.005	ppm
18:00 – 19:00	0.004	0.005	0.006	ppm
19:00 – 20:00	0.005	0.005	0.005	ppm
20:00 – 21:00	0.004	0.005	0.006	ppm
21:00 – 22:00	0.004	0.005	0.009	ppm
22:00 – 23:00	0.003	0.007	0.008	ppm
23:00 – 00:00	0.004	0.005	0.014	ppm
00:00 – 01:00	0.003	0.005	0.010	ppm
01:00 – 02:00	0.003	0.006	0.006	ppm
02:00 – 03:00	0.004	0.005	0.008	ppm
03:00 – 04:00	0.004	0.005	0.008	ppm
04:00 – 05:00	0.004	0.004	0.006	ppm
05:00 – 06:00	0.003	0.005	0.005	ppm
06:00 – 07:00	0.004	0.006	0.004	ppm
07:00 – 08:00	0.004	0.008	0.006	ppm
08:00 – 09:00	0.004	0.008	0.009	ppm
09:00 – 10:00	0.005	0.007	0.009	ppm
10:00 – 11:00	0.005	0.008	0.008	ppm
Maximum 1 hr.	0.006	0.008	0.014	ppm
Average 24 hr.	0.004	0.006	0.007	ppm
Standard (1 hr.) ¹	0.17	0.17	0.17	ppm

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MS. THANATPORN KLINSOPON)

01/11/2022

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Request No. LA65-R1056

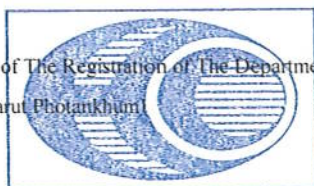
Report No. R6510-1685 – R6510-1691

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : ชุมชนหนองไผ่
 PARAMETER* : Nitrogen Dioxide
 DETERMINATION METHOD : Chemiluminescence
 INSTRUMENT : Horiba Model APNA-370 S/N XXSSJ4FM

SAMPLE NO. : 31004-31010
 SAMPLING DATE : 12-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME / DATE	18-19/10/2022	UNIT
11:00 – 12:00 ²	0.009	ppm
12:00 – 13:00	0.010	ppm
13:00 – 14:00	0.009	ppm
14:00 – 15:00	0.007	ppm
15:00 – 16:00	0.005	ppm
16:00 – 17:00	0.005	ppm
17:00 – 18:00	0.005	ppm
18:00 – 19:00	0.007	ppm
19:00 – 20:00	0.008	ppm
20:00 – 21:00	0.006	ppm
21:00 – 22:00	0.007	ppm
22:00 – 23:00	0.015	ppm
23:00 – 00:00	0.013	ppm
00:00 – 01:00	0.010	ppm
01:00 – 02:00	0.006	ppm
02:00 – 03:00	0.006	ppm
03:00 – 04:00	0.005	ppm
04:00 – 05:00	0.006	ppm
05:00 – 06:00	0.005	ppm
06:00 – 07:00	0.005	ppm
07:00 – 08:00	0.005	ppm
08:00 – 09:00	0.008	ppm
09:00 – 10:00	0.010	ppm
10:00 – 11:00	0.007	ppm
Maximum 1 hr.	0.015	ppm
Average 24 hr.	0.007	ppm
Standard (1 hr.) ¹	0.17	ppm

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

01/11/2022

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Wind Speed & Wind Direction

Request No. LA65-R1056

NS BlueScope (Thailand) Limited

Sample No. 31032

Sampling Source : ชุมชนนาบขูด

Sampling Date : October 12-19, 2022

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

COPY

Wind Speed & Wind Direction

Request No. LA65-R1056

NS BlueScope (Thailand) Limited

Sample No. 31033

Sampling Source : ชุมชนหนองแฟบ

Sampling Date : October 12-19, 2022

Time	October 12-13, 2022		October 13-14, 2022		October 14-15, 2022		October 15-16, 2022		October 16-17, 2022		October 17-18, 2022		October 18-19, 2022	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
11:00-12:00	0.4	NW	1.3	NNE	0.9	NNE	0.9	NNE	0.9	NE	1.3	S	1.8	NE
12:00-13:00	0.4	NNE	0.9	NNE	0.9	NNE	1.3	NNE	0.9	NNE	1.3	S	1.8	ENE
13:00-14:00	1.3	NNE	1.3	NNE	1.3	NNE	0.9	NNE	0.9	NNE	0.4	SW	2.2	E
14:00-15:00	0.9	NNE	0.9	NNE	0.9	NNE	0.9	NNE	0.4	NNE	0.4	WSW	1.8	SE
15:00-16:00	1.3	ENE	0.9	NNE	0.9	N	1.3	NE	0.4	NNW	0.0	-	1.8	S
16:00-17:00	0.9	NW	0.9	NE	0.9	NNE	1.3	NNE	0.9	NNW	0.0	-	0.9	S
17:00-18:00	0.9	ENE	0.4	NE	1.3	NNE	1.3	NNE	0.4	NW	0.0	-	0.4	S
18:00-19:00	1.3	NNW	0.4	NNW	0.9	NNE	0.9	NNE	0.4	NNE	0.0	-	0.0	-
19:00-20:00	0.9	NE	0.4	NE	0.0	-	1.3	NNE	0.0	-	0.0	-	0.0	-
20:00-21:00	1.3	NNW	0.0	-	0.4	NE	0.9	NE	0.4	NW	0.0	-	0.0	-
21:00-22:00	1.3	ENE	0.0	-	0.4	NNE	0.9	NNE	0.4	NNE	0.4	NNE	0.0	-
22:00-23:00	0.9	NNE	0.4	NW	0.4	N	0.9	NNE	0.9	NNE	0.0	-	0.0	-
23:00-00:00	1.3	NW	0.0	-	0.0	-	0.9	NNE	0.4	NE	0.4	N	0.0	-
00:00-01:00	0.4	NNE	0.0	-	0.0	-	1.3	NNE	0.4	NNW	0.0	-	0.4	SE
01:00-02:00	0.4	ENE	0.0	-	0.0	-	1.3	NNE	0.4	NW	0.0	-	0.0	-
02:00-03:00	0.4	NNE	0.0	-	0.0	-	0.4	NE	0.0	-	0.4	NNE	0.0	-
03:00-04:00	0.4	NNW	0.0	-	0.0	-	0.4	NE	0.0	-	0.4	NNE	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-	0.4	N	0.0	-	0.4	NNE	0.4	NNE
05:00-06:00	0.4	N	0.4	NNE	0.0	-	0.4	ENE	0.0	-	0.9	NNE	0.4	NNE
06:00-07:00	0.4	W	0.4	NNE	0.0	-	0.4	N	0.4	NNE	1.8	NE	0.4	NNE
07:00-08:00	0.4	NE	0.4	NNE	0.0	-	0.4	NE	0.9	NNE	0.9	ESE	0.9	NNE
08:00-09:00	0.0	-	0.4	NNE	0.9	NNE	0.4	NNE	0.9	NE	0.9	E	0.4	NNW
09:00-10:00	0.0	-	0.9	NNE	1.3	NNE	0.9	NE	1.3	NE	0.4	E	0.9	NNE
10:00-11:00	1.3	NNE	1.3	NNE	0.9	NNE	0.9	NE	0.9	ENE	2.2	ENE	0.9	NNE

Wind Speed & Wind Direction

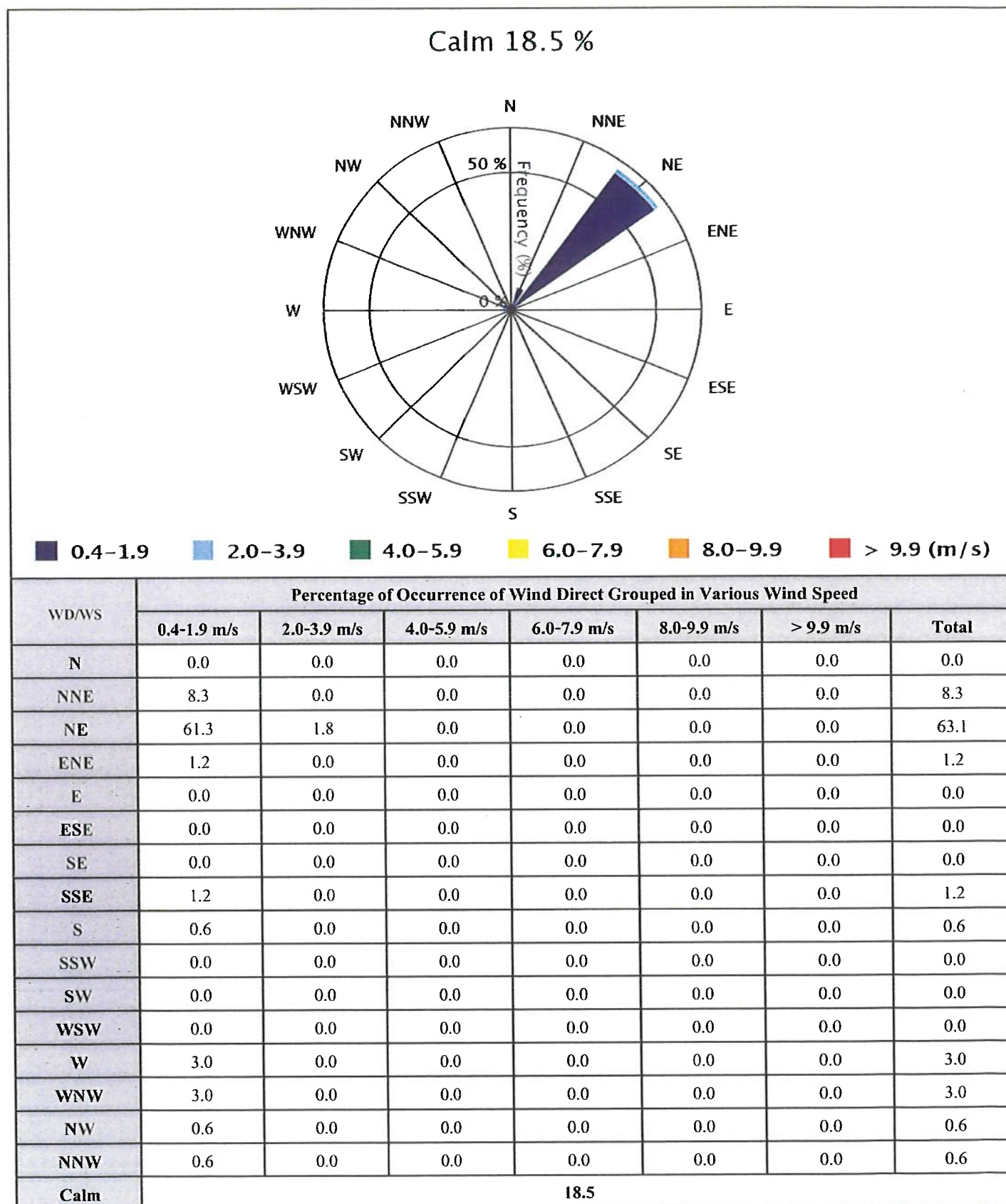
Request No. LA65-R1056

NS BlueScope (Thailand) Limited

Sample No. 31032

Sampling Source : ชุมชนนาบขูด

Sampling Date : October 12-19, 2022





Wind Speed & Wind Direction

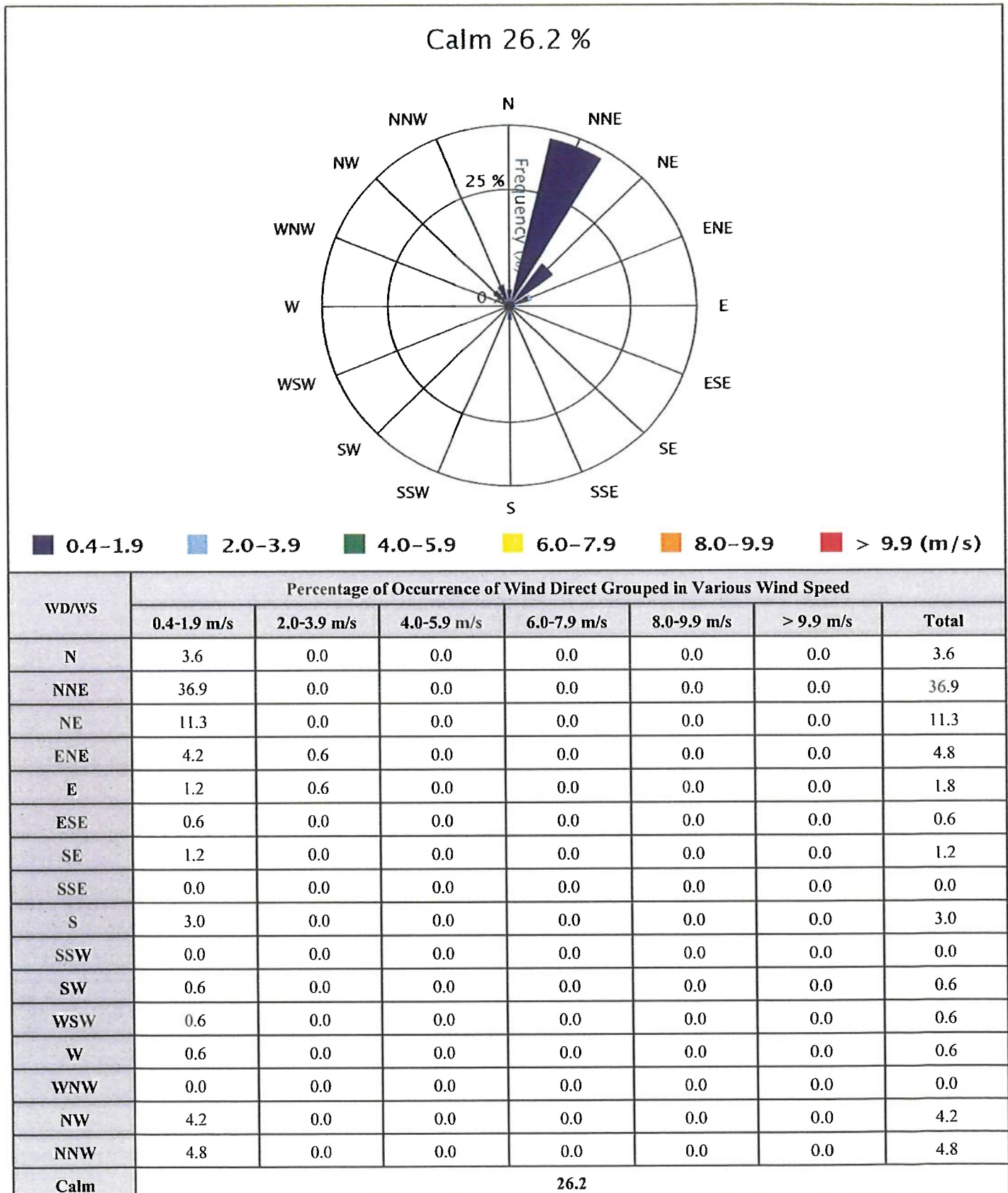
Request No. LA65-R1056

NS BlueScope (Thailand) Limited

Sample No. 31033

Sampling Source : ชุมชนหนองแฟบ

Sampling Date : October 12-19, 2022



Request No. LA65-R1056

Report No. R6510-1706

TEST REPORT

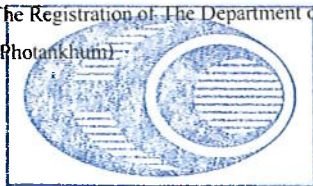
CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 162035 : Type 2

SAMPLE NO. : 31025
MEASURING DATE : 12-13/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	12-13/10/2022 (L_{eq})	12-13/10/2022 (L_{90})	UNIT
11:30 - 12:30 ^{1/3}	57.0	50.3	dB(A)
12:30 - 13:30	53.0	50.8	dB(A)
13:30 - 14:30	52.8	50.6	dB(A)
14:30 - 15:30	55.0	51.9	dB(A)
15:30 - 16:30	52.3	50.4	dB(A)
16:30 - 17:30	54.2	52.1	dB(A)
17:30 - 18:30	53.6	51.9	dB(A)
18:30 - 19:30	55.4	53.9	dB(A)
19:30 - 20:30	55.5	54.0	dB(A)
20:30 - 21:30	56.0	54.3	dB(A)
21:30 - 22:30	55.0	54.0	dB(A)
22:30 - 23:30	55.4	54.4	dB(A)
23:30 - 00:30	56.1	55.3	dB(A)
00:30 - 01:30	56.6	55.6	dB(A)
01:30 - 02:30	56.3	55.2	dB(A)
02:30 - 03:30	56.6	55.7	dB(A)
03:30 - 04:30	57.0	55.9	dB(A)
04:30 - 05:30	56.8	55.9	dB(A)
05:30 - 06:30	56.9	55.8	dB(A)
06:30 - 07:30	57.0	56.1	dB(A)
07:30 - 08:30	58.4	56.2	dB(A)
08:30 - 09:30	57.6	56.0	dB(A)
09:30 - 10:30	59.8	56.8	dB(A)
10:30 - 11:30	59.0	56.6	dB(A)
L_{eq} 24 hr.	56.4	-	dB(A)
L_{dn}	62.9	-	dB(A)
Standard	70 ^{1/2}	-	dB(A)

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

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)



Approved By

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Request No. LA65-R1056

Report No. R6510-1707

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate. Prakomsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 162035 : Type 2

SAMPLE NO. : 31026
MEASURING DATE : 13-14/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	13-14/10/2022 (L_{eq})	13-14/10/2022 (L_{90})	UNIT
11:30 - 12:30 ^{1/3}	57.0	56.1	dB(A)
12:30 - 13:30	58.8	55.0	dB(A)
13:30 - 14:30	57.8	54.7	dB(A)
14:30 - 15:30	57.3	56.0	dB(A)
15:30 - 16:30	56.7	55.1	dB(A)
16:30 - 17:30	57.1	55.4	dB(A)
17:30 - 18:30	55.6	54.5	dB(A)
18:30 - 19:30	55.8	54.7	dB(A)
19:30 - 20:30	55.4	54.4	dB(A)
20:30 - 21:30	57.1	54.9	dB(A)
21:30 - 22:30	57.9	54.7	dB(A)
22:30 - 23:30	59.5	59.1	dB(A)
23:30 - 00:30	59.4	58.9	dB(A)
00:30 - 01:30	59.8	59.2	dB(A)
01:30 - 02:30	58.3	56.1	dB(A)
02:30 - 03:30	56.5	55.7	dB(A)
03:30 - 04:30	59.2	56.0	dB(A)
04:30 - 05:30	57.0	56.1	dB(A)
05:30 - 06:30	57.1	56.4	dB(A)
06:30 - 07:30	56.9	56.1	dB(A)
07:30 - 08:30	58.4	55.7	dB(A)
08:30 - 09:30	56.4	54.7	dB(A)
09:30 - 10:30	56.6	55.3	dB(A)
10:30 - 11:30	56.6	54.7	dB(A)
L_{eq} 24 hr.	57.6	-	dB(A)
L_{dn}	64.6	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)^{1/3} Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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ACCREDITED LABORATORY
ISO/IEC 17025

Request No. LA65-R1056

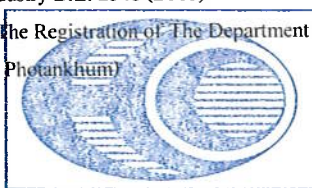
Report No. R6510-1708

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162035 : Type 2

SAMPLE NO. : 31027
 MEASURING DATE : 14-15/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	14-15/10/2022 (L_{eq})	14-15/10/2022 (L_{90})	UNIT
11:30 - 12:30 ¹³	55.8	54.2	dB(A)
12:30 - 13:30	56.0	54.5	dB(A)
13:30 - 14:30	56.0	54.4	dB(A)
14:30 - 15:30	55.7	54.0	dB(A)
15:30 - 16:30	57.4	55.2	dB(A)
16:30 - 17:30	57.0	55.0	dB(A)
17:30 - 18:30	55.7	53.8	dB(A)
18:30 - 19:30	56.0	54.8	dB(A)
19:30 - 20:30	57.6	55.2	dB(A)
20:30 - 21:30	57.3	56.1	dB(A)
21:30 - 22:30	57.0	55.4	dB(A)
22:30 - 23:30	56.0	54.5	dB(A)
23:30 - 00:30	56.4	54.8	dB(A)
00:30 - 01:30	56.6	54.8	dB(A)
01:30 - 02:30	55.8	54.6	dB(A)
02:30 - 03:30	55.8	54.6	dB(A)
03:30 - 04:30	55.3	54.6	dB(A)
04:30 - 05:30	55.4	54.5	dB(A)
05:30 - 06:30	56.6	55.3	dB(A)
06:30 - 07:30	57.2	55.8	dB(A)
07:30 - 08:30	58.3	56.0	dB(A)
08:30 - 09:30	57.5	55.6	dB(A)
09:30 - 10:30	57.1	55.2	dB(A)
10:30 - 11:30	56.0	54.7	dB(A)
L_{eq} 24 hr.	56.6	-	dB(A)
L_{dn}	62.7	-	dB(A)
Standard	70 ^{11, 12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)¹³ Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1709

TEST REPORT

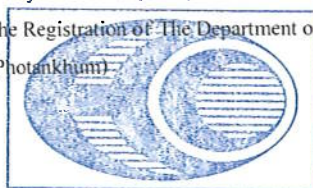
CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 162035 : Type 2

SAMPLE NO. : 31028
MEASURING DATE : 15-16/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	15-16/10/2022 (L_{eq})	15-16/10/2022 (L_{90})	UNIT
11:30 - 12:30 ¹³	55.8	54.7	dB(A)
12:30 - 13:30	55.7	54.5	dB(A)
13:30 - 14:30	57.0	55.5	dB(A)
14:30 - 15:30	57.3	56.0	dB(A)
15:30 - 16:30	56.2	55.1	dB(A)
16:30 - 17:30	56.4	55.2	dB(A)
17:30 - 18:30	57.2	56.0	dB(A)
18:30 - 19:30	56.6	55.5	dB(A)
19:30 - 20:30	56.7	55.5	dB(A)
20:30 - 21:30	56.8	55.7	dB(A)
21:30 - 22:30	56.2	55.1	dB(A)
22:30 - 23:30	56.7	55.6	dB(A)
23:30 - 00:30	56.5	55.5	dB(A)
00:30 - 01:30	56.3	55.3	dB(A)
01:30 - 02:30	55.5	54.6	dB(A)
02:30 - 03:30	55.9	55.0	dB(A)
03:30 - 04:30	55.5	54.6	dB(A)
04:30 - 05:30	56.0	54.9	dB(A)
05:30 - 06:30	56.2	54.6	dB(A)
06:30 - 07:30	56.3	55.0	dB(A)
07:30 - 08:30	56.7	55.4	dB(A)
08:30 - 09:30	56.8	54.8	dB(A)
09:30 - 10:30	56.3	54.9	dB(A)
10:30 - 11:30	56.0	54.0	dB(A)
L_{eq} 24 hr.	56.4	-	dB(A)
L_{dn}	62.6	-	dB(A)
Standard	70 ^{11,12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)¹³ Start Time

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

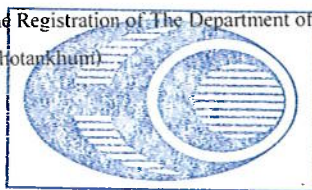
Report No. R6510-1710

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162035 : Type 2

SAMPLE NO. : 31029
 MEASURING DATE : 16-17/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	16-17/10/2022 (L_{eq})	16-17/10/2022 (L_{90})	UNIT
11:30 - 12:30 ¹³	55.3	54.1	dB(A)
12:30 - 13:30	55.4	54.1	dB(A)
13:30 - 14:30	56.0	54.9	dB(A)
14:30 - 15:30	56.0	54.2	dB(A)
15:30 - 16:30	55.4	54.1	dB(A)
16:30 - 17:30	55.2	54.2	dB(A)
17:30 - 18:30	54.6	53.6	dB(A)
18:30 - 19:30	54.9	53.7	dB(A)
19:30 - 20:30	56.2	55.2	dB(A)
20:30 - 21:30	58.3	52.2	dB(A)
21:30 - 22:30	58.3	52.4	dB(A)
22:30 - 23:30	55.1	51.1	dB(A)
23:30 - 00:30	55.0	51.3	dB(A)
00:30 - 01:30	54.6	51.1	dB(A)
01:30 - 02:30	55.1	51.5	dB(A)
02:30 - 03:30	57.1	52.2	dB(A)
03:30 - 04:30	54.8	52.3	dB(A)
04:30 - 05:30	52.7	50.2	dB(A)
05:30 - 06:30	51.3	49.0	dB(A)
06:30 - 07:30	49.6	48.1	dB(A)
07:30 - 08:30	49.3	47.5	dB(A)
08:30 - 09:30	50.7	47.3	dB(A)
09:30 - 10:30	49.3	47.2	dB(A)
10:30 - 11:30	55.7	54.1	dB(A)
L_{eq} 24 hr.	55.0	-	dB(A)
L_{dn}	61.0	-	dB(A)
Standard	70 ^{11, 12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)¹³ Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด
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Request No. LA65-R1056

Report No. R6510-1711

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162035 : Type 2

SAMPLE NO. : 31030
 MEASURING DATE : 17-18/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	17-18/10/2022 (L_{eq})	17-18/10/2022 (L_{90})	UNIT
11:30 - 12:30 ^{1/3}	54.8	53.5	dB(A)
12:30 - 13:30	55.0	51.9	dB(A)
13:30 - 14:30	52.7	50.0	dB(A)
14:30 - 15:30	50.9	48.8	dB(A)
15:30 - 16:30	52.3	48.9	dB(A)
16:30 - 17:30	53.4	51.3	dB(A)
17:30 - 18:30	53.1	51.5	dB(A)
18:30 - 19:30	54.1	52.6	dB(A)
19:30 - 20:30	54.6	53.4	dB(A)
20:30 - 21:30	55.4	54.0	dB(A)
21:30 - 22:30	55.6	54.6	dB(A)
22:30 - 23:30	56.0	55.1	dB(A)
23:30 - 00:30	57.0	56.0	dB(A)
00:30 - 01:30	57.8	56.8	dB(A)
01:30 - 02:30	57.8	56.9	dB(A)
02:30 - 03:30	56.8	55.9	dB(A)
03:30 - 04:30	56.4	55.7	dB(A)
04:30 - 05:30	56.2	55.4	dB(A)
05:30 - 06:30	56.6	55.6	dB(A)
06:30 - 07:30	56.6	55.7	dB(A)
07:30 - 08:30	56.9	55.7	dB(A)
08:30 - 09:30	57.4	56.0	dB(A)
09:30 - 10:30	56.0	54.6	dB(A)
10:30 - 11:30	56.9	55.9	dB(A)
L_{eq} 24 hr.	55.8	-	dB(A)
L_{dn}	63.0	-	dB(A)
Standard	70 ^{1/1, 12}	-	dB(A)

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

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
 (Measurement By Mr. Tummarut Photankhuan)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Request No. LA65-R1056

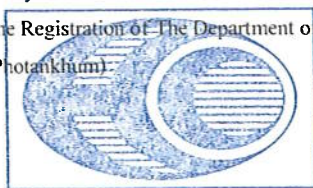
Report No. R6510-1712

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้ของที่ตั้งโครงการ (N1)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162035 : Type 2

SAMPLE NO. : 31031
 MEASURING DATE : 18-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	18-19/10/2022 (L_{eq})	18-19/10/2022 (L_{90})	UNIT
11:30 - 12:30 ^{1/3}	55.4	49.9	dB(A)
12:30 - 13:30	54.5	48.7	dB(A)
13:30 - 14:30	56.7	52.8	dB(A)
14:30 - 15:30	57.8	54.2	dB(A)
15:30 - 16:30	55.7	53.1	dB(A)
16:30 - 17:30	56.8	52.3	dB(A)
17:30 - 18:30	58.0	53.8	dB(A)
18:30 - 19:30	57.4	53.9	dB(A)
19:30 - 20:30	55.9	52.5	dB(A)
20:30 - 21:30	54.7	51.5	dB(A)
21:30 - 22:30	53.1	52.0	dB(A)
22:30 - 23:30	53.8	51.6	dB(A)
23:30 - 00:30	52.1	51.1	dB(A)
00:30 - 01:30	52.9	51.2	dB(A)
01:30 - 02:30	53.4	51.6	dB(A)
02:30 - 03:30	51.8	50.3	dB(A)
03:30 - 04:30	52.6	50.7	dB(A)
04:30 - 05:30	53.7	51.5	dB(A)
05:30 - 06:30	55.0	52.0	dB(A)
06:30 - 07:30	57.1	52.7	dB(A)
07:30 - 08:30	54.2	48.9	dB(A)
08:30 - 09:30	56.4	51.6	dB(A)
09:30 - 10:30	56.7	52.0	dB(A)
10:30 - 11:30	56.7	52.4	dB(A)
L_{eq} 24 hr.	55.5	-	dB(A)
L_{dn}	60.7	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

REMARK : ^{1/} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{2/} Notification of Ministry of the Industry B.E. 2548 (2005)^{3/} Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1699

TEST REPORT

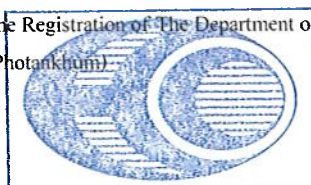
CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162037 : Type 2

SAMPLE NO. : 31018
 MEASURING DATE : 12-13/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	12-13/10/2022 (L_{eq})	12-13/10/2022 (L_{90})	UNIT
11:50 - 12:50 ^{1/3}	58.0	55.1	dB(A)
12:50 - 13:50	58.4	55.2	dB(A)
13:50 - 14:50	60.5	55.5	dB(A)
14:50 - 15:50	58.7	54.6	dB(A)
15:50 - 16:50	64.3	55.3	dB(A)
16:50 - 17:50	58.0	55.0	dB(A)
17:50 - 18:50	56.0	55.0	dB(A)
18:50 - 19:50	56.6	55.3	dB(A)
19:50 - 20:50	57.5	55.3	dB(A)
20:50 - 21:50	57.1	55.4	dB(A)
21:50 - 22:50	57.1	55.8	dB(A)
22:50 - 23:50	57.6	55.8	dB(A)
23:50 - 00:50	57.0	55.9	dB(A)
00:50 - 01:50	57.4	55.7	dB(A)
01:50 - 02:50	57.4	55.9	dB(A)
02:50 - 03:50	57.4	56.1	dB(A)
03:50 - 04:50	58.2	56.6	dB(A)
04:50 - 05:50	58.0	56.4	dB(A)
05:50 - 06:50	57.5	56.4	dB(A)
06:50 - 07:50	57.4	56.1	dB(A)
07:50 - 08:50	57.7	55.7	dB(A)
08:50 - 09:50	61.9	56.4	dB(A)
09:50 - 10:50	59.5	55.7	dB(A)
10:50 - 11:50	58.0	55.4	dB(A)
L_{eq} 24 hr.	58.7	-	dB(A)
L_{dn}	64.2	-	dB(A)
Standard	70 ^{1/2}	-	dB(A)

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

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
 (Measurement By Mr. Tummarut Photankhum)



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

01/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด
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Request No. LA65-R1056

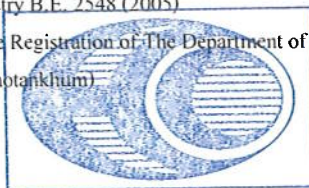
Report No. R6510-1700

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162037 : Type 2

SAMPLE NO. : 31019
 MEASURING DATE : 13-14/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	13-14/10/2022 (L_{eq})	13-14/10/2022 (L_{90})	UNIT
11:50 - 12:50 ¹³	58.2	54.6	dB(A)
12:50 - 13:50	56.8	54.4	dB(A)
13:50 - 14:50	59.0	54.3	dB(A)
14:50 - 15:50	59.9	54.1	dB(A)
15:50 - 16:50	57.6	53.7	dB(A)
16:50 - 17:50	56.7	53.9	dB(A)
17:50 - 18:50	56.8	54.0	dB(A)
18:50 - 19:50	55.3	53.9	dB(A)
19:50 - 20:50	57.1	54.3	dB(A)
20:50 - 21:50	57.0	53.9	dB(A)
21:50 - 22:50	56.9	54.1	dB(A)
22:50 - 23:50	56.9	54.3	dB(A)
23:50 - 00:50	56.3	53.5	dB(A)
00:50 - 01:50	55.1	52.5	dB(A)
01:50 - 02:50	53.4	51.9	dB(A)
02:50 - 03:50	55.1	52.4	dB(A)
03:50 - 04:50	53.9	51.7	dB(A)
04:50 - 05:50	53.6	51.7	dB(A)
05:50 - 06:50	54.2	51.6	dB(A)
06:50 - 07:50	53.9	51.8	dB(A)
07:50 - 08:50	55.8	52.2	dB(A)
08:50 - 09:50	54.6	51.7	dB(A)
09:50 - 10:50	54.7	52.0	dB(A)
10:50 - 11:50	55.1	51.8	dB(A)
L_{eq} 24 hr.	56.3	-	dB(A)
L_{dn}	61.9	-	dB(A)
Standard	70 ^{11,12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)¹³ Start Time

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

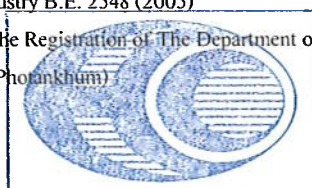
Report No. R6510-1701

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162037 : Type 2

SAMPLE NO. : 31020
 MEASURING DATE : 14-15/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	14-15/10/2022 (L_{eq})	14-15/10/2022 (L_{90})	UNIT
11:50 - 12:50 ¹³	55.0	51.6	dB(A)
12:50 - 13:50	53.6	50.7	dB(A)
13:50 - 14:50	53.8	50.9	dB(A)
14:50 - 15:50	55.2	52.2	dB(A)
15:50 - 16:50	54.6	51.1	dB(A)
16:50 - 17:50	53.4	50.7	dB(A)
17:50 - 18:50	52.9	50.9	dB(A)
18:50 - 19:50	53.3	51.6	dB(A)
19:50 - 20:50	53.9	52.1	dB(A)
20:50 - 21:50	53.4	51.3	dB(A)
21:50 - 22:50	55.4	51.6	dB(A)
22:50 - 23:50	53.8	51.4	dB(A)
23:50 - 00:50	54.4	51.5	dB(A)
00:50 - 01:50	55.3	52.6	dB(A)
01:50 - 02:50	54.6	52.8	dB(A)
02:50 - 03:50	54.2	52.6	dB(A)
03:50 - 04:50	54.2	52.7	dB(A)
04:50 - 05:50	54.4	53.0	dB(A)
05:50 - 06:50	54.7	53.3	dB(A)
06:50 - 07:50	54.5	53.4	dB(A)
07:50 - 08:50	54.9	53.3	dB(A)
08:50 - 09:50	55.0	53.3	dB(A)
09:50 - 10:50	55.5	53.5	dB(A)
10:50 - 11:50	56.1	53.3	dB(A)
L_{eq} 24 hr.	54.5	-	dB(A)
L_{dn}	61.0	-	dB(A)
Standard	70 ^{11,12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)¹³ Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Phorankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1702

TEST REPORT

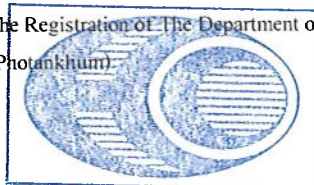
CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162037 : Type 2

SAMPLE NO. : 31021
 MEASURING DATE : 15-16/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	15-16/10/2022 (L_{eq})	15-16/10/2022 (L_{90})	UNIT
11:50 - 12:50 ^{1/3}	55.5	53.5	dB(A)
12:50 - 13:50	55.5	53.0	dB(A)
13:50 - 14:50	54.5	52.9	dB(A)
14:50 - 15:50	55.3	52.9	dB(A)
15:50 - 16:50	54.1	52.4	dB(A)
16:50 - 17:50	54.1	52.2	dB(A)
17:50 - 18:50	54.7	52.2	dB(A)
18:50 - 19:50	53.9	52.6	dB(A)
19:50 - 20:50	55.4	53.9	dB(A)
20:50 - 21:50	55.8	54.3	dB(A)
21:50 - 22:50	56.3	54.3	dB(A)
22:50 - 23:50	55.6	53.7	dB(A)
23:50 - 00:50	55.4	53.5	dB(A)
00:50 - 01:50	54.9	53.4	dB(A)
01:50 - 02:50	55.6	53.7	dB(A)
02:50 - 03:50	56.3	54.3	dB(A)
03:50 - 04:50	56.7	54.5	dB(A)
04:50 - 05:50	56.0	54.4	dB(A)
05:50 - 06:50	56.2	54.5	dB(A)
06:50 - 07:50	55.3	54.6	dB(A)
07:50 - 08:50	57.4	53.6	dB(A)
08:50 - 09:50	55.8	53.4	dB(A)
09:50 - 10:50	56.4	53.5	dB(A)
10:50 - 11:50	57.3	54.6	dB(A)
L_{eq} 24 hr.	55.7	-	dB(A)
L_{dn}	62.3	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

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

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
 (Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1703

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 162037 : Type 2

SAMPLE NO. : 31022
MEASURING DATE : 16-17/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	16-17/10/2022 (L_{eq})	16-17/10/2022 (L_{90})	UNIT
11:50 - 12:50 ^{1/3}	55.1	50.5	dB(A)
12:50 - 13:50	56.9	52.8	dB(A)
13:50 - 14:50	56.3	54.4	dB(A)
14:50 - 15:50	57.4	53.7	dB(A)
15:50 - 16:50	55.9	54.1	dB(A)
16:50 - 17:50	58.2	53.0	dB(A)
17:50 - 18:50	58.0	52.6	dB(A)
18:50 - 19:50	56.3	54.8	dB(A)
19:50 - 20:50	56.2	54.4	dB(A)
20:50 - 21:50	58.4	55.7	dB(A)
21:50 - 22:50	58.4	57.2	dB(A)
22:50 - 23:50	58.2	57.0	dB(A)
23:50 - 00:50	57.9	57.0	dB(A)
00:50 - 01:50	58.2	57.1	dB(A)
01:50 - 02:50	58.0	57.0	dB(A)
02:50 - 03:50	56.3	53.7	dB(A)
03:50 - 04:50	57.9	56.5	dB(A)
04:50 - 05:50	58.6	57.0	dB(A)
05:50 - 06:50	59.2	57.3	dB(A)
06:50 - 07:50	61.5	57.6	dB(A)
07:50 - 08:50	59.9	54.4	dB(A)
08:50 - 09:50	57.0	54.5	dB(A)
09:50 - 10:50	57.4	53.8	dB(A)
10:50 - 11:50	56.3	54.2	dB(A)
L_{eq} 24 hr.	57.9	-	dB(A)
L_{dn}	64.5	-	dB(A)
Standard	70 ^{1/2}	-	dB(A)

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

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

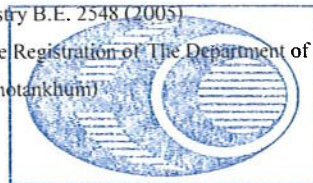
Report No. R6510-1704

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 162037 : Type 2

SAMPLE NO. : 31023
MEASURING DATE : 17-18/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	17-18/10/2022 (L_{eq})	17-18/10/2022 (L_{90})	UNIT
11:50 - 12:50 ^{1/3}	55.9	51.7	dB(A)
12:50 - 13:50	52.5	51.1	dB(A)
13:50 - 14:50	54.5	50.6	dB(A)
14:50 - 15:50	54.0	51.6	dB(A)
15:50 - 16:50	53.5	51.3	dB(A)
16:50 - 17:50	52.6	50.8	dB(A)
17:50 - 18:50	53.4	50.6	dB(A)
18:50 - 19:50	53.4	51.0	dB(A)
19:50 - 20:50	55.2	51.2	dB(A)
20:50 - 21:50	53.0	50.5	dB(A)
21:50 - 22:50	51.9	50.5	dB(A)
22:50 - 23:50	52.3	49.6	dB(A)
23:50 - 00:50	50.9	49.4	dB(A)
00:50 - 01:50	52.4	50.2	dB(A)
01:50 - 02:50	53.2	50.7	dB(A)
02:50 - 03:50	51.8	50.5	dB(A)
03:50 - 04:50	52.1	50.3	dB(A)
04:50 - 05:50	51.3	50.4	dB(A)
05:50 - 06:50	51.9	50.5	dB(A)
06:50 - 07:50	51.6	50.5	dB(A)
07:50 - 08:50	52.0	50.4	dB(A)
08:50 - 09:50	52.5	50.4	dB(A)
09:50 - 10:50	53.7	51.0	dB(A)
10:50 - 11:50	53.8	52.3	dB(A)
L_{eq} 24 hr.	53.1	-	dB(A)
L_{dn}	58.7	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)^{1/3} Start Time

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1705

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือของที่ตั้งโครงการ (N2)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 162037 : Type 2

SAMPLE NO. : 31024
 MEASURING DATE : 18-19/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	18-19/10/2022 (L_{eq})	18-19/10/2022 (L_{90})	UNIT
11:50 - 12:50 ^{1/3}	53.1	49.2	dB(A)
12:50 - 13:50	56.0	51.0	dB(A)
13:50 - 14:50	56.3	52.2	dB(A)
14:50 - 15:50	56.3	52.3	dB(A)
15:50 - 16:50	55.6	52.6	dB(A)
16:50 - 17:50	54.7	51.1	dB(A)
17:50 - 18:50	55.5	52.6	dB(A)
18:50 - 19:50	54.4	52.4	dB(A)
19:50 - 20:50	54.9	52.6	dB(A)
20:50 - 21:50	54.5	51.9	dB(A)
21:50 - 22:50	52.6	50.9	dB(A)
22:50 - 23:50	51.9	50.4	dB(A)
23:50 - 00:50	51.7	50.2	dB(A)
00:50 - 01:50	51.8	50.3	dB(A)
01:50 - 02:50	51.1	50.4	dB(A)
02:50 - 03:50	49.9	47.7	dB(A)
03:50 - 04:50	51.8	50.4	dB(A)
04:50 - 05:50	52.0	50.7	dB(A)
05:50 - 06:50	54.9	51.4	dB(A)
06:50 - 07:50	57.9	52.4	dB(A)
07:50 - 08:50	57.0	51.5	dB(A)
08:50 - 09:50	55.7	51.4	dB(A)
09:50 - 10:50	55.9	51.6	dB(A)
10:50 - 11:50	55.7	54.0	dB(A)
L_{eq} 24 hr.	54.7	-	dB(A)
L_{dn}	59.3	-	dB(A)
Standard	70 ^{1/1, 2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด

^{1/3} Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

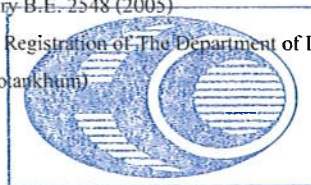
Report No. R6510-1692

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 172104 : Type 2

SAMPLE NO. : 31011
MEASURING DATE : 12-13/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	12-13/10/2022 (L_{eq})	12-13/10/2022 (L_{90})	UNIT
11:40 - 12:40 ¹³	67.1	66.4	dB(A)
12:40 - 13:40	70.1	66.7	dB(A)
13:40 - 14:40	69.4	64.0	dB(A)
14:40 - 15:40	67.8	66.0	dB(A)
15:40 - 16:40	66.8	66.1	dB(A)
16:40 - 17:40	66.6	65.9	dB(A)
17:40 - 18:40	69.2	65.4	dB(A)
18:40 - 19:40	67.0	65.5	dB(A)
19:40 - 20:40	67.1	66.4	dB(A)
20:40 - 21:40	67.0	66.4	dB(A)
21:40 - 22:40	67.0	66.4	dB(A)
22:40 - 23:40	66.8	66.2	dB(A)
23:40 - 00:40	67.0	66.5	dB(A)
00:40 - 01:40	67.1	66.5	dB(A)
01:40 - 02:40	67.5	66.8	dB(A)
02:40 - 03:40	67.7	66.9	dB(A)
03:40 - 04:40	70.8	64.6	dB(A)
04:40 - 05:40	64.6	63.4	dB(A)
05:40 - 06:40	65.6	63.7	dB(A)
06:40 - 07:40	67.9	64.1	dB(A)
07:40 - 08:40	67.4	66.7	dB(A)
08:40 - 09:40	67.2	66.6	dB(A)
09:40 - 10:40	67.2	66.6	dB(A)
10:40 - 11:40	67.1	66.4	dB(A)
L_{eq} 24 hr.	67.7	-	dB(A)
L_{dn}	73.9	-	dB(A)
Standard	70 ^{11,12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photakham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

¹³ Start TimeApproved By: 
(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

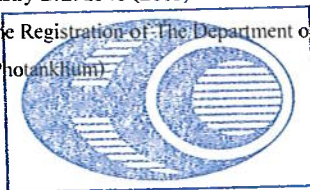
Report No. R6510-1693

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 172104 : Type 2

SAMPLE NO. : 31012
 MEASURING DATE : 13-14/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	13-14/10/2022 (L_{eq})	13-14/10/2022 (L_{90})	UNIT
11:40 - 12:40 ¹³	67.0	66.5	dB(A)
12:40 - 13:40	67.0	66.4	dB(A)
13:40 - 14:40	66.9	66.5	dB(A)
14:40 - 15:40	67.0	66.4	dB(A)
15:40 - 16:40	67.0	66.5	dB(A)
16:40 - 17:40	67.4	66.4	dB(A)
17:40 - 18:40	66.9	66.5	dB(A)
18:40 - 19:40	67.1	66.6	dB(A)
19:40 - 20:40	67.5	66.7	dB(A)
20:40 - 21:40	67.8	67.0	dB(A)
21:40 - 22:40	68.0	67.3	dB(A)
22:40 - 23:40	67.7	66.1	dB(A)
23:40 - 00:40	67.6	65.2	dB(A)
00:40 - 01:40	67.1	66.3	dB(A)
01:40 - 02:40	67.1	66.2	dB(A)
02:40 - 03:40	67.0	66.4	dB(A)
03:40 - 04:40	67.2	66.5	dB(A)
04:40 - 05:40	67.0	66.4	dB(A)
05:40 - 06:40	67.1	66.4	dB(A)
06:40 - 07:40	67.0	66.4	dB(A)
07:40 - 08:40	67.3	66.5	dB(A)
08:40 - 09:40	66.9	65.9	dB(A)
09:40 - 10:40	66.8	65.5	dB(A)
10:40 - 11:40	66.6	65.5	dB(A)
L_{eq} 24 hr.	67.2	-	dB(A)
L_{dn}	73.7	-	dB(A)
Standard	70 ^{11,12}	-	dB(A)

REMARK : ¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)¹² Notification of Ministry of the Industry B.E. 2548 (2005)¹³ Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

Report No. R6510-1694

TEST REPORT

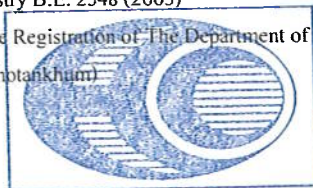
CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 172104 : Type 2

SAMPLE NO. : 31013
 MEASURING DATE : 14-15/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	14-15/10/2022 (L_{eq})	14-15/10/2022 (L_{90})	UNIT
11:40 - 12:40 ¹³	66.7	65.6	dB(A)
12:40 - 13:40	66.0	65.4	dB(A)
13:40 - 14:40	66.6	65.7	dB(A)
14:40 - 15:40	66.3	65.5	dB(A)
15:40 - 16:40	66.4	65.4	dB(A)
16:40 - 17:40	66.6	65.8	dB(A)
17:40 - 18:40	66.8	66.1	dB(A)
18:40 - 19:40	67.5	66.6	dB(A)
19:40 - 20:40	69.1	65.7	dB(A)
20:40 - 21:40	71.3	64.8	dB(A)
21:40 - 22:40	68.8	68.3	dB(A)
22:40 - 23:40	68.6	64.9	dB(A)
23:40 - 00:40	67.5	65.3	dB(A)
00:40 - 01:40	67.4	66.5	dB(A)
01:40 - 02:40	67.2	66.5	dB(A)
02:40 - 03:40	67.3	66.6	dB(A)
03:40 - 04:40	67.2	66.6	dB(A)
04:40 - 05:40	67.1	66.6	dB(A)
05:40 - 06:40	67.3	66.6	dB(A)
06:40 - 07:40	67.3	66.6	dB(A)
07:40 - 08:40	67.0	63.3	dB(A)
08:40 - 09:40	64.5	63.1	dB(A)
09:40 - 10:40	65.8	63.1	dB(A)
10:40 - 11:40	67.2	66.0	dB(A)
L_{eq} 24 hr.	67.4	-	dB(A)
L_{dn}	74.0	-	dB(A)
Standard	70 ^{1,2}	-	dB(A)

REMARK : ¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
 (Measurement By Mr. Tummarut Photankham)

¹³ Start Time

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

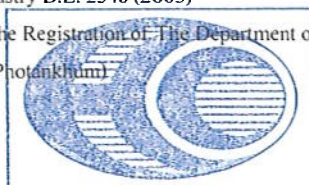
Report No. R6510-1695

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 172104 : Type 2

SAMPLE NO. : 31014
 MEASURING DATE : 15-16/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	15-16/10/2022 (L_{eq})	15-16/10/2022 (L_{90})	UNIT
11:40 - 12:40 ^{1/3}	67.4	66.4	dB(A)
12:40 - 13:40	67.3	66.5	dB(A)
13:40 - 14:40	68.8	66.8	dB(A)
14:40 - 15:40	67.5	66.6	dB(A)
15:40 - 16:40	67.2	66.4	dB(A)
16:40 - 17:40	66.7	66.0	dB(A)
17:40 - 18:40	66.6	65.7	dB(A)
18:40 - 19:40	67.0	66.3	dB(A)
19:40 - 20:40	67.5	66.6	dB(A)
20:40 - 21:40	67.1	66.3	dB(A)
21:40 - 22:40	67.3	66.5	dB(A)
22:40 - 23:40	67.5	66.6	dB(A)
23:40 - 00:40	67.1	66.1	dB(A)
00:40 - 01:40	67.3	66.5	dB(A)
01:40 - 02:40	67.0	66.5	dB(A)
02:40 - 03:40	66.7	66.3	dB(A)
03:40 - 04:40	66.9	66.3	dB(A)
04:40 - 05:40	66.6	66.0	dB(A)
05:40 - 06:40	66.7	66.0	dB(A)
06:40 - 07:40	67.1	66.5	dB(A)
07:40 - 08:40	66.9	66.4	dB(A)
08:40 - 09:40	67.1	66.4	dB(A)
09:40 - 10:40	67.2	66.5	dB(A)
10:40 - 11:40	67.3	66.5	dB(A)
L_{eq} 24 hr.	67.2	-	dB(A)
L_{dn}	73.5	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)^{1/3} Start Time

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Request No. LA65-R1056

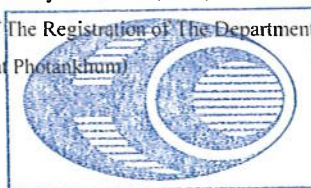
Report No. R6510-1696

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
DETERMINATION METHOD : ISO 1996-1:2016
INSTRUMENT : Integrated Sound Level Meter ;
S/N 172104 : Type 2

SAMPLE NO. : 31015
MEASURING DATE : 16-17/10/2022
RECEIVED DATE : 19/10/2022
REPORTED DATE : 01/11/2022

TIME \ DATE	16-17/10/2022 (L_{eq})	16-17/10/2022 (L_{90})	UNIT
11:40 - 12:40 ^{1/3}	67.3	66.5	dB(A)
12:40 - 13:40	67.3	66.6	dB(A)
13:40 - 14:40	67.6	66.7	dB(A)
14:40 - 15:40	67.6	66.7	dB(A)
15:40 - 16:40	67.3	66.6	dB(A)
16:40 - 17:40	67.2	66.5	dB(A)
17:40 - 18:40	67.0	66.4	dB(A)
18:40 - 19:40	67.1	66.5	dB(A)
19:40 - 20:40	67.3	66.7	dB(A)
20:40 - 21:40	67.6	66.6	dB(A)
21:40 - 22:40	67.2	66.3	dB(A)
22:40 - 23:40	66.8	66.1	dB(A)
23:40 - 00:40	66.8	66.0	dB(A)
00:40 - 01:40	66.8	65.9	dB(A)
01:40 - 02:40	66.9	66.0	dB(A)
02:40 - 03:40	67.2	66.1	dB(A)
03:40 - 04:40	67.5	66.5	dB(A)
04:40 - 05:40	66.8	65.9	dB(A)
05:40 - 06:40	67.3	64.8	dB(A)
06:40 - 07:40	67.7	64.6	dB(A)
07:40 - 08:40	64.4	61.2	dB(A)
08:40 - 09:40	66.8	64.1	dB(A)
09:40 - 10:40	66.7	64.3	dB(A)
10:40 - 11:40	66.8	64.5	dB(A)
L_{eq} 24 hr.	67.1	-	dB(A)
L_{dn}	73.5	-	dB(A)
Standard	70 ^{1/1,2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)^{1/3} Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

01/11/2022

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Request No. LA65-R1056

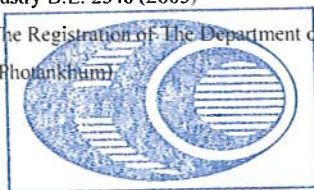
Report No. R6510-1697

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn}
 DETERMINATION METHOD : ISO 1996-1:2016
 INSTRUMENT : Integrated Sound Level Meter ;
 S/N 172104 : Type 2

SAMPLE NO. : 31016
 MEASURING DATE : 17-18/10/2022
 RECEIVED DATE : 19/10/2022
 REPORTED DATE : 01/11/2022

TIME \ DATE	17-18/10/2022 (L_{eq})	17-18/10/2022 (L_{90})	UNIT
11:40 - 12:40 ^{1/3}	66.8	65.9	dB(A)
12:40 - 13:40	66.8	66.0	dB(A)
13:40 - 14:40	66.8	65.8	dB(A)
14:40 - 15:40	66.8	66.0	dB(A)
15:40 - 16:40	67.0	66.3	dB(A)
16:40 - 17:40	66.8	66.3	dB(A)
17:40 - 18:40	67.0	66.4	dB(A)
18:40 - 19:40	67.3	66.5	dB(A)
19:40 - 20:40	67.5	66.8	dB(A)
20:40 - 21:40	68.0	66.9	dB(A)
21:40 - 22:40	67.8	66.8	dB(A)
22:40 - 23:40	68.0	67.0	dB(A)
23:40 - 00:40	67.6	66.7	dB(A)
00:40 - 01:40	67.3	66.4	dB(A)
01:40 - 02:40	67.1	66.4	dB(A)
02:40 - 03:40	66.9	66.4	dB(A)
03:40 - 04:40	66.7	66.0	dB(A)
04:40 - 05:40	66.6	66.0	dB(A)
05:40 - 06:40	67.0	66.6	dB(A)
06:40 - 07:40	67.1	66.6	dB(A)
07:40 - 08:40	67.5	66.5	dB(A)
08:40 - 09:40	67.2	66.5	dB(A)
09:40 - 10:40	67.8	66.6	dB(A)
10:40 - 11:40	67.7	65.1	dB(A)
L_{eq} 24 hr.	67.2	-	dB(A)
L_{dn}	73.7	-	dB(A)
Standard	70 ^{1/2}	-	dB(A)

REMARK : ^{1/} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)^{1/3} Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Rhotankham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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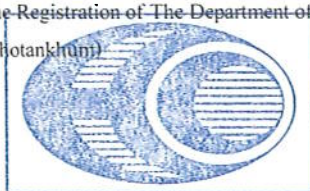
Request No. LA65-R1056

Report No. R6510-1698

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตกของที่ตั้งโครงการ (N3)
 PARAMETER* : L_{eq} 1 hr., L_{eq} 24 hr., L_{90} & L_{dn} SAMPLE NO. : 31017
 DETERMINATION METHOD : ISO 1996-1:2016 MEASURING DATE : 18-19/10/2022
 INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 19/10/2022
 S/N 172104 : Type 2 REPORTED DATE : 01/11/2022

TIME \ DATE	18-19/10/2022 (L_{eq})	18-19/10/2022 (L_{90})	UNIT
11:40 - 12:40 ^{1/3}	66.7	64.1	dB(A)
12:40 - 13:40	67.9	65.5	dB(A)
13:40 - 14:40	65.3	62.3	dB(A)
14:40 - 15:40	67.5	64.8	dB(A)
15:40 - 16:40	67.0	64.8	dB(A)
16:40 - 17:40	67.1	64.9	dB(A)
17:40 - 18:40	67.2	65.3	dB(A)
18:40 - 19:40	66.9	62.4	dB(A)
19:40 - 20:40	67.5	65.4	dB(A)
20:40 - 21:40	67.0	65.1	dB(A)
21:40 - 22:40	67.6	65.0	dB(A)
22:40 - 23:40	67.0	65.6	dB(A)
23:40 - 00:40	67.0	65.5	dB(A)
00:40 - 01:40	67.5	66.0	dB(A)
01:40 - 02:40	67.8	66.2	dB(A)
02:40 - 03:40	67.5	66.2	dB(A)
03:40 - 04:40	67.3	66.0	dB(A)
04:40 - 05:40	65.5	63.9	dB(A)
05:40 - 06:40	66.6	65.5	dB(A)
06:40 - 07:40	66.8	65.5	dB(A)
07:40 - 08:40	67.7	65.7	dB(A)
08:40 - 09:40	70.3	65.9	dB(A)
09:40 - 10:40	69.1	65.8	dB(A)
10:40 - 11:40	67.0	65.0	dB(A)
L_{eq} 24 hr.	67.4	-	dB(A)
L_{dn}	73.6	-	dB(A)
Standard	70 ^{1/1, 2}	-	dB(A)

REMARK : ^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)^{1/3} Start Time* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Measurement By Mr. Tummarut Photankhurn)Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

01/11/2022

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Test Report

Request No : W6507125

Report No : 6507-1346

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkroh Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65070491

Sample Name : Effluent

Sampling Date : 04/07/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 06/07/2022

Tested Date : 06/07/2022 - 15/07/2022

Reported Date : 20/07/2022

Parameter	Unit	Method	Result	Standard/ ¹
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
Biochemical Oxygen Demand	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	10.3	≤500
Chemical Oxygen Demand	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	83	≤750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	620	≤2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.25
Iron	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	1.58	≤10

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย ฉบับเดือนมิถุนายน พ.ศ. 2551

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

20/07/2022



Test Report

Request No : W6507125

Report No : 6507-1346

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65070491

Sample Name : Effluent

Sampling Date : 04/07/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 06/07/2022

Tested Date : 06/07/2022 - 15/07/2022

Reported Date : 20/07/2022

Parameter	Unit	Method	Result	Standard ¹
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.2	5.5-9.0
Temperature	°C	Laboratory and Field Method	32	≤45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	1,478	≤3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	7	≤200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct AAS Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3111B)	< 0.10	≤0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤5

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
ฉบับเดือนมิถุนายน พ.ศ. 2551

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Examined By :

(Miss Apiradee Chuen-arom)

20/07/2022

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Test Report

Request No : W6508060

Report No : 6508-1436

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakomsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65080220

Sample Name : Effluent

Sampling Date : 01/08/2022

Sampling By : Customer

Sampling Time : 9:50 AM

Sampling Method : Grab

Received Date : 03/08/2022

Tested Date : 03/08/2022 - 19/08/2022

Reported Date : 22/08/2022

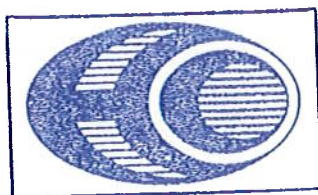
Parameter	Unit	Method	Result	Standard ¹
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
Biochemical Oxygen Demand	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.6	≤ 500
Chemical Oxygen Demand	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	63	≤ 750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	733	≤ 2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 0.25
Iron	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	1.65	≤ 10

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย ฉบับเดือนมิถุนายน พ.ศ. 2551

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



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

22/08/2022

Test Report

Request No : W6508060

Report No : 6508-1436

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65080220

Sample Name : Effluent

Sampling Date : 01/08/2022

Sampling By : Customer

Sampling Time : 9:50 AM

Sampling Method : Grab

Received Date : 03/08/2022

Tested Date : 03/08/2022 - 19/08/2022

Reported Date : 22/08/2022

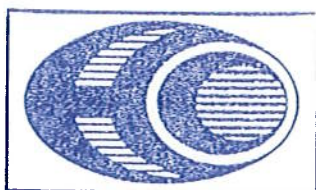
Parameter	Unit	Method	Result	Standard ¹
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.4	5.5-9.0
Temperature	°C	Laboratory and Field Method	31	≤45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	1,524	≤3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	7	≤200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct AAS Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3111B)	< 0.10	≤0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤5

Physical Appearance : 1. Sample : yellowish, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. / ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย ฉบับเดือนมิถุนายน พ.ศ. 2551

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

22/08/2022

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Test Report

Request No : W6509163

Report No : 6509-1503

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakomsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65090726

Sample Name : Effluent

Sampling Date : 05/09/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 07/09/2022

Tested Date : 07/09/2022 - 16/09/2022

Reported Date : 21/09/2022

Parameter	Unit	Method	Result	Standard ¹
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
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)	64	≤ 750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	495	≤ 2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 0.25
Iron	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.86	≤ 10

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
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บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By : 

(Miss Apiradee Chuen-arom)

21/09/2022

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Test Report

Request No : W6509163

Report No : 6509-1503

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakomsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65090726

Sample Name : Effluent

Sampling Date : 05/09/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 07/09/2022

Tested Date : 07/09/2022 - 16/09/2022

Reported Date : 21/09/2022

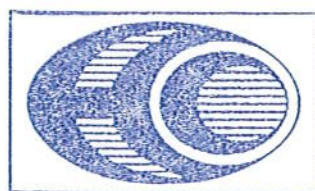
Parameter	Unit	Method	Result	Standard ¹
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.2	5.5-9.0
Temperature	°C	Laboratory and Field Method	30	≤45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	1,374	≤3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	9	≤100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	6	≤200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	≤0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤5

Physical Appearance : 1. Sample : lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบบ้างแล้วของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

21/09/2022

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Test Report

Request No : W6510094

Report No : 6510-1315

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkroh Rd., T. Maptaphut , A. Muang , Rayong 21150

Sampling Source : NS Blue Scope (Thailand) Limited

Sample No : W 65100410

Sample Name : Effluent

Sampling Date : 03/10/2022

Sampling By : Customer

Sampling Time : 9:20 AM

Sampling Method : Grab

Received Date : 05/10/2022

Tested Date : 05/10/2022 - 19/10/2022

Reported Date : 20/10/2022

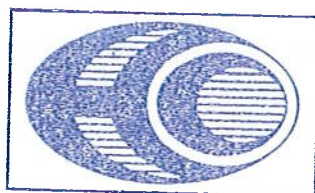
Parameter	Unit	Method	Result	Standard ^{/1}
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	<0.10	-
Biochemical Oxygen Demand	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.6	≤500
Chemical Oxygen Demand	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	42	≤750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	493	≤2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.25
Iron	mg/l	Digestion, Direct Air-Acetylene Flame Method (SM:3030F, 3111B)	1.64	≤10

Physical Apperance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
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Examined By :

(Miss Apiradee Chuen-arom)

20/10/2022

Test Report

Request No : W6510094

Report No : 6510-1315

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakomsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS Blue Scope (Thailand) Limited

Sample No : W 65100410

Sample Name : Effluent

Sampling Date : 03/10/2022

Sampling By : Customer

Sampling Time : 9:20 AM

Sampling Method : Grab

Received Date : 05/10/2022

Tested Date : 05/10/2022 - 19/10/2022

Reported Date : 20/10/2022

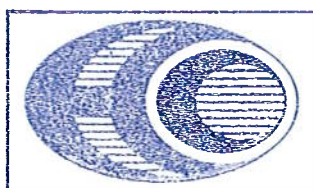
Parameter	Unit	Method	Result	Standard ¹
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site)		Electrometric Method	7.1	5.5-9.0
Temperature	°C	Laboratory and Field Method	32	≤ 45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	1,944	≤ 3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤ 100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	6	≤ 200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct AAS Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3111B)	< 0.10	≤ 0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.03	≤ 5

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ถ้าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
ฉบับเดือนมิถุนายน พ.ศ. 2551

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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By : 

(Miss Apiradee Chuen-arom)

20/10/2022

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Test Report

Request No : W6511232

Report No : 6511-1365

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65110923

Sample Name : Effluent

Sampling Date : 07/11/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 09/11/2022

Tested Date : 09/11/2022 - 17/11/2022

Reported Date : 17/11/2022

Parameter	Unit	Method	Result	Standard ¹
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	<0.10	-
Biochemical Oxygen Demand	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	7.7	≤500
Chemical Oxygen Demand	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	77	≤750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	663	≤2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	<0.050	≤0.25
Iron	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.43	≤10

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย ฉบับเดือนมิถุนายน พ.ศ. 2551

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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By : 

(Miss Apiradee Chuen-arom)

17/11/2022

**Test Report**

Request No : W6511232

Report No : 6511-1365

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65110923

Sample Name : Effluent

Sampling Date : 07/11/2022

Sampling By : Customer

Sampling Time : 9:30 AM

Sampling Method : Grab

Received Date : 09/11/2022

Tested Date : 09/11/2022 - 17/11/2022

Reported Date : 17/11/2022

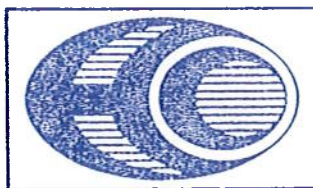
Parameter	Unit	Method	Result	Standard ¹
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.2	5.5-9.0
Temperature	°C	Laboratory and Field Method	31	≤45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	2,160	≤3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	11	≤200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	≤0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.03	≤5

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
ฉบับเดือนมิถุนายน พ.ศ. 2551

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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

17/11/2022

Test Report

Request No : W6512109

Report No : 6512-1108

Customer : NS BlueScope (Thailand) Limited

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65120506

Sample Name : Effluent

Sampling Date : 02/12/2022

Sampling By : Customer

Sampling Time : 9:20 AM

Sampling Method : Grab

Received Date : 06/12/2022

Tested Date : 06/12/2022 - 19/12/2022

Reported Date : 19/12/2022

Parameter	Unit	Method	Result	Standard ^{1/}
Aluminium	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
Biochemical Oxygen Demand	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.8	≤500
Chemical Oxygen Demand	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	51	≤750
Chloride	mg/l as Cl ₂	Argentometric Method (SM:4500-Cl- B)	517	≤2000
Flow Rate	m ³ /hr.	Calculation	60.00	-
Hexavalent Chromium	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.25
Iron	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.73	≤10

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
ฉบับเดือนมิถุนายน พ.ศ. 2551

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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By : 

(Miss Apiradee Chuen-arom)

19/12/2022

Test Report

Request No : W6512109

Customer : NS BlueScope (Thailand) Limited

Report No : 6512-1108

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150

Sampling Source : NS BlueScope (Thailand) Limited

Sample No : W 65120506

Sample Name : Effluent

Sampling Date : 02/12/2022

Sampling By : Customer

Sampling Time : 9:20 AM

Sampling Method : Grab

Received Date : 06/12/2022

Tested Date : 06/12/2022 - 19/12/2022

Reported Date : 19/12/2022

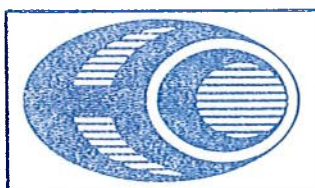
Parameter	Unit	Method	Result	Standard ^{1/}
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.3	5.5-9.0
Temperature	°C	Laboratory and Field Method	33	≤45
Total Dissolved Solids	mg/l	Dried at 180 C (SM:2540C)	1,876	≤3000
Total Kjeldahl Nitrogen	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤100
Total Suspended Solids	mg/l	Dried at 103-105 C (SM:2540D)	9	≤200
Trivalent Chromium	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	≤0.75
Zinc	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.03	≤5

Physical Appearance : 1. Sample : yellow, lightly SS

2. Container : Normal [PE 0.5 L [3 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 ค่าที่กำหนดไว้ในรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อมของโครงการนิคมอุตสาหกรรมเหมราชตะวันออก (มาบตาพุด) ส่วนขยาย
ฉบับเดือนมิถุนายน พ.ศ. 2551

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บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Miss Apiradee Chuen-arom)

19/12/2022

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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

Test Report

Request No : W6510579

Report No : 6511-0303

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102023

Sample Name : Ground Water Bore # 1**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:45 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ¹
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.05
pH (on site) *		Electrometric Method	4.6	-
Trivalent Chromium *	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	-
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.18	≤5

Physical Appearance : 1. Sample : slightly - white, turbid

2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20, B.E. 2543 (2000)

2. @ = ISO/IEC 17025:2017 Accredited by TISI. 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. Supharerk Phatklang (1-003-1-5637)*

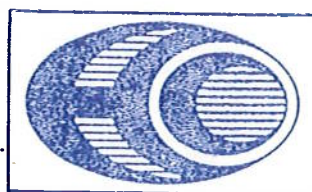
5. ** = These data are non laboratory data.

Examined By :

(Miss Apiradee Chuen-arom)

(1-003-1-4377)

03/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :

(Mr. Kawee Suthasub)

(1-003-1-2205)

03/11/2022

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

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Test Report

Request No : W6510579

Report No : 6511-0303

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102023

Sample Name : Ground Water Bore # 1**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:45 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ¹
Aluminium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.37	-
Iron @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.10	-
Temperature *	°C	Laboratory and Field Method	29	-

Physical Appearance : 1. Sample : slightly - white, turbid

2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /1 Ground Water Standard Notification of the National of Environment Board No. 20, B.E. 2543 (2000)

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

3. Mr. Kawee Suthasub is Technical Management.

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (1-003-0-5637)*

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

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Mr. Kawee Suthasub)

03/11/2022

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WITHOUT THE WRITTEN APPROVAL LABORATORY

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Test Report

Request No : W6510579

Report No : 6511-0304

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102024

Sample Name : Ground Water Bore # 2**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:05 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ¹
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.05
pH (on site) *		Electrometric Method	5.1	-
Trivalent Chromium *	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	-
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.98	≤5

Physical Appearance : 1. Sample : yellowish, turbid

2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20 , B.E. 2543 (2000)

2. @ = ISO/IEC 17025:2017 Accredited by TISI. 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. Supharerk Phatklang (1-003-0-5637)*

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

Examined By :

(Miss Apiradee Chuen-arom)

(1-003-0-4377)

03/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :

(Mr. Kawee Suthasub)

(1-003-0-2205)

03/11/2022

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683 Moo 11 Sukhapiarn 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

Test Report

Request No : W6510579

Report No : 6511-0304

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102024

Sample Name : Ground Water Bore # 2**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:05 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ¹
Aluminium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
Iron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.39	-
Temperature *	°C	Laboratory and Field Method	30	-

Physical Appearance : 1. Sample : yellowish, turbid

2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20 , B.E. 2543 (2000)

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

3. Mr. Kawee Suthasub is Technical Management.

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (1-003-0-5637)*

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

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Mr. Kawee Suthasub)

03/11/2022

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TEST REPORT

Request No. W6510579, W6511557

Report No. 6511-0305-1, 6512-0016


Customer : NS BlueScope (Thailand) Limited**
Address : No.2 Soil G 9 Prakornsongkhroard Rd., T. Maptaphut , A. Muang , Rayong 21150**
Sampling Source : NS BlueScope (Thailand) Limited** Sample No. : W 65102025, W 65111876
Sample Name : Ground Water Bore # 3 Sampling Date : 26/10/2022, 23/11/2022**
Sampling By : ETC Sampling Time : 10:20 AM, 10:00 AM**
Sampling Method : Grab Received Date : 27/10/2022, 24/11/2022
Tested Date : 27/10/2022 – 03/11/2022 Reported Date : 01/12/2022

Parameter	Unit	Method	Result	Standard ¹
Hexavalent Chromium*	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.05
pH (on site)*		Electrometric Method	6.3	-
Trivalent Chromium *	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	-
Zinc @ ²	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.10	≤5

Physical Apperance :
1. Sample : orange, turbid
2. Container : Normal [PE 0.5 L [3 Bottle]]


Remark :
1./1 Ground Water Standard Notification of the National of Environment Board No. 20 , B.E. 2543 (2000)
2./2 Sample No. W65111876: Sampling Date 23/11/2022 (10:00 AM) : Tested Date 24/11/2022 – 25/11/2022
3.@ = ISO/IEC 17025:2017 Accredited by TISI. SM = Standard Methods for the Examination of Water and Wastewater.
APHA, AWWA, WEF, 23rd Edition, 2017.
4. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
5.* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
6.** = These data are non laboratory data.

SUPPLEMENT TO TEST REPORT NO. 6511-0305

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
01/12/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
01/12/2022

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY
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NSC-TISI-TIS 17025

TESTING 0031

Test Report

Request No : W6510579

Report No : 6511-0305-2

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakomsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102025

Sample Name : Ground Water Bore # 3**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:20 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 27/01/2023

Parameter	Unit	Method	Result	Standard ¹
Aluminium @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.10	-
Iron *	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	25.1	-
Temperature *	°C	Laboratory and Field Method	31	-

Physical Appearance : 1. Sample : orange, turbid

2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20 , B.E. 2543 (2000)

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

3. Mr. Kawee Suthasub is Technical Management.

4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (๖-003-๖-5637)*

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

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

SUPPLEMENT TO TEST REPORT NO. 6511-0305-1



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By :

(Mr. Kawee Suthasub)

27/01/2023

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Test Report

Request No : W6510579

Report No : 6511-0306

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut, A. Muang, Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102026

Sample Name : Ground Water Bore # 4**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:30 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ¹
Hexavalent Chromium *	mg/l as Cr ⁶⁺	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤0.05
pH (on site) *		Electrometric Method	5.0	-
Trivalent Chromium *	mg/l as Cr ³⁺	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	-
Zinc @	mg/l	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.94	≤5

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle]]

Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20, B.E. 2543 (2000)

2. @ = ISO/IEC 17025:2017 Accredited by TISI. 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. Supharerk Phatklang (จ-003-จ-5637)*

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 : W6510579

Report No : 6511- 0306

Customer : NS BlueScope (Thailand) Limited**

Address : No.2 Soi G 9 Pakornsongkrohrad Rd., T. Maptaphut , A. Muang , Rayong 21150**

Sampling Source : NS BlueScope (Thailand) Limited**

Sample No : W 65102026

Sample Name : Ground Water Bore # 4**

Sampling Date : 26/10/2022**

Sampling By : ETC**

Sampling Time : 10:30 AM**

Sampling Method : Grab**

Received Date : 27/10/2022

Tested Date : 27/10/2022 - 03/11/2022

Reported Date : 03/11/2022

Parameter	Unit	Method	Result	Standard ^{/I}
Aluminium [@]	mg/l	Digestion,Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.54	-
Iron [@]	mg/l	Digestion,Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.14	-
Temperature *	°C	Laboratory and Field Method	29	-

Physical Apperance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L [3 Bottle]]

- Remark : 1. /I Ground Water Standard Notification of the National of Environment Board No. 20 , B.E. 2543 (2000)
2. @ = ISO/IEC 17025:2017 Accredited by TISI.SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.
3. Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (๓-๐๐3-๖-5637)*
5. ** = These data are non laboratory data.
6. Parameter Outside The Scope of The Registration of Department of Industrial Works



บริษัท อีสเทิร์นไทยคอนซัลต์ 1992 จำกัด

Examined By :

(Mr. Kawee Suthasub)

03/11/2022

Request No. ATR6511040

Report No. 6511-0759

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : Passivation ในสายการผลิต Zincalume Line : MCL1
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110759
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:32-11:32
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20180903083 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Chromium (Cr)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:

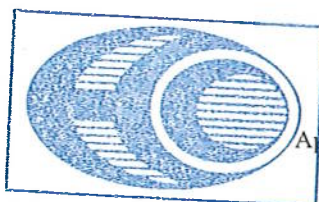
¹ Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.
(Standard for Chromium metal and insol salts (as Cr))

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.
(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510005

Report No. 6510-0083

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : Passivation ในสายการผลิต Zinalume Line : MCL2
SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100083
RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:56-10:56
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 03/10/2022-10/10/2022
Serial No. 20200403064 REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Chromium (Cr)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:¹ Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

(Standard for Chromium metal and insol salts (as Cr))

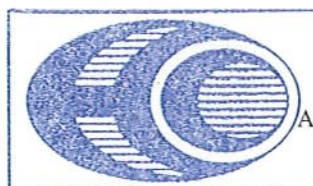
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By 

(Miss Thanatporn Klinsohon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0760

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Passivation ในสายการผลิต Zinalume Line : MCL2
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110760
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:30-11:30
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
 Serial No. 20181001042 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Chromium (Cr)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:

¹ Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

(Standard for Chromium metal and insol salts (as Cr))

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510025

Report No. 6510-0406

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Passivation ในสายการผลิต Zincalume Line : MCL3
 SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100406
 RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:13-11:13
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-25/10/2022
 Serial No. 20180903093 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Chromium (Cr)	Filtration, ICP-OES /NIOSH 7300	0.04	1	mg/m ³

REMARK:

¹ Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.
 (Standard for Chromium metal and insol salts (as Cr))

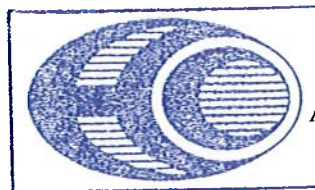
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
 No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

28/10/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Request No. ATR6511040

Report No. 6511-0761

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Passivation ในสายการผลิต Zinalume Line : MCL3
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110761
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:03-11:03
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
 Serial No. 20150302004 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Chromium (Cr)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:

¹ Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.
 (Standard for Chromium metal and insol salts (as Cr))

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
 No.0202-03-2564-0005.
 (Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510025

Report No. 6510-0411

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Alkali Cleaning Section (CPL Process Section)
 SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100411
 RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:35-11:35
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-26/10/2022
 Serial No. 20200403073 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Sodium Hydroxide	Filtration Acid Base Titrimetric Method	< 0.4	2.0	mg/m ³
		< 0.2	1.2	ppm

REMARK:¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoapon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

28/10/2022

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Request No. ATR6511040

Report No. 6511-0772

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Alkali Cleaning Section : MCL1
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110772
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:28-11:28
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-18/11/2022
 Serial No. 20160502013 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Sodium Hydroxide	Filtration Acid Base Titrimetric Method	< 0.4	2.0	mg/m ³
		< 0.2	1.2	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510025

Report No. 6510-0412

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : Alkali Cleaning Section : MCL2
 SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100412
 RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:29-11:29
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-26/10/2022
 Serial No. 20200403080 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Sodium Hydroxide	Filtration Acid Base Titrimetric Method	< 0.4	2.0	mg/m ³
		< 0.2	1.2	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

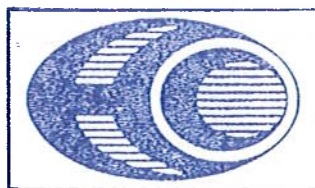
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsohon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

28/10/2022

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Request No. ATR6510025

Report No. 6510-0413

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : Alkali Cleaning Section : MCL3
SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100413
RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:03-11:03
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-26/10/2022
Serial No. 20180903085 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Sodium Hydroxide	Filtration Acid Base Titrimetric Method	< 0.4	2.0	mg/m ³
		< 0.2	1.2	ppm

REMARK:

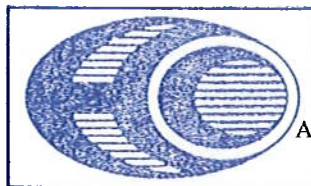
¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By 

(Miss Thanatporm Klinsohon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

28/10/2022

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Request No. ATR6511040

Report No. 6511-0762

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : MCL Pot Area : MCL1
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110762
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:30-11:30
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
 Serial No. 20180903094 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Zinc (Zn)	Filtration, ICP-OES /NIOSH 7300	< 0.01	5	mg/m ³

REMARK:

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

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
 No.0202-03-2564-0005.
 (Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6511040

Report No. 6511-0763

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : MCL Pot Area : MCL1
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110763
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:30-11:30
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20180903094 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Aluminium (Al)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:¹ American Conference of Government Industrial Hygienists (ACGIH) B.E. 2563 (2020)* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

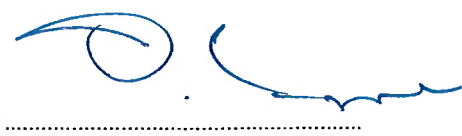
Examined By 

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510005

Report No. 6510-0080

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : MCL Pot Area : MCL2
 SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100080
 RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:57-10:57
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 03/10/2022-10/10/2022
 Serial No. 20181001042 REPORTED DATE : 17/10/2022

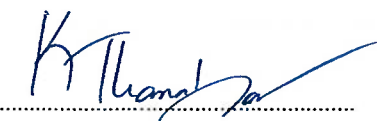
PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Zinc (Zn)	Filtration, ICP-OES /NIOSH 7300	< 0.01	5	mg/m ³

REMARK:

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

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
 No.0202-03-2564-0005.
 (Sampling By Mr. Suttha Songthaninai)

Examined By



(Miss Thanatporn Klinsoon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0764

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : MCL Pot Area : MCL2
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110764
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:36-11:36
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20160502016 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Zinc (Zn)	Filtration, ICP-OES /NIOSH 7300	< 0.01	5	mg/m ³

REMARK:

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

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.
(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510005

Report No. 6510-0081

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : MCL Pot Area : MCL2
 SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100081
 RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:57-10:57
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 03/10/2022-10/10/2022
 Serial No. 20181001042 REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Aluminium (Al)	Filtration, ICP-OES /NIOSH 7300	0.01	1	mg/m ³

REMARK:¹ American Conference of Government Industrial Hygienists (ACGIH) B.E. 2563 (2020)

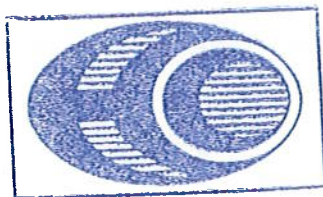
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0765

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : MCL Pot Area : MCL2
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110765
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:36-11:36
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20160502016 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Aluminium (Al)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

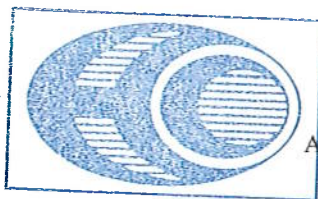
REMARK:¹ American Conference of Government Industrial Hygienists (ACGIH) B.E. 2563 (2020)* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510025

Report No. 6510-0407

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : MCL Pot Area : MCL3
 SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100407
 RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:00-11:00
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-25/10/2022
 Serial No. 20200403065 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Zinc (Zn)	Filtration, ICP-OES /NIOSH 7300	< 0.01	5	mg/m ³

REMARK:

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

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

28/10/2022

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Request No. ATR6511040

Report No. 6511-0766

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : MCL Pot Area : MCL3
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110766
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:05-11:05
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20150302003 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Zinc (Zn)	Filtration, ICP-OES /NIOSH 7300	0.01	5	mg/m ³

REMARK:

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

* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.
(Sampling By Mr. Suttha Songthaninai)

Examined By



(Miss Thanatporn Klinson)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510025

Report No. 6510-0408

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : MCL Pot Area : MCL3
 SAMPLING DATE : 17/10/2022 SAMPLE NO. : A65100408
 RECEIVED DATE : 25/10/2022 SAMPLING TIME : 10:00-11:00
 SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 25/10/2022-25/10/2022
 Serial No. 20200403065 REPORTED DATE : 28/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Aluminium (Al)	Filtration, ICP-OES /NIOSH 7300	0.04	1	mg/m ³

REMARK:¹ American Conference of Government Industrial Hygienists (ACGIH) B.E. 2563 (2020)

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

28/10/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

28/10/2022

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Request No. ATR6511040

Report No. 6511-0767

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : MCL Pot Area : MCL3
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110767
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:05-11:05
SAMPLING INSTRUMENT : Personal Pump Flow rate 2.00 L/min TESTED DATE : 17/11/2022-22/11/2022
Serial No. 20150302003 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Aluminium (Al)	Filtration, ICP-OES /NIOSH 7300	< 0.01	1	mg/m ³

REMARK:

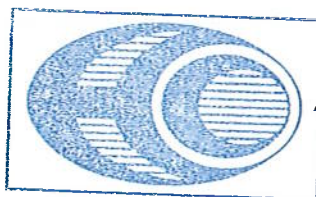
¹ American Conference of Government Industrial Hygienists (ACGIH) B.E. 2563 (2020)* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and
No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

29/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY
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Request No. ATR6510005

Report No. 6510-0082

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : PKL Entry Section
SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100082
RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:43-09:58
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 03/10/2022-06/10/2022
Serial No. 218403 REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	0.081	7	mg/m ³
		0.054	5	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

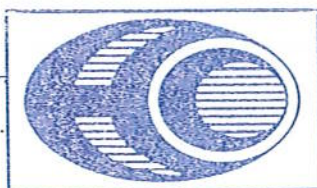
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

17/10/2022



บริษัท อีสเทิร์นไทยคอนซัลต์ติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0757

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : PKL Entry Section
SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110757
RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:47-11:02
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 17/11/2022-21/11/2022
Serial No. 20200403075 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	0.025	7	mg/m ³
		0.017	5	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

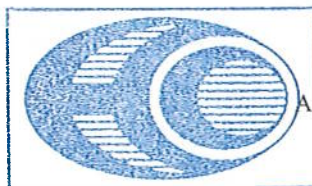
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



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Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510005

Report No. 6510-0078

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : PKL Exit Section
 SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100078
 RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:40-09:55
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 03/10/2022-06/10/2022
 Serial No. 218411 REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{/1}	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	0.077	7	mg/m ³
		0.052	5	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

17/10/2022



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Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0756

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : PKL Exit Section
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110756
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:45-11:00
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 17/11/2022-21/11/2022
 Serial No. 218402 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	< 0.015	7	mg/m ³
		< 0.010	5	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsopon)

29/11/2022



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Approved By

(Mr. Kawee Suthasub)

29/11/2022

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Request No. ATR6510005

Report No. 6510-0079

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE NAME : PKL Test Section
SAMPLING DATE : 29/09/2022 SAMPLE NO. : A65100079
RECEIVED DATE : 03/10/2022 SAMPLING TIME : 09:42-09:57
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 03/10/2022-06/10/2022
Serial No. 218408 REPORTED DATE : 17/10/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{1/}	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	0.055	7	mg/m ³
		0.037	5	ppm

REMARK:

^{1/} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsonon)

17/10/2022



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Approved By

(Mr. Kawee Suthasub)

17/10/2022

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Request No. ATR6511040

Report No. 6511-0758

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
 ADDRESS : 2 Soi G9 Prakornsongkrohraj road, Mueang Rayong District, Rayong 21150
 SAMPLE SOURCE : NS BlueScope (Thailand) Limited
 SAMPLE NAME : PKL Test Section
 SAMPLING DATE : 14/11/2022 SAMPLE NO. : A65110758
 RECEIVED DATE : 17/11/2022 SAMPLING TIME : 10:50-11:05
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.50 L/min TESTED DATE : 17/11/2022-21/11/2022
 Serial No. 218405 REPORTED DATE : 29/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Hydrogen chloride (HCl)	Ion Chromatography Method (OSHA ID 174sg)	0.052	7	mg/m ³
		0.035	5	ppm

REMARK:

¹ Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

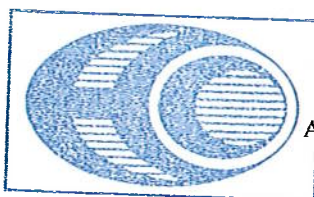
* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Suttha Songthaninai)

Examined By

(Miss Thanatporn Klinsoon)

29/11/2022



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Approved By

(Mr. Kawee Suthasub)

29/11/2022

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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-R1005

Report No. R6510-0021

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Air Compressor

PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 29310

DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 29/09/2022

INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 29/09/2022

S/N 00310456 : Type 2 REPORTED DATE : 04/10/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
09:40-10:40	83.3	83.3	dB(A)
10:40-11:40	84.0	84.0	dB(A)
11:40-12:40	84.5	84.5	dB(A)
12:40-13:40	82.9	82.9	dB(A)
13:40-14:40	81.2	81.2	dB(A)
14:40-15:40	83.9	83.9	dB(A)
15:40-16:40	81.7	81.7	dB(A)
16:40-17:40	83.9	83.9	dB(A)
L_{eq} 8 hr. (TWA)	83*	83**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

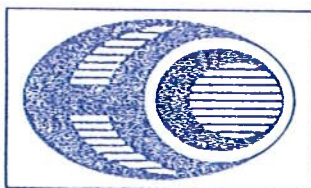
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Jutarat Suksaget)



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Approved By

(MRS. WANPEN LHAOCHINDAWAT)

04/10/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakongsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Air Compressor
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 34124
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 14/11/2022
S/N 01147298 : Type 2 REPORTED DATE : 23/11/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
10:10-11:10	86.5	86.5	dB(A)
11:10-12:10	86.7	86.7	dB(A)
12:10-13:10	86.7	86.7	dB(A)
13:10-14:10	86.5	86.5	dB(A)
14:10-15:10	86.7	86.7	dB(A)
15:10-16:10	86.9	86.9	dB(A)
16:10-17:10	87.0	87.0	dB(A)
17:10-18:10	86.9	86.9	dB(A)
L_{eq} 8 hr. (TWA)	86*	86**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

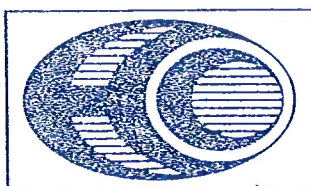
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

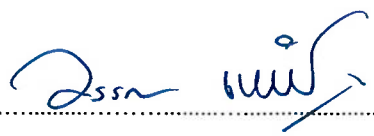
(Ms. Thanatporn Klinsoon is Section Head / Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Ms. Savita Kittinoavarat)



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Approved By


(MRS. WANPEN LHAOCHINDAWAT)

23/11/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Zinalume Pot Area : MCL 1
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 34120
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 14/11/2022
S/N 00646443 : Type 2 REPORTED DATE : 23/11/2022

MEASURING TIME	RESULT ^{/1}	RESULT ^{/2}	UNIT
09:00-10:00	90.0	90.0	dB(A)
10:00-11:00	90.2	90.2	dB(A)
11:00-12:00	90.4	90.4	dB(A)
12:00-13:00	90.5	90.5	dB(A)
13:00-14:00	90.6	90.6	dB(A)
14:00-15:00	90.7	90.7	dB(A)
15:00-16:00	90.8	90.8	dB(A)
16:00-17:00	90.8	90.8	dB(A)
L_{eq} 8 hr. (TWA)	90*	90**	dB(A)
Standard	85 ^{/1}	90 ^{/2}	dB(A)

REMARK : ^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

^{/2} Notification of The Ministry of Industry B.E. 2546 (2003)

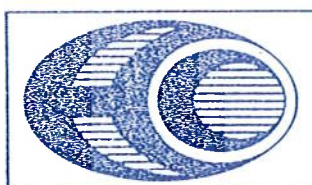
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Savita Kittinoavarat)



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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Zincalume Pot Area : MCL 2
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 29308
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 29/09/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 29/09/2022
S/N 00209071 : Type 2 REPORTED DATE : 04/10/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
09:55-10:55	88.2	88.2	dB(A)
10:55-11:55	88.2	88.2	dB(A)
11:55-12:55	87.8	87.8	dB(A)
12:55-13:55	88.5	88.5	dB(A)
13:55-14:55	88.7	88.7	dB(A)
14:55-15:55	88.6	88.6	dB(A)
15:55-16:55	88.4	88.4	dB(A)
16:55-17:55	87.2	87.2	dB(A)
L_{eq} 8 hr. (TWA)	88*	88**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

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

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Jutarat Suksaget)



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Approved By

(MRS. WANPEN LHAOCHINDAWAT)

04/10/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Zincalume Pot Area : MCL 2
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 34121
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 14/11/2022
S/N 00443358 : Type 2 REPORTED DATE : 23/11/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
10:30-11:30	83.6	83.6	dB(A)
11:30-12:30	86.8	86.8	dB(A)
12:30-13:30	86.9	86.9	dB(A)
13:30-14:30	87.1	87.1	dB(A)
14:30-15:30	87.3	87.3	dB(A)
15:30-16:30	88.0	88.0	dB(A)
16:30-17:30	88.1	88.1	dB(A)
17:30-18:30	88.1	88.1	dB(A)
L_{eq} 8 hr. (TWA)	87*	87**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

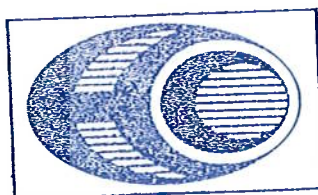
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Savita Kittinoavarat)



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Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

23/11/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Cold Reduction Mill
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 29309
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 29/09/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 29/09/2022
S/N 01209915 : Type 2 REPORTED DATE : 04/10/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
09:35-10:35	87.8	87.8	dB(A)
10:35-11:35	87.1	87.1	dB(A)
11:35-12:35	87.7	87.7	dB(A)
12:35-13:35	85.4	85.4	dB(A)
13:35-14:35	81.4	81.4	dB(A)
14:35-15:35	82.1	82.1	dB(A)
15:35-16:35	81.4	81.4	dB(A)
16:35-17:35	85.7	85.7	dB(A)
L_{eq} 8 hr. (TWA)	85*	85**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

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

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Jutarat Suksaget)



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Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

04/10/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Cold Reduction Mill
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 34123
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 14/11/2022
S/N 01209916 : Type 2 REPORTED DATE : 23/11/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
09:40-10:40	85.1	85.1	dB(A)
10:40-11:40	85.2	85.2	dB(A)
11:40-12:40	85.9	85.9	dB(A)
12:40-13:40	87.5	87.5	dB(A)
13:40-14:40	87.0	87.0	dB(A)
14:40-15:40	85.8	85.8	dB(A)
15:40-16:40	85.7	85.7	dB(A)
16:40-17:40	86.3	86.3	dB(A)
L_{eq} 8 hr. (TWA)	86*	86**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

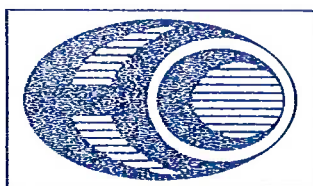
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Savita Kittinoavarat)



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Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

23/11/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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COPY

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Zinalume Pot Area : MCL 3
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 30914
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 17/10/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 18/10/2022
S/N 00443359 : Type 2 REPORTED DATE : 25/10/2022

MEASURING TIME	RESULT ^{/1}	RESULT ^{/2}	UNIT
09:55-10:55	90.4	90.4	dB(A)
10:55-11:55	90.5	90.5	dB(A)
11:55-12:55	89.5	89.5	dB(A)
12:55-13:55	90.0	90.0	dB(A)
13:55-14:55	90.0	90.0	dB(A)
14:55-15:55	90.0	90.0	dB(A)
15:55-16:55	90.2	90.2	dB(A)
16:55-17:55	90.1	90.1	dB(A)
L_{eq} 8 hr. (TWA)	90*	90**	dB(A)
Standard	85 ^{/1}	90 ^{/2}	dB(A)

REMARK : ^{/1} Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

^{/2} Notification of The Ministry of Industry B.E. 2546 (2003)

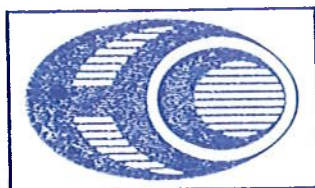
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

25/10/2022

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TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited
ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150
SAMPLE SOURCE : NS BlueScope (Thailand) Limited
SAMPLE POINT : Zincalume Pot Area : MCL 3
PARAMETER*** : L_{eq} 1 hr. & L_{eq} 8 hr. SAMPLE NO. : 34122
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 14/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 14/11/2022
S/N 01147300 : Type 2 REPORTED DATE : 23/11/2022

MEASURING TIME	RESULT ¹	RESULT ²	UNIT
09:50-10:50	90.2	90.2	dB(A)
10:50-11:50	90.0	90.0	dB(A)
11:50-12:50	88.1	88.1	dB(A)
12:50-13:50	87.2	87.2	dB(A)
13:50-14:50	90.0	90.0	dB(A)
14:50-15:50	90.3	90.3	dB(A)
15:50-16:50	90.3	90.3	dB(A)
16:50-17:50	90.3	90.3	dB(A)
L_{eq} 8 hr. (TWA)	89*	89**	dB(A)
Standard	85 ¹	90 ²	dB(A)

REMARK : ¹ Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

(Published in the Government Gazette on January 26, 2018)

² Notification of The Ministry of Industry B.E. 2546 (2003)

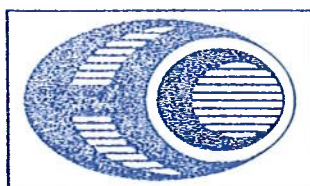
* Based on Criteria 85 dB(A); 3 dB Exchange Rate

** Based on Criteria 90 dB(A); 5 dB Exchange Rate

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

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

(Measurement By Ms. Savita Kittinoavarat)



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(MRS. WANPEN LHAOCHINDAWAT)

23/11/2022

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Request No. LA65-R1163

Report No. R6511-2905

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Zinalume Line Cleaning : MCL 1 SAMPLE NO. : 34118

MEASURING DATE : 14/11/2022 RECEIVED DATE : 14/11/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 23/11/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	10:00-10:30	29.3	38.6	38.2	32.1	°C
	10:30-11:00	29.4	39.0	38.7	32.3	°C
	11:00-11:30	29.4	38.9	38.6	32.3	°C
	11:30-12:00	29.5	39.3	39.0	32.4	°C
WBGT AVERAGE	10:00-12:00	-	-	-	32.3	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/} Regulation of The Ministry of Labour B.E. 2559 (2016)^{2/} Notification of The Ministry of Industry B.E. 2546 (2003)

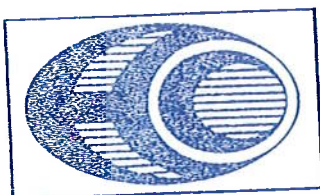
NWB = Natural Wet - Bulb Temperature

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)

23/11/2022

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Request No. LA65-R1041

Report No. R6510-0879

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Zincalume Line Cleaning : MCL 2

MEASURING DATE : 17/10/2022

SAMPLING INSTRUMENT : Heat Stress ;

SAMPLE NO. : 30185

RECEIVED DATE : 18/10/2022

REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	10:00-10:30	27.5	37.2	35.6	30.4	°C
	10:30-11:00	27.5	37.6	35.9	30.5	°C
	11:00-11:30	27.8	37.9	36.0	30.8	°C
	11:30-12:00	27.9	38.0	36.2	30.9	°C
WBGT AVERAGE	10:00-12:00	-	-	-	30.7	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/1} Regulation of The Ministry of Labour B.E. 2559 (2016)^{1/2} Notification of The Ministry of Industry B.E. 2546 (2003)

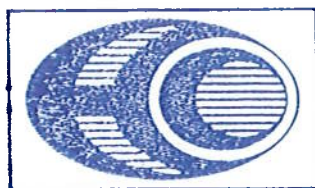
NWB = Natural Wet - Bulb Temperature

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)

25/10/2022

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Request No. LA65-R1163

Report No. R6511-2906

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Annealing Process : MCL 1 SAMPLE NO. : 34119

MEASURING DATE : 14/11/2022 RECEIVED DATE : 14/11/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 23/11/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	10:00-10:30	28.9	36.8	35.2	31.3	°C
	10:30-11:00	28.7	37.5	35.7	31.3	°C
	11:00-11:30	28.9	37.7	35.9	31.5	°C
	11:30-12:00	28.6	38.1	36.0	31.5	°C
WBGT AVERAGE	10:00-12:00	-	-	-	31.4	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/} Regulation of The Ministry of Labour B.E. 2559 (2016)^{1/2} Notification of The Ministry of Industry B.E. 2546 (2003)

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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(MRS. WANPEN LHAOCHINDAWAT)

23/11/2022

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Request No. LA65-R1041

Report No. R6510-0880

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakomsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Annealing Process : MCL 2 SAMPLE NO. : 30186

MEASURING DATE : 17/10/2022 RECEIVED DATE : 18/10/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	13:00-13:30	25.3	36.4	35.1	28.6	°C
	13:30-14:00	25.0	37.4	35.8	28.7	°C
	14:00-14:30	24.6	37.4	36.0	28.4	°C
	14:30-15:00	24.2	36.7	35.3	28.0	°C
WBGT AVERAGE	13:00-15:00	-	-	-	28.4	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/} Regulation of The Ministry of Labour B.E. 2559 (2016)^{2/} Notification of The Ministry of Industry B.E. 2546 (2003)

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)

25/10/2022

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Request No. LA65-R1041

Report No. R6510-0885

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Oven RTO : CPL SAMPLE NO. : 30191

MEASURING DATE : 17/10/2022 RECEIVED DATE : 18/10/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	13:00-13:30	23.2	34.0	31.7	26.4	°C
	13:30-14:00	24.0	34.5	32.1	27.2	°C
	14:00-14:30	24.7	33.5	31.8	27.3	°C
	14:30-15:00	24.8	32.9	31.5	27.2	°C
WBGT AVERAGE	13:00-15:00	-	-	-	27.0	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/1} Regulation of The Ministry of Labour B.E. 2559 (2016)^{1/2} Notification of The Ministry of Industry B.E. 2546 (2003)

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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(MRS. WANPEN LHAOCHINDAWAT)

25/10/2022

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Request No. LA65-R1041

Report No. R6510-0884

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Coater Room : CPL SAMPLE NO. : 30190

MEASURING DATE : 17/10/2022 RECEIVED DATE : 18/10/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	13:00-13:30	22.7	33.0	32.6	25.8	°C
	13:30-14:00	23.1	33.3	32.9	26.2	°C
	14:00-14:30	24.8	33.7	33.3	27.5	°C
	14:30-15:00	24.9	33.8	33.4	27.6	°C
WBGT AVERAGE	13:00-15:00	-	-	-	26.7	°C
STANDARD		-	-	-	34.0 ^{1,2}	°C

REMARK :

Work Load is Light, Indoor

¹ Regulation of The Ministry of Labour B.E. 2559 (2016)² Notification of The Ministry of Industry B.E. 2546 (2003)

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)

25/10/2022

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Request No. LA65-R1041

Report No. R6510-1854

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Zincalume Line Cleaning : MCL 3 SAMPLE NO. : 31175

MEASURING DATE : 17/10/2022 RECEIVED DATE : 18/10/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	10:00-10:30	23.9	32.9	30.7	26.6	°C
	10:30-11:00	24.0	34.1	31.6	27.0	°C
	11:00-11:30	24.8	34.4	32.1	27.7	°C
	11:30-12:00	24.9	34.8	32.3	27.9	°C
WBGT AVERAGE	10:00-12:00	-	-	-	27.3	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/1} Regulation of The Ministry of Labour B.E. 2559 (2016)^{1/2} Notification of The Ministry of Industry B.E. 2546 (2003)

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

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(MRS. WANPEN LHAOCHINDAWAT)

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Request No. LA65-R1041

Report No. R6510-0881

TEST REPORT

CUSTOMER : NS BlueScope (Thailand) Limited

ADDRESS : Soi G 9 Eastern Industrial Estate, Prakornsongkruarat, Muang, Rayong 21150

SAMPLE SOURCE : NS BlueScope (Thailand) Limited

SAMPLE POINT : Annealing Process : MCL 3 SAMPLE NO. : 30187

MEASURING DATE : 17/10/2022 RECEIVED DATE : 18/10/2022

SAMPLING INSTRUMENT : Heat Stress ; REPORTED DATE : 25/10/2022

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

PARAMETER*	SAMPLING TIME	RESULT				
		NWB	GT	DB	WBGT	UNIT
Heat Stress	10:00-10:30	24.0	33.9	32.6	27.0	°C
	10:30-11:00	24.2	35.1	34.2	27.5	°C
	11:00-11:30	24.0	35.2	34.0	27.4	°C
	11:30-12:00	24.6	35.5	34.2	27.9	°C
WBGT AVERAGE	10:00-12:00	-	-	-	27.4	°C
STANDARD		-	-	-	34.0 ^{1/2}	°C

REMARK :

Work Load is Light, Indoor

^{1/} Regulation of The Ministry of Labour B.E. 2559 (2016)^{2/} Notification of The Ministry of Industry B.E. 2546 (2003)

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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